CULTURAL HERITAGE RESOURCE ASSESSMENT: BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES

EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

DENISON ROAD MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

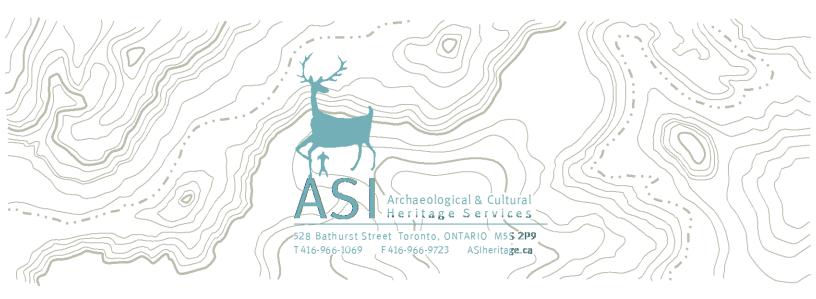
CITY OF BRAMPTON, REGIONAL MUNICIPALITY OF PEEL, ONTARIO

Prepared for:

Associated Engineering Ltd. 508 Riverbend Drive, Suite 302 Kitchener, Ontario N2K 3S2

ASI File: 18CH-163

May 2019 Revised May 2020



CULTURAL HERITAGE RESOURCE ASSESSMENT: BUILT HERITAGE RESOURCES AND CULTURAL HERITAGE LANDSCAPES

EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

DENISON AVENUE EXTENSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BRAMPTON, REGIONAL MUNICIPALITY OF PEEL, ONTARIO

EXECUTIVE SUMMARY

ASI was contracted by Associated Engineering Ltd. to conduct a Cultural Heritage Resource Assessment as part of the Environmental Assessment (EA) Study for the Denison Avenue Extension from Park Street to Mill Street in the City of Brampton. This project involves the proposed extension of Denison Avenue eastwards from Park Street to Mill Street, in accordance with the City of Brampton's *Transportation Master Plan* (2015) which recommends the extension of Denison Avenue from Park Street to Mill Street by 2021.

The results of background historical research and a review of secondary source material revealed a study area with a residential and industrial land use history dating back to the nineteenth and early-twentieth century. A field review was conducted for the entire study area to confirm the location of previously identified cultural heritage resources and to document newly discovered ones.

The Denison Avenue Extension EA study area constitutes a 50 metre buffer from the centre line of the proposed extension of Denison Avenue between Park Street and Mill Street North. Background research, data collection, and field review was conducted, and it was determined that 17 cultural heritage resources are located within the Denison Avenue Extension EA study area. Based on the results of the assessment, the following recommendations have been developed:

- 1. Construction activities and staging should be suitably planned and undertaken to avoid impacts to the identified cultural heritage resources. No-go zones should be established adjacent to the identified cultural heritage resources and instructions to construction crews should be issued in order to prevent impacts.
- 2. Where feasible, staging and construction activities and no-go zones should be suitably planned to avoid vibration impacts to 43 Mill Street North (CHR 5).
- 3. Where indirect impacts including grading, property acquisition and subsequent demolition are anticipated on properties adjacent to identified cultural heritage resources and occurring within 50 m of buildings identified as potential cultural heritage resources, the impacts of the vibrations should be investigated through an engineering assessment and any necessary mitigation measures should be implemented prior to construction. Properties identified as potentially being indirectly impacted as a result of construction activities include:
 - i. 39 Mill Street North (CHR 2)



- ii. 40 Mill Street North (CHR 3)
- iii. 41 Mill Street North (CHR 4)
- iv. 43 Mill Street North (CHR 5)
- v. 44 Mill Street North (CHR 6)
- vi. 48 Mill Street North (CHR 8)
- vii. 50 Mill Street North (CHR 9)
- viii. 52 Mill Street North (CHR 10)

If there arise any structural and/or geotechnical concerns subsequent to this Cultural Heritage Resource Assessment the recommended distance will have to be re-evaluated and reconfirmed upon discovery of any arising concern.

- 4. This report should be submitted to City of Brampton Heritage Planning staff for review.
- 5. Should future work require an expansion of the study area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on potential heritage resources.



PROJECT PERSONNEL

Senior Project Manager:	Lindsay Graves, MA CAHP Senior Cultural Heritage Specialist Senior Project Manager, Cultural Heritage Division
Project Manager:	Laura Loney, MPlan, CAHP Cultural Heritage Specialist, Cultural Heritage Division
Project Administrator	Carol Bella, Hon. BA Archaeologist Executive Assistant Operations Division
Report Preparation:	Laura Loney
	Laura Wickett, Hon. BA, Dip. Heritage Conservation Cultural Heritage Assistant, Cultural Heritage Division
	Johanna Kelly, MSc Cultural Heritage Associate, Cultural Heritage Division
Graphics Preparation:	Adam Burwell, MSc Archaeologist Geomatics Specialist, Operations Division
Field Review:	Laura Loney
Report Reviewer:	Johanna Kelly
	Lindsay Graves



TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
PROJECT PERSONNEL	. iii
TABLE OF CONTENTS	. iv
1.0 INTRODUCTION	1
2.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT CONTEXT	2
2.1 Legislation and Policy Context	2
2.1.1 City of Brampton Official Plan (2015)	6
2.1.2 City of Brampton's Transportation Master Plan (2015)	9
2.1.3 Region of Peel Official Plan (December 2016 Consolidation)	9
2.2 Data Collection and Methodology	10
3.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT	13
3.1 Background Historical Summary	13
3.1.1 Physiography	13
3.1.2 Indigenous Overview	14
3.1.3 Historical Euro-Canadian Land Use: Township Survey and Settlement	14
3.1.4 Review of Historical Mapping	16
3.2 Existing Conditions	19
3.2.1 Review of Existing Heritage Inventories	19
3.2.2 Denison Avenue Extension Study Area– Field Review	
3.2.3 Denison Avenue Extension Study Area– Identified Cultural Heritage Resources	23
3.3 Screening for Potential Impacts	24
3.4 Potential Impacts of the Preferred Design Concept on Cultural Heritage Resources	25
4.0 CONCLUSIONS	32
5.0 RECOMMENDATIONS	33
6.0 REFERENCES	
7.0 CULTURAL HERITAGE RESOURCE INVENTORY	39
8.0 CULTURAL HERITAGE RESOURCE MAPPING	47
APPENDIX A: PREFERRED ALTERNATIVE	48

LIST OF FIGURES

Figure 1: Location of the study area	1
Figure 2: Aerial photograph of the study area	2
Figure 3: 1859 Tremaine's Map of the County of Peel	18
Figure 4: 1877 Illustrated Historical Atlas of the County of Peel	18
Figure 5: 1909 National Topographic Map	18
Figure 6: 1918 National Topographic Map	18
Figure 7: 1931 National Topographic Map	
Figure 8: 1948 National Topographic Map	19
Figure 9: 1954 Aerial Photograph	19
Figure 10: 1963 National Topographic Map	19
Figure 11: Looking west along Denison Avenue from Park Street (ASI 2019)	21
Figure 12: Looking south along Park Street (ASI 2019)	21
Figure 13: Looking east into the construction site within the property at 45 Railroad Street (ASI 2019)	22
Figure 14: Looking west into the construction site within the property at 45 Railroad Street (ASI 2019)	22
Figure 15: Looking south along Park Street towards the study area (ASI 2019)	22
Figure 16: Looking northwest along Mill Street North towards the study area (ASI 2019)	22
Figure 17: Looking northwest along Mill Street North within the study area (ASI 2019)	22
Figure 18: Looking south along Mill Street North from Railroad Street (ASI 2019)	22



Figure 19: Looking southeast towards 45 Railroad Street along Railroad Street (ASI 2019)	23
Figure 20: Looking northwest from the intersection of Mill Street North and Railroad Street (ASI 2019)	23
Figure 21: Looking northeast along Railroad Street towards 27 Church Street (ASI 2019)	23
Figure 22: Location of Identified and Potential CHR within the study area and Figure Locations	47

LIST OF TABLES

Table 1: Outline of Southern Ontario Prehistory	14
Table 2: Nineteenth century property owner(s) and historical feature(s) within the study area	
Table 3: Summary of existing and potential cultural heritage resources (CHR) within the study area	24
Table 4: Potential Impacts of the Proposed Undertaking	27



1.0 INTRODUCTION

ASI was contracted by Associated Engineering to conduct a Cultural Heritage Resource Assessment as part of the Environmental Assessment Study Denison Avenue Extension from Park Street to Mill Street in the City of Brampton (Figure 1, Figure 2). This project involves the proposed extension of Denison Avenue east from Park Street to Mill Street, in accordance with the City of Brampton's Transportation Master Plan (TMP) which recommends the extension of Denison Avenue from Park Street to Mill Street by 2021.

The purpose of this report is to identify existing conditions of the Denison Avenue Extension study area and to present an inventory of cultural heritage resources located within or adjacent to the study area, , and propose appropriate mitigation measures and recommendations for minimizing and avoiding negative impacts on identified cultural heritage resources. This research was conducted by Laura Loney, Cultural Heritage Specialist, and Johanna Kelly, Cultural Heritage Associate, under the senior project management of Lindsay Graves, Senior Project Manager of the Cultural Heritage Division, all of ASI.

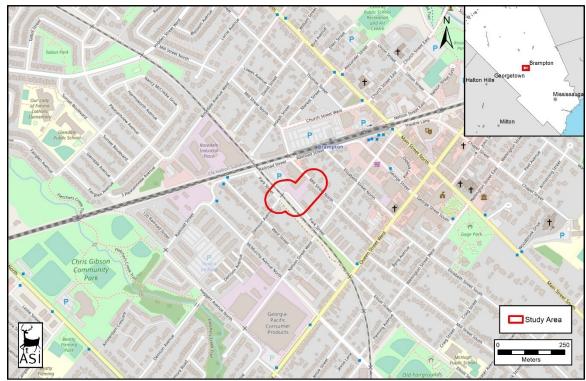


Figure 1: Location of the study area Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)





Figure 2: Aerial photograph of the study area

2.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT CONTEXT

2.1 Legislation and Policy Context

This cultural heritage assessment considers cultural heritage resources in the context of improvements to specified areas, pursuant to the *Environmental Assessment Act*. This assessment addresses above ground cultural heritage resources over 40 years old. Use of a 40 year old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (Ministry of Transportation 2006; Ministry of Transportation 2007). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from retaining heritage value.

For the purposes of this assessment, the term cultural heritage resources is used to describe both cultural heritage landscapes and built heritage resources. A cultural landscape is perceived as a collection of individual built heritage resources and other related features that together form farm complexes, roadscapes, and nucleated settlements. Built heritage resources are typically individual buildings or structures that may be associated with a variety of human activities, such as historical settlement and patterns of architectural development.



The analysis throughout the study process addresses cultural heritage resources under various pieces of legislation and their supporting guidelines. Under the *Environmental Assessment Act* (1990) environment is defined in Subsection 1(c) to include:

- cultural conditions that influence the life of man or a community, and;
- any building, structure, machine, or other device or thing made by man (Ministry of the Environment 1990).

The Ministry of Tourism, Culture and Sport is charged under Section 2 of the *Ontario Heritage Act* (MHSTCI 1990) with the responsibility to determine policies, priorities and programs for the conservation, protection and preservation of the heritage of Ontario and has published two guidelines to assist in assessing cultural heritage resources as part of an environmental assessment: *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992), and *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (1981) (MHSTCI 1992; MHSTCI 1980). Accordingly, both guidelines have been utilized in this assessment process.

The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* (Section 1.0) states the following:

When speaking of man-made heritage we are concerned with the works of man and the effects of his activities in the environment rather than with movable human artifacts or those environments that are natural and completely undisturbed by man.

In addition, environment may be interpreted to include the combination and interrelationships of human artifacts with all other aspects of the physical environment, as well as with the social, economic and cultural conditions that influence the life of the people and communities in Ontario. The *Guidelines on the Man-Made Heritage Component of Environmental Assessments* distinguish between two basic ways of visually experiencing this heritage in the environment, namely as cultural heritage landscapes and as cultural features.

Within this document, cultural heritage landscapes are defined as the following (Section 1.0):

The use and physical appearance of the land as we see it now is a result of man's activities over time in modifying pristine landscapes for his own purposes. A cultural landscape is perceived as a collection of individual man-made features into a whole. Urban cultural landscapes are sometimes given special names such as townscapes or streetscapes that describe various scales of perception from the general scene to the particular view. Cultural landscapes, or waterscapes, and include such land uses as agriculture, mining, forestry, recreation, and transportation. Like urban cultural landscapes, they too may be perceived at various scales: as a large area of homogeneous character; or as an intermediate sized area of homogeneous character or a collection of settings such as a group of farms; or as a discrete example of specific landscape character such as a single farm, or an individual village or hamlet.

A cultural feature is defined as the following (Section 1.0):



...an individual part of a cultural landscape that may be focused upon as part of a broader scene or viewed independently. The term refers to any man-made or modified object in or on the land or underwater, such as buildings of various types, street furniture, engineering works, plantings and landscaping, archaeological sites, or a collection of such objects seen as a group because of close physical or social relationships.

The Minister of Tourism, Culture, and Sport has also published *Standards and Guidelines for Conservation of Provincial Heritage Properties* ("Standards and Guidelines" hereafter) (MHSTCI 2010). These Standards and Guidelines apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest. They are mandatory for Ministries and prescribed public bodies and have the authority of a Management Board or Cabinet directive. Prescribed public bodies include:

- Agricultural Research Institute of Ontario
- Hydro One Inc.
- Liquor Control Board of Ontario
- McMichael Canadian Art Collection
- Metrolinx
- The Niagara Parks Commission.
- Ontario Heritage Trust
- Ontario Infrastructure and Lands Corporation
- Ontario Lottery and Gaming Corporation
- Ontario Power Generation Inc.
- Royal Botanical Gardens
- Toronto Area Transit Operating Authority
- St. Lawrence Parks Commission

The Standards and Guidelines provide a series of definitions considered during the assessment:

A provincial heritage property is defined as the following (14):

Provincial heritage property means real property, including buildings and structures on the property, that has cultural heritage value or interest and that is owned by the Crown in right of Ontario or by a prescribed public body; or that is occupied by a ministry or a prescribed public body if the terms of the occupancy agreement are such that the ministry or public body is entitled to make the alterations to the property that may be required under these heritage standards and guidelines.

A provincial heritage property of provincial significance is defined as the following (14):

Provincial heritage property that has been evaluated using the criteria found in the *Ontario Heritage Act* O.Reg. 10/06 and has been found to have cultural heritage value or interest of provincial significance.

A built heritage resource is defined as the following (13):



...one or more significant buildings (including fixtures or equipment located in or forming part of a building), structures, earthworks, monuments, installations, or remains associated with architectural, cultural, social, political, economic, or military history and identified as being important to a community. For the purposes of these Standards and Guidelines, "structures" does not include roadways in the provincial highway network and in-use electrical or telecommunications transmission towers.

A cultural heritage landscape is defined as the following (13):

...a defined geographical area that human activity has modified and that has cultural heritage value. Such an area involves one or more groupings of individual heritage features, such as structures, spaces, archaeological sites, and natural elements, which together form a significant type of heritage form distinct from that of its constituent elements or parts. Heritage conservation districts designated under the *Ontario Heritage Act*, villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trails, and industrial complexes of cultural heritage value are some examples.

Additionally, the *Planning Act* (1990) and related *Provincial Policy Statement (PPS)*, which was updated in 2014, make a number of provisions relating to heritage conservation (Ministry of Municipal Affairs and Housing 1990; Ministry of Municipal Affairs and Housing 2014). One of the general purposes of the *Planning Act* is to integrate matters of provincial interest in provincial and municipal planning decisions. In order to inform all those involved in planning activities of the scope of these matters of provincial interest, Section 2 of the *Planning Act* provides an extensive listing. These matters of provincial interest shall be regarded when certain authorities, including the council of a municipality, carry out their responsibilities under the *Act*. One of these provincial interests is directly concerned with:

2.(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest

Part 4.7 of the PPS states that:

The official plan is the most important vehicle for implementation of this Provincial Policy Statement. Comprehensive, integrated and long-term planning is best achieved through official plans.

Official plans shall identify provincial interests and set out appropriate land use designations and policies. To determine the significance of some natural heritage features and other resources, evaluation may be required.

Official plans should also coordinate cross-boundary matters to complement the actions of other planning authorities and promote mutually beneficial solutions. Official plans shall provide clear, reasonable and attainable policies to protect provincial interests and direct development to suitable areas.



In order to protect provincial interests, planning authorities shall keep their official plans up-to-date with this Provincial Policy Statement. The policies of this Provincial Policy Statement continue to apply after adoption and approval of an official plan.

Those policies of relevance for the conservation of heritage features are contained in Section 2 - Wise Use and Management of Resources, wherein Subsection 2.6 - Cultural Heritage and Archaeological Resources, makes the following provisions:

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

Several definitions that have specific meanings for use in a policy context accompany the policy statement. These definitions include built heritage resources and cultural heritage landscapes.

A *built heritage resource* is defined as: "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 Aboriginal community" (PPS 2014).

A *cultural heritage landscape* is defined as "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 Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association" (PPS 2014). Examples may include, but are not limited to farmscapes, historical settlements, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, and industrial complexes of cultural heritage value.

In addition, significance is also more generally defined. It is assigned a specific meaning according to the subject matter or policy context, such as wetlands or ecologically important areas. Regarding cultural heritage and archaeology resources, resources of significance are those that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people (*PPS* 2014).

Criteria for determining significance for the resources are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation (*PPS* 2014).

Accordingly, the foregoing guidelines and relevant policy statement were used to guide the scope and methodology of the cultural heritage assessment.

2.1.1 City of Brampton Official Plan (2015)

The City of Brampton provides cultural heritage policies in Section 4.10 of its Official Plan (2015) (City of Brampton 2015b). Cultural heritage policies relevant to this assessment are provided below:



4.10.1 Built Heritage

- 4.10.1.1 The City shall compile a Cultural Heritage Resources Register to include designated heritage resources as well as those listed as being of significant cultural heritage value or interest including built heritage resources, cultural heritage landscapes, heritage conservation districts, areas with cultural heritage character and heritage cemeteries.
- 4.10.1.2 The Register shall contain documentation for these resources including legal description, owner information, and description of the heritage attributes for each designated and listed heritage resources to ensure effective protection and to maintain its currency, the Register shall be updated regularly and be accessible to the public.
- 4.10.1.3 All significant heritage resources shall be designated as being of cultural heritage value or interest in accordance with the *Ontario Heritage Act* to help ensure effective protection and their continuing maintenance, conservation and restoration.
- 4.10.1.4 Criteria for assessing the heritage significance of cultural heritage resources shall be developed. Heritage significance refers to the aesthetic, historic, scientific, cultural, social or spiritual importance or significance of a resource for past, present or future generations. The significance of a cultural heritage resource is embodied in its heritage attributes and other character defining elements including: materials, forms, location, spatial configurations, uses and cultural associations or meanings. Assessment criteria may include one or more of the following core values:
 - Aesthetic, Design or Physical Value;
 - Historical or Associative Value; and/or,
 - Contextual Value.
- 4.10.1.8 Heritage resources will be protected and conserved in accordance with the Standards and Guidelines for the Conservation of Historic Places in Canada, the Appleton Charter for the Protection and Enhancement of the Built Environment and other recognized heritage protocols and standards. Protection, maintenance and stabilization of existing cultural heritage attributes and features over removal or replacement will be adopted as the core principles for all conservation projects.
- 4.10.1.17 The City shall modify its property standards and by-laws as appropriate to meet the needs of preserving heritage structures.
- 4.10.2 Cultural Heritage Landscape
- 4.10.2.1 The City shall identify and maintain an inventory of cultural heritage landscapes as part of the City's Cultural Heritage Register to ensure that they are accorded





with the same attention and protection as the other types of cultural heritage resources.

- 4.10.2.2 Significant cultural heritage landscapes shall be designated under either Part IV or Part V of the *Ontario Heritage Act*, or established as Areas of Cultural Heritage Character as appropriate.
- 4.10.2.3 Owing to the spatial characteristics of some cultural heritage landscapes that they may span across several geographical and political jurisdictions, the City shall cooperate with neighbouring municipalities, other levels of government, conservation authorities and the private sector in managing and conserving these resources.
- 4.10.4 Areas with Cultural Heritage Character
- 4.10.4.1 Areas with Cultural Heritage Character shall be established through secondary plan, block plan or zoning by-law.
- 4.10.4.2 Land use and development design guidelines shall be prepared for each zoned area to ensure that the heritage conservation objectives are met.
- 4.10.4.3 Cultural Heritage Character Area Impact Assessment shall be required for any development, redevelopment and alteration works proposed within the area.
- 4.10.5 Heritage Cemeteries
- 4.10.5.1 All cemeteries of cultural heritage significance shall be designated under Part IV or V of the *Ontario Heritage Act*, including vegetation and landscape of historic, aesthetic and contextual values to ensure effective protection and preservation.
- 4.10.5.3 Standards and design guidelines for heritage cemetery preservation shall be developed including the design of appropriate fencing, signage and commemorative plaquing.
- 4.10.5.4 The heritage integrity of cemeteries shall be given careful consideration at all times. Impacts and encroachments shall be assessed and mitigated and the relocation of human remains shall be avoided.
- 4.10.8 City-owned Heritage Resources
- 4.10.8.1 The City shall designate all city-owned heritage resources of merits under the Ontario Heritage Act and shall prepare strategies for their care, management, and stewardship.
- 4.10.8.2 The City shall protect and maintain all city-owned heritage resources to a good standard to set a model for high standard heritage conservation.



4.10.8.3 City-owned heritage resources shall be integrated into the community and put to adaptive reuse, where feasible.

4.10.9 Implementation

- 4.10.9.4 The City shall acquire heritage easements, and enter into development agreements, as appropriate, for the preservation of heritage resources and landscapes.
- 4.10.9.5 Landowner cost share agreement should be used wherever possible to spread the cost of heritage preservation over a block plan or a secondary plan area on the basis that such preservation constitutes a community benefit that contributes significantly to the sense of place and recreational and cultural amenities that will be enjoyed by area residents.
- 4.10.9.11 The relevant public agencies shall be advised of the existing and potential heritage and archaeological resources, Heritage Conservation District Studies and Plans at the early planning stage to ensure that the objectives of heritage conservation are given due consideration in the public work project concerned.
- 4.10.9.13 Lost historical sites and resources shall be commemorated with the appropriate form of interpretation.
- 4.10.9.14 The City will undertake to develop a signage and plaquing system for cultural heritage resources in the City.

2.1.2 City of Brampton's Transportation Master Plan (2015)

The City of Brampton's *Transportation Master Plan* (2015) provides direction relating to the phasing of road network improvements in Section 1.1 of the plan. The *Transportation Master Plan* identifies road projects recommended for implementation by 2021 in order to respond to rapid employment and population growth in the city as short-term horizon projects. The extension of Denison Street from Park Street to Mill Street North with a new two-lane road is identified as a short-term horizon project in Table 16 of the *Transportation Master Plan* (City of Brampton 2015a:93).

2.1.3 Region of Peel Official Plan (December 2016 Consolidation)

The Region of Peel provides cultural heritage policies in Section 3.6 of its *Official Plan* (December 2016 consolidation) (Region of Peel 2018). Cultural heritage policies relevant to this assessment are provided below:



3.6.2 It is the policy of *Regional Council* to:

3.6.2.1 Direct the area municipalities to include in their official plan policies for the definition, identification, conservation and protection of cultural heritage resources in Peel, in cooperation with the Region, the conservation authorities, other agencies and aboriginal groups, and to provide direction for their conservation and preservation, as required.

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

3.6.2.8 Direct the area municipalities to only permit development and site alteration on adjacent lands to protected heritage property where the proposed property has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

2.2 Data Collection and Methodology

In the course of the cultural heritage assessment, all potentially affected cultural heritage resources are subject to inventory. Short form names are usually applied to each resource type, (e.g. barn, residence). Generally, when conducting a preliminary identification of cultural heritage resources, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of cultural heritage resources in a geographic area.

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 retaining cultural heritage value. Typically, resources identified during these stages of the research process are reflective of architectural styles, associated with an important person, place, or event, and contribute to the contextual facets of a place, neighbourhood, or intersection.

A field review is then undertaken to confirm the location and condition of previously identified cultural heritage resources. The field review is also used to identify cultural heritage resources that have not been previously identified on federal, provincial, or municipal databases. Several investigative criteria are utilized during the field review to appropriately identify new cultural heritage resources. These investigative criteria are derived from provincial guidelines, definitions, and past experience. During the environmental assessment, a built structure or landscape is identified as a cultural heritage resource if it is 40 years or older, and if the resource satisfies at least one of the following criteria:



Design/Physical Value:

- It is a rare, unique, representative or early example of a style, type, expression, material or construction method.
- It displays a high degree of craftsmanship or artistic merit.
- It demonstrates a high degree of technical or scientific achievement.
- The site and/or structure retains original stylistic features and has not been irreversibly altered so as to destroy its integrity.
- It demonstrates a high degree of excellence or creative, technical or scientific achievement at a provincial level in a given period.

Historical/Associative Value:

- It has a direct association with a theme, event, belief, person, activity, organization, or institution that is significant to: The City of Brampton; the Province of Ontario; or Canada.
- It yields, or has the potential to yield, information that contributes to an understanding of the history of the: The City of Brampton; the Province of Ontario; or Canada.
- It demonstrates or reflects the work or ideas of an architect, artist builder, designer, or theorist who is significant to: The City of Brampton; the Province of Ontario; or Canada.
- It represents or demonstrates a theme or pattern in Ontario's history.
- It demonstrates an uncommon, rare or unique aspect of Ontario's cultural heritage.
- It has a strong or special association with the entire province or with a community that is found in more than one part of the province. The association exists for historical, social, or cultural reasons or because of traditional use.
- It has a strong or special association with the life or work of a person, group or organization of importance to the province or with an event of importance to the province.

Contextual Value:

- It is important in defining, maintaining, or supporting the character of an area.
- It is physically, functionally, visually, or historically linked to its surroundings.
- It is a landmark.
- It illustrates a significant phase in the development of the community or a major change or turning point in the community's history.
- The landscape contains a structure other than a building (fencing, culvert, public art, statue, etc.) that is associated with the history or daily life of that area or region.
- There is evidence of previous historical and/or existing agricultural practices (e.g. terracing, deforestation, complex water canalization, apple orchards, vineyards, etc.)
- It is of aesthetic, visual or contextual important to the province.

If a property within or adjacent to the study area meets one of these criteria it will be identified as a potential cultural heritage resource in this report and is subject to further research where appropriate and when feasible. Typically, detailed archival research, permission to enter lands containing potential heritage resources, and further consultation is required to determine the specific heritage significance of the identified potential cultural heritage resource. The detailed research and analysis required to conduct a heritage evaluation under O. Reg 9/06 is considered beyond the scope of this CHRA. Instead, a preliminary evaluation and justification for inclusion as potential cultural heritage resources based on the criteria above is employed and is presented in this report.



Additional properties within the project study area were encountered and observed during field review, however, they were screened out as potential cultural heritage resources because they were not considered to be 40 years or older, and were not determined to satisfy at least one of the criteria identified above.

When identifying cultural heritage landscapes, the following categories are typically utilized for the purposes of the classification during the field review:

Farm complexes:	comprise two or more buildings, one of which must be a farmhouse or barn, and may include a tree-lined drive, tree windbreaks, fences, domestic gardens and small orchards.
Roadscapes:	generally two-lanes in width with absence of shoulders or narrow shoulders only, ditches, tree lines, bridges, culverts and other associated features.
Waterscapes:	waterway features that contribute to the overall character of the cultural heritage landscape, usually in relation to their influence on historical development and settlement patterns.
Railscapes:	active or inactive railway lines or railway rights of way and associated features.
Historical settlements:	groupings of two or more structures with a commonly applied name.
Streetscapes:	generally consists of a paved road found in a more urban setting, and may include a series of houses that would have been built in the same time period.
Streetscapes: Historical agricultural	may include a series of houses that would have been built in the same
	may include a series of houses that would have been built in the same

Results of the desktop data collection and field review are contained in Section 3.0, while Sections 4.0 and 5.0 contain conclusions and recommendations with respect to potential impacts of the undertaking on the identified cultural heritage resource. A cultural heritage resource inventory is provided in Section 7.0, while location mapping is in Section 8.0.



3.0 BUILT HERITAGE RESOURCE AND CULTURAL HERITAGE LANDSCAPE ASSESSMENT

This section provides a brief summary of historical research and a description of identified above-ground cultural heritage resources that may be affected by the proposed undertaking.

3.1 Background Historical Summary

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, as well as Indigenous and Euro-Canadian land use and settlement.

3.1.1 Physiography

The study area is situated within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984).

The Peel Plain physiographic region is a level-to-undulating area of clay soil which covers an area of approximately 77,700 hectares across the central portions of the Regional Municipalities of York, Peel, and Halton. The Peel Plain has a general elevation of between 500 and 750 feet above sea level with a gradual uniform slope towards Lake Ontario. The Peel Plain is sectioned by the Credit, Humber, Don, and Rouge Rivers with deep valleys as well as several other streams such as the Bronte, Oakville, and Etobicoke Creeks. These valleys are in places bordered by trains of sandy alluvium. The region is devoid of large undrained depressions, swamps, and bogs though nevertheless the dominant soil possesses imperfect drainage (Chapman and Putnam 1984).

The Study Area is within West Etobicoke Creek subwatershed of the Etobicoke Creek. The Etobicoke Creek watershed, derived from the Algonkian word "*Wah-do-be kaug*" meaning "place where the alders grow" includes the major tributaries Spring Creek, Little Etobicoke Creek, and West Etobicoke Creek, and drains an area of approximately 211 square kilometres within the cities of Brampton, Mississauga, Toronto, and the Town of Caledon. The creeks flow south from its headwaters in Caledon into Lake Ontario through 68% urban, 27% rural and 5% urbanizing land (Toronto and Region Conservation Authority 2018).

The Study Area is also near Fletcher's Creek, within the Credit River watershed. The Credit River Watershed drains an area of approximately 860 square kilometres from its headwaters in Orangeville, Erin, and Mono, passing through part of the Niagara Escarpment and the Oak Ridges Moraine, and draining into Lake Ontario at the town of Port Credit (Credit Valley Conservation 2009). The river was named "*Mis.sin.ni.he*" or "*Mazinigae-zeebi*" by the Mississaugas, and surveyor Augustus Jones believed this signified "the trusting creek" or could also be translated as "to write or give and make credit", while the French name used when the river was first mapped in 1757 was "*Riviere au Credit*". These names refer to the fur trading period, when French, British, and Indigenous traders would meet along this river (Jameson 1838:73–74; Smith 1987:255–257; Rayburn 1997:84; Scott 1997:182; Gibson 2002:177; Robb et al. 2003:6). The Credit River was historically considered to be one of the best potential power sources for milling in all of southern Ontario, which led to the development of early of saw and grist mill



industries, and later textile mills, distilleries, bottling plants, and hydro-electric plants spawned communities throughout the river valley, typically close to the Niagara Escarpment (Town of Caledon 2009:fig. 7.1).

3.1.2 Indigenous Overview

Southern Ontario has a cultural history that begins approximately 11,000 years ago. The land now encompassed by the Township of Chinguacousy has a cultural history which begins approximately 10,000 years ago and continues to the present. Table 1 provides a general summary of the pre-contact Indigenous settlement of the area.

Period	Archaeological/ Material Culture	Date Range	Lifeways/ Attributes
PALEO-IN	IDIAN		
Early	Gainey, Barnes, Crowfield	9000-8500 BC	Big game hunters
Late	Holcombe, Hi-Lo, lanceolate	8500-7500 BC	Small nomadic groups
ARCHAIC			
Early	Nettling, Bifurcate-base	7800-6000 BC	Nomadic hunters and gatherers
Middle	Kirk, Stanley, Brewerton, Laurentian	6000-2000 BC	Transition to territorial settlements
Late	Lamoka, Genesee, Crawford Knoll, Innes	2500-500 BC	Polished/ground stone tools (small
			stemmed)
WOODLA	ND		
Early	Meadowood	800-400 BC	Introduction of pottery
Middle	Point Peninsula, Saugeen	400 BC-AD 800	Incipient horticulture
Late	Algonkian, Iroquoian	AD 800-1300	Transition to village life and agriculture
	Algonkian, Iroquoian	AD 1300-1400	Establishment of large palisaded villages
	Algonkian, Iroquoian	AD 1400-1600	Tribal differentiation and warfare
HISTORIC	2		
Early	Huron, Neutral, Petun, Odawa, Ojibwa	AD 1600-1650	Tribal displacements
Late	Six Nations Iroquois, Ojibwa	AD 1650-1800's	
	Euro-Canadian	AD 1800-present	European settlement

Table 1: Outline of Southern Ontario Prehistory

3.1.3 Historical Euro-Canadian Land Use: Township Survey and Settlement

Historically, the study area is located within the former Township of Chinguacousy, County of Peel, in Lot 6, Concession 1 West of Centre Road.

In 1788, the County of Peel was part of the extensive district known as the "Nassau District" and later called the "Home District". Its administrative centre was located in Newark, now called Niagara. After the province of Quebec was divided into Upper and Lower Canada in 1792, the Province was separated into nineteen counties. By 1852, the entire institution of districts was abolished, and the late Home Districts were represented by the Counties of York, Ontario and Peel. Shortly after, the County of Ontario became a separate county, and the question of separation became popular in Peel. A vote for independence was taken in 1866, and in 1867 the village of Brampton was chosen as the capital of the new county.



Township of Chinguacousy

The study area is located within lands of the 1818 "Ajetance Treaty" between the Crown and the Mississauga Nation of the River Credit, Twelve and Sixteen Mile Creeks (Mississaugas of the Credit First Nation 2017a). This treaty, however, excluded lands within one mile on either side of the Credit River, Twelve Mile Creek, and Sixteen Mile Creek. In 1820, Treaties 22 and 23 were signed which acquired these remaining lands except a 200 acre parcel along the Credit River (Mississaugas of the Credit First Nation 2017b).

The township is said to have been named by Sir Peregrine Maitland after the Mississauga word for the Credit River meaning "young pine." Other scholars assert that it was named in honour of the Ottawa Chief Shinguacose, which was corrupted to the present spelling of 'Chinguacousy,' "under whose leadership Fort Michilimacinac was captured from the Americans in the War of 1812" (Mika and Mika 1977:416; Rayburn 1997:68). The township was formally surveyed in 1818, and the first legal settlers took up their lands later in that same year. The extant Survey Diaries indicate that the original timber stands within the township included oak, ash, maple, beech, elm, basswood, hemlock, and pine. It was recorded that the first landowners in Chinguacousy included settlers from New Brunswick, the United States, and also United Empire Loyalists and their children (Pope 1877:65; Mika and Mika 1977:417; Armstrong 1985:142).

Due to the small population of the newly acquired tract, Chinguacousy was initially amalgamated with the Gore of Toronto Township for political and administrative purposes. In 1821, the population of the united townships numbered just 412. By 1837, the population of the township had reached an estimated 1,921. The numbers grew from 3,721 in 1842 to 7,469 in 1851. Thereafter the figures declined to 6,897 in 1861, and to 6,129 by 1871 (Walton 1837:71; Pope 1877:59). Chinguacousy Township was the largest in Peel County and was described as one of the best settled townships in the Home District. It contained excellent, rolling land which was timbered mainly in hardwood with some pine intermixed. Excellent wheat was grown here. The township contained one grist mill and seven sawmills. By 1851, this number had increased to two grist mills and eight sawmills (Smith 1846:32; Smith 1851:279). The principal crops grown in Chinguacousy included wheat, oats, peas, potatoes, and turnips. It was estimated that the only township in the province which rivaled Chinguacousy in wheat production at that time was Whitby. Other farm products included maple sugar, wool, cheese, and butter (Smith 1851:279).

Chinguacousy was included within the limits of the Home District until 1849, when the old Upper Canadian Districts were abolished. It formed part of the United Counties of York, Ontario, and Peel until 1851, when Peel was elevated to independent county status under the Provisions 14 & 15. A provisional council for Peel was not established until 1865, and the first official meeting of the Peel County council occurred in January 1867.

In 1974, part of the township was amalgamated with the City of Brampton, and the remainder was annexed to the Town of Caledon (Pope 1877:59; Mika and Mika 1977:417–418; Armstrong 1985:152; Rayburn 1997:68).

City of Brampton

The land of Brampton was originally owned by Samuel Kenny. Kenny sold this land to John Elliot who cleared the land, laid it out into village lots, and named it Brampton. By 1822 Brampton began to be populated but in 1845 the settlement gained a large influx of Irish immigrants leading to its incorporation as a village in 1852. At this point Brampton had spread across Etobicoke Creek with three bridges spanning it, had seven churches, five schools, a distillery, a cooperage, and a potashery. In 1858 Brampton was connected with the Grand Trunk Railway. This allowed the founding of two major industries in Brampton, the Haggert Foundry and the Dale Estate Nurseries; Dale Estate Nurseries remained the largest employer in the city until the 1940s. By the 1860s, Brampton had a population of 1,627 and became the County Town. In 1867 a courthouse was constructed. In 1873 Brampton was incorporated as a town and the population remained fairly static until the 1940s (Mika and Mika 1977:250–251).

In the late 1940s and into the 1950s rapid urban growth in Toronto helped to change the landscape as population rose steadily. New subdivisions developed during this time and, in the 1950s, Bramalea was created. Called "Canada's first satellite city," Bramalea was a planned community built to accommodate 50,000 people by integrating houses, shopping centres, parks, commercial business, and industry. In 1974 the City of Brampton was formed as a result of the amalgamation of Chinguacousy Township, Toronto Gore Township, the Town of Brampton, and part of the Town of Mississauga. In the 1980s and 1990s development spread further with large subdivisions developed on lands formerly used for farming (Mika and Mika 1977:250–251).

3.1.4 Review of Historical Mapping

The 1859 *Tremaine's Map of the County of Peel* (Figure 3) and the 1877 *Illustrated Historical Atlas of the County of Peel* (Figure 4) were reviewed to determine the potential for the presence of cultural heritage resources within the study area from the nineteenth century.

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference regarding the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. In addition, the use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historical mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.



Historically, the study area is in the former Township of Chinguacousy, Peel County in Lot 6, Concession 1 West of Centre Road. Details of historical property owners and historical features within the study area are listed in Table 2.

The 1859 *Tremaine's Map of the County of Peel* (Figure 3) demonstrates that the subject property was located along the western boundary of the Village of Brampton, though was not densely developed by that time. The Grand Trunk Railway line is visible to the north of the study area, while the developed urban area of Brampton is visible to the east of the study area. Within the study area "Depot" is identified to the south of the Grant Trunk Railway line.

The 1877 *Illustrated Historical Atlas of the County of Peel* (Figure 4) illustrates the growth of the village and shows the property as located within the urban area of Brampton, identified by blacked-out city blocks. As such, no identification of historical features is possible. The Credit Valley Railway line, on which construction had begun in 1874, is visible extending north-south through the west portion of the study corridor (Boles 2019).

1859 Tremaine's Map of th	e County of Peel	1877 Illustrated Historical Atlas of the County of Peel				
Property Owner(s)	Historical Feature(s)	Property Owner(s)	Historical Feature(s)			
George Wright, Esquire (west half of Lot 6, Con 1 W)	 Depot Grand Trunk Railway extending to the north of the study area No other historical features identified 	• William Fletcher (west half of Lot 6, Con 1 W)	 Grand Trunk Railway extending to the north of the study area and Credit Valley Railway extending through the study area No other historical features identified 			

Table 2: Nineteenth century property owner(s) and historical feature(s) within the study area

In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. 1921 (Revised 1924) Fire Insurance Plans for Brampton were reviewed at the Peel Art Gallery Museum & Museum and Archives, however were not reproduced in this report. This report presents maps and aerial photographs from 1909 to 1973. These do not represent the full range of maps consulted for the purpose of this study but were judged to cover the full range of land uses that occurred in the area during this period.

The 1909 National Topographic Map (Figure 5) identifies the intersection of the Grant Trunk and Credit Valley Railway lines to the north of the study area. Several structures are identified along Park Street, Denison Avenue, and Mill Street North.

The 1918 topographic map (Figure 6) identifies continued growth within the Village of Brampton and increased density in the general location of the study area. West Street, located to the west of the study area, is shown extending northwards to intersect with Railroad Street with several brick buildings constructed alongside the roadway. The 1931 topographic map (Figure 7) identifies additional structures along Denison Road with increased density along West Street to the west of the study area, while the



1948 topographic map (Figure 8) shows continued growth throughout the urban centre and extending to the north and south.

The 1954 aerial photograph (Figure 9) identifies the existing industrial building at 45 Railroad Street along Mill Street North and another large building situated perpendicular to Railroad Street to the east of the railway line (now a parking lot). The 1963 topographic map (Figure 10) identifies the density within and surrounding the study area with the industrial properties located to the north of the study area south of Railroad Street.

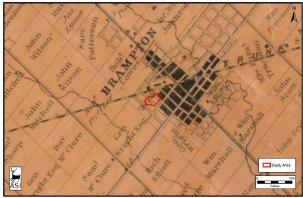


Figure 3: 1859 *Tremaine's Map of the County of Peel* (Tremaine 1859)



Figure 4: 1877 Illustrated Historical Atlas of the County of Peel

(Walker and Miles 1877)



Figure 5: 1909 National Topographic Map (Department of Militia and Defence 1909)



Figure 6: 1918 National Topographic Map (Department of Militia and Defence 1918)



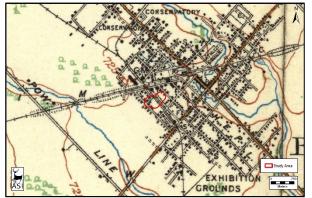


Figure 7: 1931 National Topographic Map (Department of National Defence 1931)

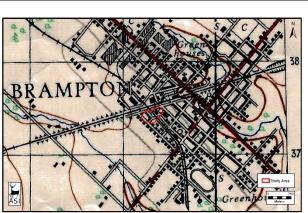


Figure 8: 1948 National Topographic Map (Department of National Defence 1948)



Figure 9: 1954 Aerial Photograph (Hunting Survey Corporation Limited 1954:fig. 463.794)

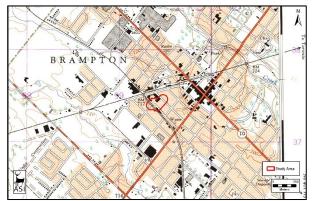


Figure 10: 1963 National Topographic Map (Army Survey Establishment, R.C.E 1963)

3.2 Existing Conditions

3.2.1 Review of Existing Heritage Inventories

In order to make an identification of existing cultural heritage resources within the study area, several resources were consulted (MTCS 2016). They include:

- City of Brampton's *Municipal Register of Cultural Heritage Resources designated under the Ontario Heritage Act, Designated Properties,* which includes properties individually designated under Part IV of the *Ontario Heritage Act* (City of Brampton 2019a) (Accessed 1 May 2019);
- Municipal Register of Cultural Heritage Resources, 'Listed' Heritage Properties, which included properties which are not designated but believed to be of cultural heritage value or interest (commonly referred to as "listed" properties) (City of Brampton 2019b) (Accessed 1 May 2019);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust n.d.) (Ontario Heritage Trust n.d.) (Accessed 1 May 2019);
- The Ontario Heritage Trust's *Ontario Heritage Plaque Guide*, an online, searchable database of Ontario Heritage Plaques (Ontario Heritage Trust n.d.) (Accessed 2 May 2019);



- Inventory of known cemeteries/burial sites in the Ontario Ministry of Government and Consumer Services and the Ontario Genealogical Society's online databases (Ontario Genealogical Society n.d.) (Accessed 2 May 2019);
- Parks Canada's *Canada's Historic Places* website: available online, the searchable register provides information on historical places recognized for their heritage value at the local, provincial, territorial, and national levels (Parks Canada n.d.) (Accessed 2 May 2019);
- Parks Canada's Directory of Federal Heritage Designations, a searchable on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings, and Heritage Lighthouses (Parks Canada n.d.) (Accessed 2 May 2019);
- Canadian Heritage River System. The Canadian Heritage River System is 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.) (Accessed 2 May 2019); and,
- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites (UNESCO World Heritage Centre n.d.) (Accessed 2 May 2019).

In addition, the following stakeholders were contacted to gather information on potential cultural heritage resources, active and inactive cemeteries, and areas of identified Indigenous interest within the study area:

- Pascal Doucet, Heritage Planner, City of Brampton, and Erin Smith, Heritage Planner, City of Brampton, were contacted to gather any information on potential cultural heritage resources or concerns within the study area (email communication 1-2 May 2019); and
- The Ministry of Tourism, Culture and Sport (email sent 2 May 2019 to registrar@ontario.ca; response received 6 May 2019 from Karla Barboza, Team Lead, Heritage Ministry of Tourism, Culture and Sport)

Based on the review of available provincial and federal data, there are 12 previously-identified cultural heritage resources within and/or adjacent to the Denison Avenue Extension study area, including properties listed on the City of Brampton's *Municipal Register of Cultural Heritage Resources designated under the Ontario Heritage Act, Designated Properties*, the City of Brampton's *Municipal Register of Cultural Heritage Resources, 'Listed' Heritage Properties*, and properties identified as potential properties of interest by City of Brampton heritage staff (identified via email 2 May 2019).

The Ministry of Tourism, Culture and Sport identified one provincial heritage property to the north of the study area at 27 Church Street, the Brampton Go Transit/Via Rail Station (identified via email 6 May 2019). However, this property is well outside the boundaries of the study area.

3.2.2 Denison Avenue Extension Study Area- Field Review

A field review of the study area was undertaken by Laura Loney of ASI, on 8 May 2019 to document the existing conditions of the study area. The field review was preceded by a review of available, current and historical, aerial photographs and maps (including online sources such as Bing and Google maps). These large-scale maps were reviewed for any potential cultural heritage resources which may be extant in the



study area. The existing conditions of the study area are described below. Identified cultural heritage resources are discussed in Section 3.2.3 and are mapped in Section 8.0 of this report.

The proposed extension of Denison Avenue begins from Denison Avenue at Park Street and continues east to Mill Street. The study area for the purposes of this report extends 50 metres to the north and south of the centre-line of the proposed roadway for the Denison Avenue extension (see Figure 1 and Figure 2 in Section 1.0 of this report).

Currently, Park Street (Figure 12, Figure 15) extends south towards Denison Avenue (Figure 11) and then continues south towards Nelson Street West within a primarily residential area. A former industrial building is located to the east of the existing railway and Park Street at 45 Railroad Street with the surrounding property currently surrounding by hoarding and under construction (Figure 13, Figure 14, Figure 18 though Figure 20). A railway corridor runs north-south along the west boundary of the study corridor to the east of Park Street while residential buildings are located along the west side of Park Street. Within and to the south of the study area along the east side of Park Street and the west side of Mill Street North are single-detached residential properties. A former industrial building adapted for commercial use is located along the north side of Railroad Street, separated from the roadway by another railway line running east-west (Figure 20). The existing industrial building dominates the southwest corner of Railroad Street and Mill Street North, with residential properties extending along the east and west side of Mill Street North to the south (Figure 16 through Figure 18). At the northeast corner of Mill Street North and Railroad Street is the provincial heritage property at 27 Church Street, the Brampton GO Transit/VIA Rail Station (Figure 20).

The proposed extension of Denison Avenue will result in a new roadway between Park Street south of Denison Avenue to Mill Street North. The proposed roadway will extend through a currently vacant space adjacent to the south of a former industrial building, a designated heritage property, at 45 Railroad Street. This area is currently bordered by a chain-link fence on the west side, with trees extending along the fence on the east side of Park Street south of Denison Avenue, with construction hoarding and chain link fence along the west side of Mill Street North and ongoing construction throughout the site (Figure 13 and Figure 14).



Figure 11: Looking west along Denison Avenue from Park Street (ASI 2019)



Figure 12: Looking south along Park Street (ASI 2019)





Figure 13: Looking east into the construction site within the property at 45 Railroad Street (ASI 2019)



Figure 14: Looking west into the construction site within the property at 45 Railroad Street (ASI 2019)



Figure 15: Looking south along Park Street towards the study area (ASI 2019)

Figure 16: Looking northwest along Mill Street North towards the study area (ASI 2019)



Figure 17: Looking northwest along Mill Street North within the study area (ASI 2019)



Figure 18: Looking south along Mill Street North from Railroad Street (ASI 2019)





Figure 19: Looking southeast towards 45 Railroad Street along Railroad Street (ASI 2019)



Figure 20: Looking northwest from the intersection of Mill Street North and Railroad Street (ASI 2019)



Figure 21: Looking northeast along Railroad Street towards 27 Church Street (ASI 2019)

3.2.3 Denison Avenue Extension Study Area– Identified Cultural Heritage Resources

Based on the results of the background research and field review, a total of 17 cultural heritage resources (CHR) were identified within the Denison Avenue Extension study area (see Table 3 below). A detailed inventory of these cultural heritage resource within the study area is presented in Section 7.0 and mapping of the feature along with photographic figure locations is provided in Section 8.0 of this report.



Page 23

Feature ID	Address/Location	Resource Type	Heritage Recognition
CHR 1	45 Railroad St	Industrial	Designated under Part IV of the OHA
CHR 2	39 Mill Street N	Residential	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources
CHR 3	40 Mill Street N	Residential	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources
CHR 4	41 Mill Street N	Residential	Identified during Fieldwork
CHR 5	43 Mill Street N	Residential	Identified during Fieldwork
CHR 6	44 Mill Street N	Residential	Designated under Part IV of the OHA
CHR 7	45 Mill Street N	Residential	Identified during Fieldwork
CHR 8	48 Mill Street N	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 9	50 Mill Street N	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 10	52 Mill Street N	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 11	2 Denison Ave	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 12	3 Denison Ave	Residential	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources
CHR 13	4 Denison Ave	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 14	5 Denison Ave	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 15	6 & 8 Denison Avenue	Residential	Identified by the City of Brampton as a Potential Property of Interest
CHR 16	53 Park Street	Residential	Identified during Fieldwork
CHR 17	55 Park Street	Residential	Identified during Fieldwork

3.3 Screening for Potential Impacts

To assess the potential impacts of the undertaking, identified cultural heritage resources (CHR) are considered against a range of possible impacts as outlined in the document entitled *Ontario Heritage Tool Kit* (MTC 2006) which include:

- 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;
- 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 soils, and drainage patterns that adversely affect an archaeological resource.

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

- 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.

For the purposes of evaluating potential impacts of development and site alteration, MTC (2010) defines "adjacent" as: "contiguous properties as well as properties that are separated from a heritage property by narrow strip of land used as a public or private road, highway, street, lane, trail, right-of-way, walkway, green space, park, and/or easement or as otherwise defined in the municipal official plan."

The proposed undertaking should endeavor to avoid adversely affecting cultural heritage resources and intervention should be managed in such a way that its impact is sympathetic with the value of the resources. When the nature of the undertaking is such that adverse impacts are unavoidable, it may be necessary to implement management or mitigation strategies that alleviate the deleterious effects on cultural heritage resources. Mitigation is the process of causing lessening or negating anticipated adverse impacts to cultural heritage resources and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, documentation of the cultural heritage landscape and/or built heritage resource if to be demolished or relocated, and salvage of building materials.

Various works associated with infrastructure improvements have the potential to affect cultural heritage resources in a variety

3.4 Potential Impacts of the Preferred Design Concept on Cultural Heritage Resources

The preferred alternative (Alternative 1) for the Denison Avenue Extension study area consists of a new roadway between Park Street, south of Denison Avenue, to Mill Street North, with entrances to the proposed 45 Railroad Street development constructed from Denison Avenue, Park Street, and the newly constructed road extension (see Alternative Design 1, dated May 24, 2019, in Appendix A). The proposed roadway will extend through a currently vacant space to the south of the existing designated heritage property at 45 Railroad Street, north of 45 Mill Street North. The interim solution involves paving an 8.5 metre in width roadway, a sidewalk to the north, and the construction of the three proposed entrances to the property at 45 Railroad Street. This work is expected to be completed by 2021. The ultimate solution will involve the expansion of the interim right-of-way to 23 metres in width. At the time of report writing there was no project schedule in place for the ultimate solution.



Cultural heritage landscapes and/or built heritage resources may experience displacement, or direct impacts, i.e. removal, if they are located within the right-of-way of the undertaking. They may also experience disruption, or indirect impacts, by the introduction of physical, visual, audible, or atmospheric elements that are not in keeping with the character and /or setting. Table 4 outlines the potential impacts on all cultural heritage resources within the study area. Where direct impacts to cultural heritage resources are anticipated, 'Y' is listed in the column for direct impacts. Where they may be potential for indirect impacts, 'P' is listed in the column for indirect impacts. Indirect impacts from construction-related vibration are identified as having potential to affect an identified cultural heritage resource where work is taking place within 50 m of the heritage property. A 50 m buffer is applied in the absence of a project specific defined vibration zone of influence. This 50 m buffer for vibration impacts was established by the MHSCTI, based on best practices and in consultation with engineering professionals, and was communicated to ASI on 24 April 2020. Where no impacts to cultural heritage resources are anticipated, 'N' is listed in the columns for both direct and indirect impacts.



Table 4: Potential Impacts of the Proposed Undertaking

Location 45 Railroad St		Indirect Impacts N		Mitigation Strategies		Indirect	Potential Impacts	
Railroad	N	N			Impacts	Impacts		
			No impacts are anticipated to any of the identified heritage attributes outlined in the City of Brampton By- Law 150-2015.	No further work required.	Ν		No impacts are anticipated to any of the identified heritage attributes outlined in the City of Brampton By-Law 150-2015.	No fur
39 Mill Street N	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 subject to vibration impacts: <u>Preferred Option:</u> Plan construction activities to avoid adverse vibration impacts to the structure on this property. <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during 	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	constr
40 Mill Street N	N	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 subject to vibration impacts: <u>Preferred Option:</u> Plan construction activities to avoid adverse vibration impacts to the structure on this property. <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration 	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	thresh To ens constr in adva assess subjec - - - - The ar constr thresh
	Street N 40 Mill	Street N 40 Mill N	Street N 40 Mill N Y	Street N of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property. 40 Mill N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on	Street Nof construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property.0this property <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property.10NYIndirect impacts as a result of construction activities may result in limited and temporary adverse vibration to for construction activities may result in limited and temporary adverse vibration thresholds are exceeded until the above has been undertaken.10NYIndirect impacts as a result of construction activities may result in limited and temporary adverse vibration thresholds are exceeded until the above has been undertaken.10NYIndirect impacts as a result of construction activities may result in limited and temporary adverse vibration timpacts to the structure on this property.To ensure this property is not adversely impacted during construction, adal impacts in advance of construction activities to vibration impacts:10NYIndirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.10NYIndirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.10NYIndirect impacts adverse vibration impa	Street N of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property. construction, baseline vibration monitoring should be undertaken in advance of construction. Should that the structure on this property will be subject to vibration impacts: - - Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. - - Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a committering should be undertaken. 40 Mill N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property. To ensure this property is not adversely impacted during to adverse vibration impacts: N 40 Mill N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property. To ensure this property is not adversely impacted during to adverse vibration impacts: N • Preferred Option: Plan construction activities to avoid adverse vibration impacts: • Preferred Option: Should it not be feasible to avoid adverse vibration impacts: N 40 Mill N Y Indirect impacts as a result of	Street N of construction activities may result in limited and impacts to the structure on this property. construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property. is construction impacts • Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. · • Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. 40 Mill N Y 10 A construction activities may result in limited and temporary adverse vibration result is advance of construction activities to avoid adverse vibration impacts to the structure on this property.	Street N of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property. construction. Should this advance monitoring is advance of construction activities to avoid adverse vibration impacts: activities may result in limited and temporary adverse vibration impacts to the structure on this property will be subject to vibration impacts to the structure on this property. seessment conclude that the structure on this property. seessment conclude that the structure on this property. seessment conclude that the structure on this property. 40 Mill N Y Indirect impacts as a result of construction, and immediately cease work if acceptable vibration impacts to the structure on this property. N Y 40 Mill N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on vibration impacts during construction, and immediately cease work if acceptable vibration in advance of construction activities to avoid adverse vibration impacts: N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure. N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure. N Y Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts: 40 Mill N Y Indirect impacts as a result of constru

olution

Mitigation Strategies

further work required.

ensure this property is not adversely impacted during struction, baseline vibration monitoring should be undertaken dvance of construction. Should this advance monitoring essment conclude that the structure on this property will be ject to vibration impacts:

- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.
- area should be monitored for vibration impacts during struction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken. ensure this property is not adversely impacted during struction, baseline vibration monitoring should be undertaken dvance of construction. Should this advance monitoring essment conclude that the structure on this property will be ject to vibration impacts:
- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.

area should be monitored for vibration impacts during struction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken.



					Interim Solution			Ultima	ate Sol
Feature	Location	Direct	Indirect	Potential Impacts	Mitigation Strategies	Direct	Indirect	Potential Impacts	
ID		Impacts	Impacts			Impacts	5 Impacts		
CHR 4	41 Mill Street N	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. 	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	const
					The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration				The a const
CHR 5	43 Mill Street N	N	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 thresholds are exceeded until the above has been undertaken. To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration thresholds are exceeded until the above has been undertaken. 	Ν	Y	Property acquisition and removal of all structures of the adjacent property (45 Mill Street N) is anticipated to accommodate the full 23 m right-of-way. Indirect impacts to CHR 5 are anticipated in the form of grading, and vibration due to demolition activities. These impacts are subject to future development applications and property acquisition.	- No

olution

Mitigation Strategies

ensure this property is not adversely impacted during struction, baseline vibration monitoring should be undertaken dvance of construction. Should this advance monitoring essment conclude that the structure on this property will be ject to vibration impacts:

- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.

e area should be monitored for vibration impacts during struction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken. Staging and construction activities should be suitably planned o avoid impacts to CHR 5.

- No-go zones should be suitably planned to avoid impacts to CHR 5.
- Given the potential cultural heritage value of the residence at 43 Mill Street N, and the anticipated impacts to the adjacent property, if heavy construction (including demolition and grading activities) is to occur in close proximity to this building within 50 m), the impacts of the vibrations should be nvestigated through an engineering assessment and any necessary mitigation measures should be implemented prior to construction.

f there arise any structural and/or geotechnical concerns subsequent to this Cultural Heritage Resource Assessment the ecommended distance will have to be re-evaluated and econfirmed upon discovery of any arising concern.



					Interim Solution			Ultima	ate Sol
Feature ID	Location		Indirect s Impacts		Mitigation Strategies		Indirect Impacts	•	
CHR 6	44 Mill Street N	N	Ŷ	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration 	N	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	To ens constr in adv assess subjec - - - - The at constr
					thresholds are exceeded until the above has been undertaken.				thresh
CHR 7	45 Mill Street N	N/A	N/A	Indirect impacts to CHR 7 are anticipated in the form of vibration due to construction activities.	This property was identified as a CHR during initial screening for the existing conditions CHRA (completed in July 2019). The City of Brampton requested an HIA be completed for the property. The HIA completed in December 2019 for this potential cultural	N/A	N/A	Property acquisition and removal of all structures is anticipated to accommodate the full 23 m right-of-way.	This p the ex Bramp HIA co
					heritage resource determined that this property does not meet criteria outlined in O. Reg. 9/06 (ASI 2019). As such no further work is required.			These impacts are subject to future development applications and property acquisition.	herita criteri work
CHR 8	48 Mill Street N	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. 	Ν	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	To ens constri in adv assess subjec
					The area should be monitored for vibration impacts during				The a
					construction, and immediately cease work if acceptable vibration				const
					thresholds are exceeded until the above has been undertaken.				thresh

olution

Mitigation Strategies

ensure this property is not adversely impacted during struction, baseline vibration monitoring should be undertaken dvance of construction. Should this advance monitoring essment conclude that the structure on this property will be ject to vibration impacts:

- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.

e area should be monitored for vibration impacts during struction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken. s property was identified as a CHR during initial screening for existing conditions CHRA (completed in July 2019). The City of mpton requested an HIA be completed for the property. The completed in December 2019 for this potential cultural itage resource determined that this property does not meet eria outlined in O. Reg. 9/06 (ASI 2019). As such no further rk is required.

ensure this property is not adversely impacted during struction, baseline vibration monitoring should be undertaken dvance of construction. Should this advance monitoring essment conclude that the structure on this property will be ject to vibration impacts:

- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.

area should be monitored for vibration impacts during struction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken.



					Interim Solution			Ultima	
Feature ID	Location		Indirect Impacts		Mitigation Strategies		Indirect Impacts	Potential Impacts	
CHR 9	50 Mill Street N	N	Ŷ	Indirect impacts as a result of construction activities may result in limited and	 To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration 	N	Ŷ	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	asses subje - - - The a const
CHR 10	52 Mill Street N	N	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	 thresholds are exceeded until the above has been undertaken. To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken in advance of construction. Should this advance monitoring assessment conclude that the structure on this property will be subject to vibration impacts: Preferred Option: Plan construction activities to avoid adverse vibration impacts to the structure on this property. Alternative Option: Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration thresholds are exceeded until the above has been undertaken. 	N	Y	Indirect impacts as a result of construction activities may result in limited and temporary adverse vibration impacts to the structure on this property.	thresi To en const in adv asses: subje - - - - The a const thresi
CHR 11	2 Denison Ave	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No fu
CHR 12	3 Denison Ave	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No fu
CHR 13	4 Denison Ave	Ν	N	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No fu

olution

Mitigation Strategies

ensure this property is not adversely impacted during nstruction, baseline vibration monitoring should be undertaken advance of construction. Should this advance monitoring sessment conclude that the structure on this property will be bject to vibration impacts:

- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.
- e area should be monitored for vibration impacts during instruction, and immediately cease work if acceptable vibration resholds are exceeded until the above has been undertaken. ensure this property is not adversely impacted during instruction, baseline vibration monitoring should be undertaken advance of construction. Should this advance monitoring sessment conclude that the structure on this property will be bject to vibration impacts:
- <u>Preferred Option</u>: Plan construction activities to avoid adverse vibration impacts to the structure on this property.
- <u>Alternative Option:</u> Should it not be feasible to avoid adverse vibration impacts to the structure on this property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations.

e area should be monitored for vibration impacts during astruction, and immediately cease work if acceptable vibration esholds are exceeded until the above has been undertaken. further work required.

further work required.

further work required.



					Interim Solution			Ultin	nate Solı
Feature	Location	Direct	Indirect	Potential Impacts	Mitigation Strategies	Direct	Indirect	Potential Impacts	
ID		Impacts	Impacts			Impacts	Impacts		
CHR 14	5 Denison Ave	Ν	Ν	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	Ν	Ν	No impacts are anticipated to affect the identified cultural heritage resource.	No fui
CHR 15	6 & 8 Denison Avenue	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	Ν	N	No impacts are anticipated to affect the identified cultural heritage resource.	No fui
CHR 16	53 Park Street	N	N	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	Ν	N	No impacts are anticipated to affect the identified cultural heritage resource.	No fui
CHR 17	55 Park Street	Ν	Ν	No impacts are anticipated to affect the identified cultural heritage resource.	No further work required.	Ν	Ν	No impacts are anticipated to affect the identified cultural heritage resource.	No fui

olution

Mitigation Strategies

further work required.

further work required.

further work required.

further work required.



No direct impacts to any CHRs are anticipated as a result of the interim or ultimate solutions for the preferred alternative.

Potential vibration impacts to CHRs 2, 3, 4, 5, 6, 8, 9, and 10 are anticipated as a result of their proximity (within 50 m) to the demolition and construction activities being undertaken for both the interim and ultimate solutions of the preferred alternative. It is recommended that baseline vibration monitoring be undertaken in advance of the construction to identify whether the resource is located within the vibration zone of influence established for the project. Where feasible, construction activities should be planned in order to prevent impacts to identified cultural heritage resources. Should it not be feasible to avoid adverse vibration impacts to the structure on property, a qualified engineer should undertake a condition assessment of the structures within the vibration zone of influence. Further, Associated Engineering must make a commitment to repair any damages caused by vibrations. The area should be monitored for vibration impacts during construction, and immediately cease work if acceptable vibration thresholds are exceeded until the above has been undertaken

4.0 CONCLUSIONS

The results of background historical research and a review of secondary source material, including historical mapping, revealed a study area with an urban land use history dating back to the nineteenth century. A review of federal registers and municipal and provincial inventories revealed that there are eleven previously-identified cultural heritage resources within and/or adjacent to the Denison Avenue Extension study area, including properties listed on the City of Brampton's *Municipal Register of Cultural Heritage Resources designated under the Ontario Heritage Act, Designated Properties*, the City of Brampton's *Municipal Register of Cultural Heritage Resources, 'Listed' Heritage Properties*, and properties identified as potential properties of interest by City of Brampton heritage staff. Five additional cultural heritage resources have been identified as part of the field review.

Key Findings

- The study area contains five potential cultural heritage resources, including the residential properties at 41 Mill Street North (CHR 4), 43 Mill Street North (CHR 5), 45 Mill Street North (CHR 7)¹, 53 Park Street (CHR 16), and 55 Park Street (CHR 17);
- The residential properties at 48 Mill Street North (CHR 8), 50 Mill Street North (CHR 9), 52 Mill Street North (CHR 10), 4 Denison Avenue (CHR 13), 5 Denison Avenue (CHR 14), and 6-8 Denison Avenue (CHR 15) are identified by City of Brampton Heritage Staff as Potential Properties of Interest;
- The residential properties at 39 and 40 Mill Street North (CHR 2 & 3) and 3 Denison Avenue (CHR 11) are listed on the City of Brampton's Municipal Register of Cultural Heritage Resources;
- The industrial property at 45 Railroad Street (CHR 1) and residential property at 44 Mill Street North (CHR 6) are designated under Part IV of the *Ontario Heritage Act;* and

¹ Note that the property at 45 Mill Street North was subsequently found not to meet the criteria outlined in O. Reg 9/06 in December 2019 (ASI 2019).



• No direct impacts to any CHRs are anticipated as a result of the interim or ultimate solutions for the preferred alternative. Both the interim and ultimate solutions for the preferred alternative are anticipated to result in potential vibration impacts to eight cultural heritage resource (CHR 2-6, 8-10) as a result of vibration due to demolition and construction activities.

Results of Preliminary Impact Assessment

- No direct impacts to any previously identified or potential cultural heritage resources are anticipated as a result of the preferred alternatives interim or ultimate solutions.
- Both the interim and ultimate solutions are anticipated to potentially result in vibration impacts to six previously identified cultural heritage resources and two potential cultural heritage resources.
 - 39 Mill Street North (CHR 2) (Listed);
 - 40 Mill Street North (CHR 3) (Listed);
 - 41 Mill Street North (CHR 4);
 - 43 Mill Street North (CHR 5);
 - 44 Mill Street North (CHR 6) (Designated);
 - o 48 Mill Street North (CHR 8) (Identified by the City of Brampton);
 - o 50 Mill Street North (CHR 9 (Identified by the City of Brampton)); and
 - 52 Mill Street North (CHR 10) (Identified by the City of Brampton).

No impacts are anticipated to the remaining six previously identified cultural heritage resource and two potential cultural heritage resources:

- 45 Railroad Street (CHR 1) (Designated);
- 2 Denison Avenue (CHR 11) (Identified by the City of Brampton);
- 3 Denison Avenue (CHR 12) (Listed);
- 4 Denison Avenue (CHR 13) (Identified by the City of Brampton);
- o 5 Denison Avenue (CHR 14 (Identified by the City of Brampton));
- o 6 & 8 Denison Avenue (CHR 15) (Identified by the City of Brampton);
- 53 Park Street (CHR 16); and
- 55 Park Street (CHR 17).

No further work is required to address impacts to the following property:

• 45 Mill Street North (CHR 7)

5.0 RECOMMENDATIONS

Background research, data collection, and field review was conducted for the study area and it was determined that a total of 17 cultural heritage resources are located within the Denison Avenue Extension EA study area. Based on the results of the assessment, the following recommendations have been developed:

1. Construction activities and staging should be suitably planned and undertaken to avoid impacts to the identified cultural heritage resources. No-go zones should be established



adjacent to the identified cultural heritage resources and instructions to construction crews should be issued in order to prevent impacts.

- 2. Where feasible, staging and construction activities and no-go zones should be suitably planned to avoid vibration impacts to 43 Mill Street North (CHR 5).
- 3. Where indirect impacts including grading, property acquisition and subsequent demolition are anticipated on properties adjacent to identified cultural heritage resources and occurring within 50 m of buildings identified as potential cultural heritage resources, the impacts of the vibrations should be investigated through an engineering assessment and any necessary mitigation measures should be implemented prior to construction. Properties identified as potentially being indirectly impacted as a result of construction activities include:
 - i. 39 Mill Street North (CHR 2)
 - ii. 40 Mill Street North (CHR 3)
 - iii. 41 Mill Street North (CHR 4)
 - iv. 43 Mill Street North (CHR 5)
 - v. 44 Mill Street North (CHR 6)
 - vi. 48 Mill Street North (CHR 8)
 - vii. 50 Mill Street North (CHR 9)
 - viii. 52 Mill Street North (CHR 10)

If there arise any structural and/or geotechnical concerns subsequent to this Cultural Heritage Resource Assessment the recommended distance will have to be re-evaluated and reconfirmed upon discovery of any arising concern.

- 4. This report should be submitted to City of Brampton Heritage Planning staff for review.
- 5. Should future work require an expansion of the study area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on potential heritage resources.



6.0 **REFERENCES**

Armstrong, F.H.

1985 Handbook of Upper Canadian Chronology. Dundurn Press, Toronto.

Army Survey Establishment, R.C.E

1963 Brampton Sheet 30M/12. Brampton, Ontario.

ASI, (Archaeological Services Inc.)

2019 *Heritage Impact Assessment, 45 Mill Street North, City of Brampton, Ontario*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto. On file with the author.

Boles, D.

2019 Credit Valley Railway. *Toronto Railway Historical Association*. http://www.trha.ca/trha/railways/credit-valley-railway/.

Canadian Heritage Rivers Board and Technical Planning Committee

n.d. The Rivers – Canadian Heritage Rivers System Canada's National River Conservation Program. *Canadian Heritage Rivers System*. http://chrs.ca/the-rivers/.

Chapman, L.J., and F. Putnam

1984 *The Physiography of Southern Ontario*. Vol. 2. Ontario Geologic Survey, Special Volume. Ontario Ministry of Natural Resources, Toronto.

City of Brampton

2014 Heritage Report: Reasons for Designation - 44 Mill Street North. February.

2015a Transportation Master Plan.

2015b Official Plan. September. https://www.brampton.ca/EN/City-Hall/Official-Plan/Documents/Sept2015_Consolidated_OP.pdf.

2019a Municipal Register of Cultural Heritage Resources Designated Under the Ontario Heritage Act Designated Properties. http://www.brampton.ca/EN/Arts-Culture-Tourism/Cultural-Heritage/Documents1/Designation_Register.pdf.

2019b Municipal Register of Cultural Resources: "Listed" Heritage Properties. July. https://www.brampton.ca/EN/Arts-Culture-Tourism/Cultural-Heritage/Documents1/Listed_Register.pdf.

Credit Valley Conservation

2009 Rising to the Challenge: A Handbook for Understanding and Protecting the Credit River Watershed.

Department of Militia and Defence

1909 Brampton Sheet No. 35. National Topographic System.



1918 Brampton Sheet 30M/12. Brampton, Ontario.

Department of National Defence

1931 Brampton Sheet 30M/12. Brampton, Ontario.

1948 Brampton Sheet 30M/12. Brampton, Ontario.

ERA Architects

2015 Conservation Plan: 45 Railroad Street. June 8.

Gibson, M.M.

2002 Changes at the River's Mouth: The Port Credit Community. In *Mississauga: The First Ten Thousand Years*. F.A. Dieterman. Eastend Books, Toronto.

Hunting Survey Corporation Limited

1954 Digital Aerial Photographs. Southern Ontario 1954. University of Toronto Map & Data Library. maps.library.utorotno.ca/data/on/AP_1954/index.html.

Jameson

1838 Winter Studies and Summer Rambles in Canada. London.

Leonard, J.

2009 Heritage Report - Statement of Reasons for Designation: Dominion-Skate Buildings (Former Copeland-Chatterson Loose Leaf Ledger Factory) 45 Railroad Street. City of Brampton, April.

MHSTCI, (Ministry of Heritage, Sport, Tourism and Culture Industries)

1980 *Guidelines on the Man-Made Component of Environmental Assessments, Prepared by Weiler.* Historical Planning and Research Branch, Ontario Ministry of Culture and Recreation, Toronto, Ontario.

1990 Ontario Heritage Act, R.S.O. 1990, c. O.18 [as Amended in 2019].

1992 Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments.

2010 Standards and Guidelines for Conservation of Provincial Heritage Properties. http://www.mtc.gov.on.ca/en/publications/Standards_Conservation.pdf.

Mika, N., and H. Mika

1977 *Places In Ontario: Their Name Origins and History, Part I, A-E*. Vol. I. Encyclopedia of Ontario. Mika Publishing Company, Belleville.

Ministry of Municipal Affairs and Housing

1990 Planning Act, R.S.O. 1990, c. P.13.

2014 Provincial Policy Statement. Toronto, Ontario.



Ministry of the Environment

1990 Environmental Assessment Act, R.S.O. Province of Ontario.

Ministry of Transportation

2006 Cultural Heritage – Built Heritage and Cultural Heritage Landscapes: Technical Requirements for Environmental Impact Study and Environmental Protection/Mitigation.

2007 Environmental Guide for Built Heritage and Cultural Heritage Landscapes. http://www.raqsb.mto.gov.on.ca/techpubs/eps.nsf/0/0c286507a82cde53852572d70059fdf 9/\$FILE/FINAL_MT0%20Env%20Guide%20BHCHL%20Final%202007%20ACC.pdf.

Mississaugas of the Credit First Nation

2017a Ajetance Purchase (Treaty 19). Treaty Lands and Territory. http://mncfn.ca/treaty19/.

2017b 12 Mile Creek, 16 Mile Creek and Credit River Reserves – Treaty Nos. 22 and 23 (1820). *Mississaugas of the New Credit First Nation*. http://mncfn.ca/treaty2223/.

Ontario Genealogical Society

n.d. OGS Cemeteries. *Digitals Collections & Library Catalogue*. http://vitacollections.ca/ogscollections/2818487/data.

Ontario Heritage Trust

n.d. Easement Properties. *Ontario Heritage Trust*. https://www.heritagetrust.on.ca/en/property-types/easement-properties.

n.d. Provincial Plaque Program. *Ontario Heritage Trust*. https://www.heritagetrust.on.ca/en/pages/programs/provincial-plaque-program.

Parks Canada

n.d. Canada's Historic Places. www.historicplaces.ca.

n.d. Directory of Federal Heritage Designations. https://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx.

Pope, J.H.

1877 Illustrated Historical Atlas of the County of Halton, Ont. Walker and Miles, Toronto.

Rayburn, A.

1997 Place Names of Ontario. University of Toronto Press, Toronto.

Region of Peel

2018 Official Plan. December.

https://www.peelregion.ca/planning/officialplan/pdfs/ROPConsolidationDec2016.pdf.

Robb, G., P. Dilse, H. Henderson, B. Hermsen, W. Shearer, and P. Stewart

2003 Heritage Conservation Feasibility Study of Old Port Credit Village Stage 1 Report. City of

Mississauga.

Scott, W.B.

1997 Ontario Place Names: The Historical, Offbeat or Humorous Origins of More Than 1,000 Communities. Lone Pine Publishing, Edmonton.

Smith, D.B.

1987 Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) & the Mississauga Indians. University of Toronto Press, Toronto.

Smith, W.H.

1846 Smith's Canadian Gazetteer, Comprising Statistical and General Information Respecting All Parts of the Upper Province, or Canada West. H. & W. Rowsell, Toronto.

1851 *Canada: Past, Present and Future, Being a Historical, Geographical, Geological and Statistical Account of Canada West.* Vol. 1. Thomas Maclear, Toronto.

Toronto and Region Conservation Authority

2018 Etobicoke & Mimico Creek Watershed Features. https://trca.ca/conservation/watershedmanagement/etobicoke-mimico-creek/watershed-features/.

Town of Caledon

2009 Cultural Heritage Landscape Inventory Report.

Tremaine, G.C.

1859 Tremaine's Map of the County of Peel. George C. Tremaine, Toronto.

Underwriters' Survey Ltd.

1924 Fire Insurance Plan, Brampton, 1921, Revised in 1924. Brampton, Ontario.

UNESCO World Heritage Centre

n.d. World Heritage List. UNESCO World Heritage Centre. http://whc.unesco.org/en/list/.

Walker and Miles

1877 Illustrated Historical Atlas of the County of Peel, Ont. Walker and Miles, Toronto.

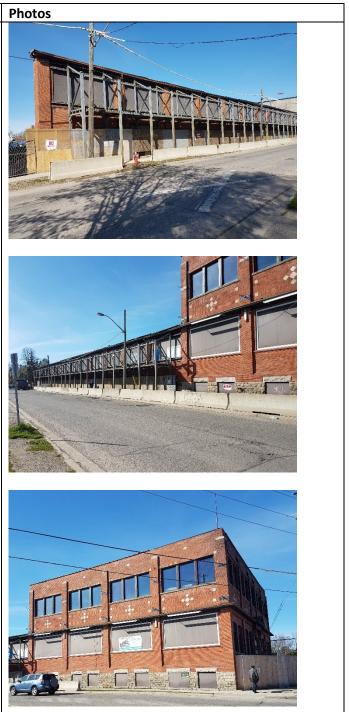
Walton, G.

1837 The City of Toronto and Home District Commercial Directory. Dalton and Coates, Toronto.



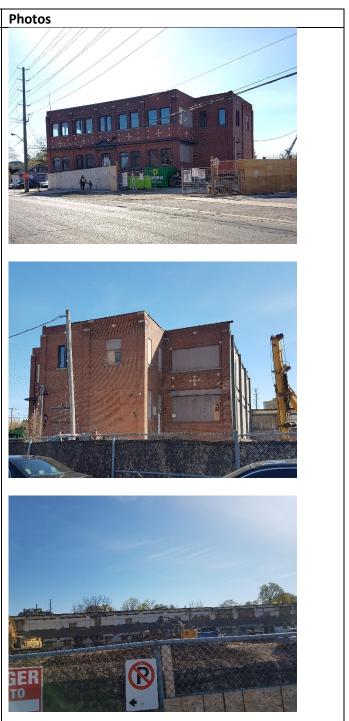
7.0 CULTURAL HERITAGE RESOURCE INVENTORY

Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value
CHR 1	45 Railroad Street	Industrial Building	Designated under Part IV of the OHA	Historical: The property is associated with R.J. Copeland and A.E. Chatterson, inventors of the loose- leaf ledger systems manufactured in the Brampton Plant. This property is linked to the early industrial history and development of Brampton, and to the development of loose-leaf binder systems. The building was constructed in two phases: the first in 1905, originally a single-one-storey building, and the second phase in 1914, a second storey over the Railroad Street office component (Leonard 2009). The property is identified on the 1921, Revised 1924 Fire Insurance Plan of Brampton (Underwriters' Survey Ltd. 1924).
				A development has been approved by the City of Brampton for the existing property. Between 2012 and 2013, the removal of the rear of the factory was completed and the existing east façade of the one-storey addition was braced. The rehabilitation of the rest of the building and additional conservation work will continue post-construction of the proposed podium and towers on site (ERA Architects 2015).
				Design: The existing two-storey building has a rectangular plan with partial second-storey, flat roof addition, with Chicago School and Neo-Gothic style influences (Leonard 2009). The unpainted brick walls include brick buttresses, a diamond brick pattern, a stone-block foundation, large industiral-scale window openings, and stone-lintels over the below-grade basement windows. A sign is located at the corner of Mill Street North and Railroad Street which reads "Mill Street". All that remains of the one-storey addition along Mill Street North is the east façade which is currently braced while construction continues onsite.
				Context: Located on the west side of Mill Street North at the north edge of a residential area with a railway line to the west and north, an industrial property further to the north and the Brampton GO/Via Rail Station to the northeast. The existing building is a landmark at the southwest corner of Mill Street North and Railroad Street and contributes to the heritage character of the established late- nineteenth- and early-twentieth century residential neighbourhood.



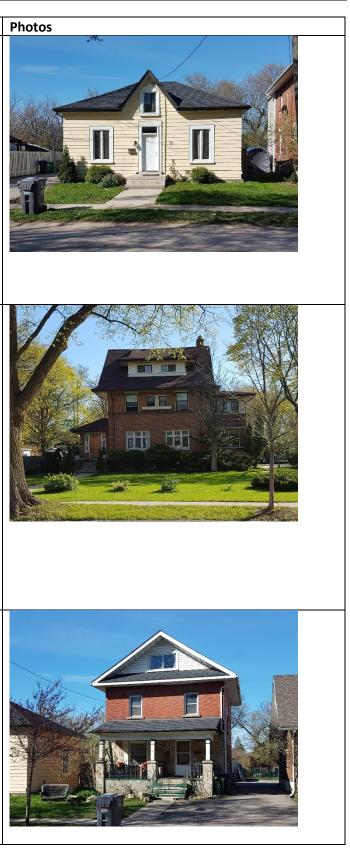


Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	I
					100
					1.000
					16
					-
					-
					_
					C
					1





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value
CHR 2	39 Mill Street North	Residence	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources	 Potential Historical Value: According to the City of Brampton's Municipal Register of Cultural Heritage Resources, the existing residence was constructed circa 1875 (City of Brampton 2019b). The property is identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924). Potential Design Value: A one-storey Ontario cottage residential building with hipped roof with cross gable, gothic-arched sash window (partially covered by contemporary trim), and symmetrically-placed windows on either side of central entrance with transom window. Potential Contextual Value: Located on the west side of Mill Street North in a residential area with an industrial property further to the north. Mature deciduous trees are visible along the rear lot line of the property. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any
CHR 3	40 Mill Street North	Residence	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources	 formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource. Potential Historical Value: According to the City of Brampton's Municipal Register of Cultural Heritage Resources, the existing residence was constructed circa 1910 (City of Brampton 2019b). The property is identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924). Potential Design Value: A two-and-a-half storey Prairie-style brick (Flemish-bond) residential building with side gable asphalt-clad roof, brick chimney, one-storey entrance along the north elevation, flatheaded window openings, and flat-roofed dormer on the front elevation. The existing building is featured as an example of Prairie-style architecture in John Blumenson's book <i>Ontario Architecture</i>. Potential Contextual Value: Located on the east side of Mill Street North, with industrial buildings to the north and west and a residential neighbourhood to the south and east. Mature deciduous trees are located throughout the property surrounding the existing residential building with a generous setback from the public right-of-way. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.
CHR 4	41 Mill Street North	Residence	Identified during Fieldwork	 Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924). Potential Design Value: A two-and-a-half storey red-brick residential building with stone foundation, gable roof with projecting eaves, and one-storey porch across the front elevation. Potential Contextual Value: Located on the west side of Mill Street North in a residential area with an industrial property further to the north. Mature deciduous trees are visible along the rear lot line of the property. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	
CHR 5	43 Mill Street North	Residence	Identified during Fieldwork	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: A one-and-a-half storey wood-frame residential building with brick veneer, stone foundation, side-gable roof with central gable-roofed dormer on the east elevation, and recessed porch under projecting eaves.	
				Potential Contextual Value: Located on the west side of Mill Street North in a residential area with an industrial property further to the north. A mature deciduous tree is located in front of the existing residential building.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	
CHR 6	44 Mill Street North	Residence	Designated Part IV	Historical: The existing residential building was constructed circa 1875 and is associated with the family of George Graham, a prominent family in the area, as well as Anne Stirk, sister of a prominent veterinarian (City of Brampton 2014). The existing structure is identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924)	
				Design: "The house is a two-storey brick structure with a stone foundation. It has a rectangular plan with multiple rear brick additions. It has a truncated hip roof with cross gables and two brick chimneys. Two two-storey bays are located on both the front façade and south wall. Each bay is topped with a gable that features Tudor elements such as vergeboard, half-timber details and large corner brackets. An in-style enclosed porch has been added to the entry and the south wall overlooking the yard. The windows are one-over-one sash windows and feature brick, and radiating voussoirs" (City of Brampton 2014:3)	
				Context: Located on the east side of Mill Street North, with industrial buildings to the north and west and a mid-to-late nineteenth and early-twentieth century residential neighbourhood to the south and east (City of Brampton 2014). Mature deciduous trees are located throughout the property surrounding the existing residential building with a wrought-iron fence along the east lot line.	
CHR 7	45 Mill Street North	Residence	Identified during Fieldwork	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: A two-and-a-half storey red-brick residential building with stone foundation, gable roof with projecting eaves, and one-storey porch across the front elevation.	
				Potential Contextual Value: Located on the west side of Mill Street North, with residential buildings to the east and south and an industrial property to the north. A mature coniferous tree is located in front of the existing residential building.	
				*This property was evaluated in December 2019 and found not to meet the criteria outlined in O. Reg 9/06 (ASI 2019)	





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	
CHR 8	48 Mill Street North	Residence	Identified by the City of Brampton as a Potential Property of Interest	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
			Froperty of interest	Potential Design Value: A one-storey Ontario Cottage wood-frame residential building with hipped roof with central gable, symmetrically placed rectangular window openings on either side of the central entrance.	
				Potential Contextual Value: Located on the east side of Mill Street North, with industrial buildings to the north and west and a residential neighbourhood to the south and east.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	
CHR 9	50 Mill Street North	Residence	Identified by the City of Brampton as a Potential Property of Interest	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: A one-and-a-half storey vernacular brick-veneer residential building with central-gable roof, shed-roofed dormer on the north elevation, and one-storey enclosed wooden porch across the front elevation.	
				Potential Contextual Value: Located on the east side of Mill Street North, with industrial buildings to the north and west and a residential neighbourhood to the south and east.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	and the second second
CHR 10	52 Mill Street North	Residence	Identified by the City of Brampton as a Potential Property of Interest	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	1
				Potential Design Value: A two-storey red-brick (stretcher-bond) residential building with hipped roof with gable-roofed dormer on the west elevation, stone foundation, and one-storey porch wrapping the west and south elevations.	
				Potential Contextual Value: Located on the east side of Mill Street North, with industrial buildings to the north and west and a residential neighbourhood to the south and east.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	
CHR 11	2 Denison Avenue	Residence	Identified by the City of Brampton as a Potential Property of Interest	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: A one-storey Ontario Cottage red-brick residential building with parged foundation, gable roof, central gable on the south elevation with decorative bargeboard, segmentally-arched window openings with buff brick hoodmolds and sills, and entrance beneath covered one-storey porch with central gable.	
				Potential Contextual Value: Located at the northeast corner of Denison Avenue and Park Street within a residential neighbourhood. Mature deciduous trees are located to the rear of the existing residential building.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	
CHR 12	3 Denison Avenue	Residence	Listed on the City of Brampton's Municipal Register of Cultural Heritage Resources	Potential Historical Value: According to the City of Brampton's Municipal Register of Cultural Heritage Resources, the existing residence was constructed circa 1880. The dwelling was constructed during "Brampton's initial phase of growth and economic development following the establishment of the CPR (Grand Trunk Railway) line through Brampton and the arrival of industry to the area" (City of Brampton 2019b). The property is also associated with Edward Heydon, a local builder, mason and bricklayer who purchased the property in 1882 (City of Brampton 2019b). The property is identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924). Potential Design Value: A two-storey painted-brick, Gothic-Revival residential building with steeply- pitched gable roof, one-storey bay window with decorative wooden cornice and dentils on the north elevation, round-arched window openings at the second storey and segmentally-arched window openings at the first storey, segmentally-arched door opening with glass transom, brick chimney above the existing roof, and flat-roofed rear addition.	
				Potential Contextual Value: Located along the south side of Denison Avenue within a residential neighbourhood. Mature deciduous trees are located to the rear of the existing residential building. The existing building is a landmark at the terminus of the Denison Avenue roadway and contributes to the existing nineteenth-century streetscape along Denison Avenue. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	
CHR 13	4 Denison Avenue	Residence	Identified by the City of Brampton as a Potential Property of Interest	 Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924). Potential Design Value: A one-storey wood-frame Ontario Cottage residential building with hipped roof, central gable on the south elevation with decorative bargeboard and a gothic-arched window with wooden shutters below, a central entrance with transom window and door surround, flat-roofed porch above the central entrance, symmetrically-placed, flat-headed window openings, and a one-storey addition to the rear. Potential Contextual Value: Located along the north side of Denison Avenue within a residential neighbourhood. Mature deciduous trees are located to the rear of the existing residential building. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource. 	
CHR 14	5 Denison Avenue	Residence	Identified by the City of Brampton as a Potential Property of Interest	 Potential Historical Value: Identified on the 1931 National Topographic Map (Department of National Defence 1931) Potential Design Value: A two-storey red brick residential building with hipped roof, central gable-roofed dormer on the north elevation, concrete foundation, segmentally arched window openings and one-storey hipped-roof covered wooden porch across the front elevation Potential Contextual Value: Located along the south side of Denison Avenue within a residential neighbourhood. A mature deciduous tree is located in front of the existing residential building. An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource. 	





Feature ID	Address/Location	Resource Type	Heritage Recognition	Description of Known/Potential Cultural Heritage Value	
CHR 15	6 & 8 Denison Avenue	Residence	Identified by the City of Brampton as a Potential Property of Interest	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
			Troperty of interest	Potential Design Value: A two-storey semi-detached red brick residential building with pyramidal- hipped roof with centrally placed gable-roofed dormer on the south elevation, centrally located entrances, segmentally arched window openings, brick chimneys extending above the roofline on the east and west elevations, and a shed-roofed porch across the front elevation.	
				Potential Contextual Value: Located along the north side of Denison Avenue within a residential neighbourhood. Concrete and gravel driveways extend on either side of the existing residential building with a small grassed area in front of the existing residential building.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	
CHR 16	53 Park Street	Residence	Identified during Fieldwork	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: One-storey Ontario Cottage residential building with hipped roof, aluminum siding and stone cladding, rectangular windows and entrance beneath a central gable.	
				Potential Contextual Value: Located along the west side of Park Street within a residential area to the east of the existing railway tracks. Mature deciduous trees are visible to the rear of the existing building.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	
CHR 17	55 Park Street	Residence	Identified during Fieldwork	Potential Historical Value: Identified on the 1921, Revised 1924 Fire Insurance Plan (Underwriters' Survey Ltd. 1924).	
				Potential Design Value: Two-storey wood-frame residential building with gable roof, clad in siding with entrance along the side (south) elevation, and rectangular window openings with projecting aluminum awnings.	
				Potential Contextual Value: Located along the west side of Park Street within a residential area to the east of the existing railway tracks. Mature deciduous trees are visible to the rear of the existing building.	
				An evaluation of this property against criteria outlined in O. Reg 9/06 is required to identify any formal cultural heritage value or interest or attributes associated with this potential cultural heritage resource.	





8.0 CULTURAL HERITAGE RESOURCE MAPPING

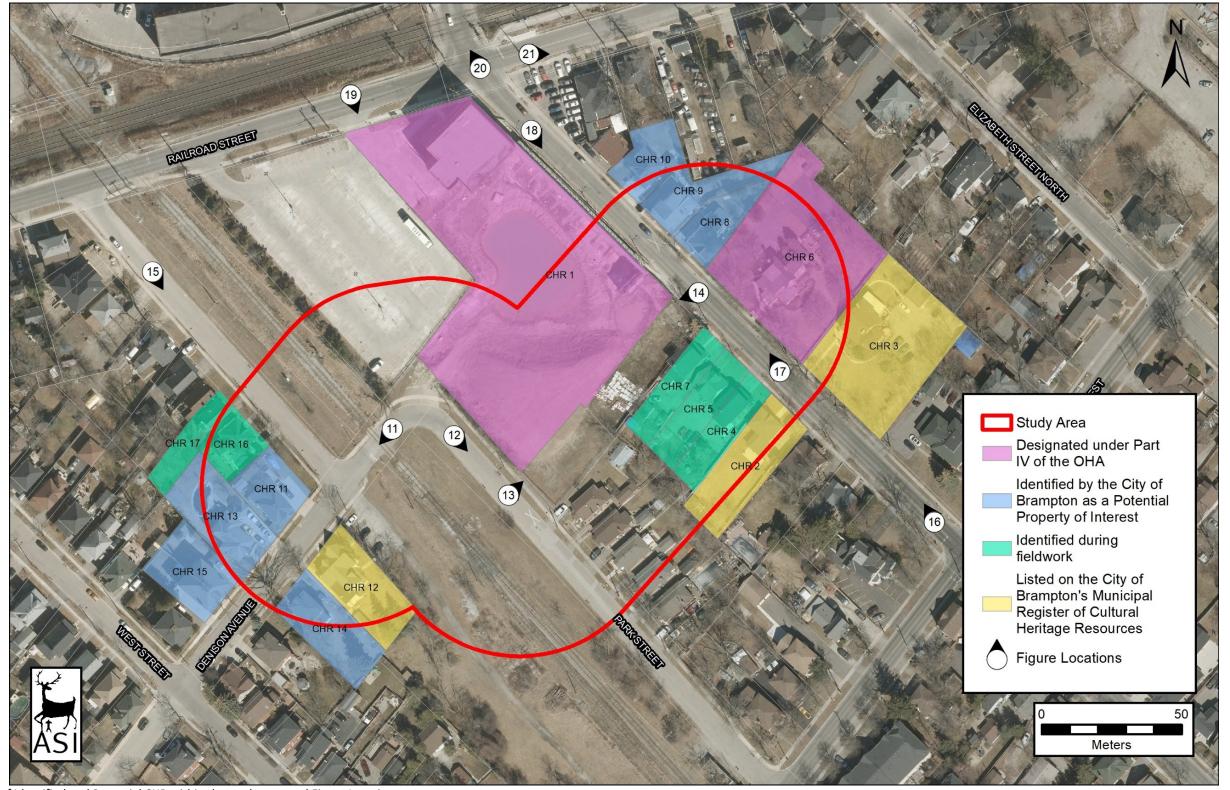
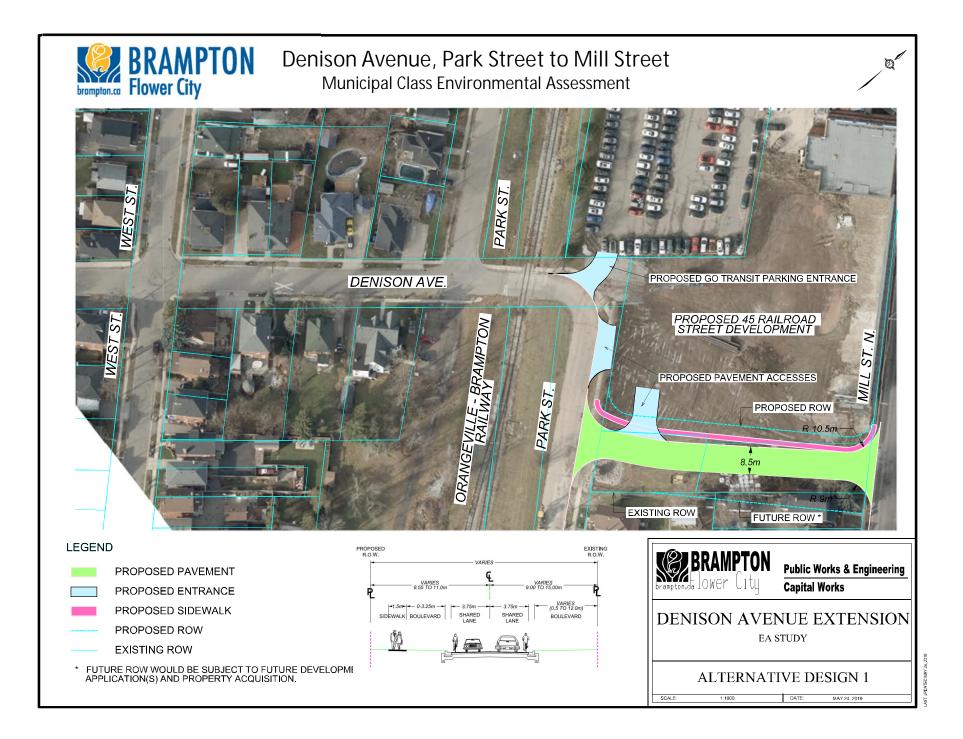


Figure 22: Location of Identified and Potential CHR within the study area and Figure Locations



APPENDIX A: PREFERRED ALTERNATIVE





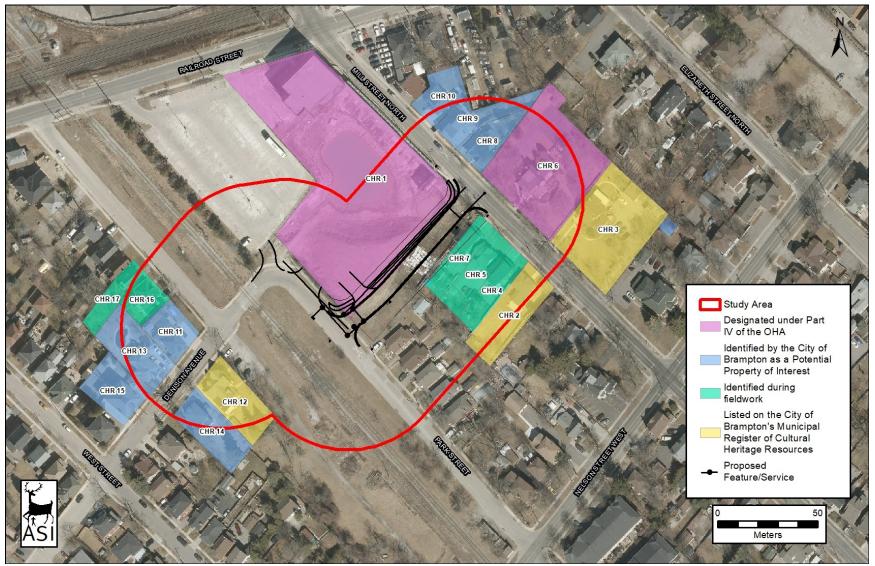


Figure 23: Location of Identified and Potential CHR within the study area, showing Proposed Works



Ministry of Heritage, Sp Tourism and Culture Ind Programs and Services B 401 Bay Street, Suite 170 Toronto, ON M7A 0A7 Tel: 416.314.7643	lustries ranch	Ministère des Industries du Patrimoine, du Sport, du Tourisme et de la Culture Direction des programmes et des services 401, rue Bay, Bureau 1700 Toronto, ON M7A 0A7 Tél: 416.314.7643	Ontario 😵			
April 24, 2020		E	mail Only			
Archaeological Serv 528 Bathurst Street Toronto, ON M5S 2	Cultural Heritage Associate Archaeological Services Inc.					
MHSTCI File : Your File : Proponent : Subject : Project : Location :	0010643 18CH-163 City of Brampton Cultural Heritage Resource Assessment Report Denison Avenue Extension Denison Avenue, between Park Street and Mill Street North, Lot 6, Conc 1, West of Centre Road, Former Township of Chinguacousy, now City of Brampton					

Dear Ms. Kelly:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the report *Cultural Heritage Resource Assessment* [CHRA]: *Built Heritage Resources and Cultural Heritage Landscapes, Existing Conditions and Preliminary Impact Assessment, Denison Road* (Archaeological Services Inc., May 2019, Revised January 2020) for the above-referenced project. MHSTCI's interest in this environmental assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage.

Project Summary

The City of Brampton is considering the extension of Denison Avenue, from Park Street eastward to Mill Street North, and will be studying traffic and connectivity needs, alternative road designs and active transportation aspects. This project is proceeding as a Schedule B undertaking via the Municipal Class EA process.

General Remarks

The Public Information Centre of September 19, 2019 depicted three alternative designs for the extension of Denison Ave. Can you please confirm whether the preferred design, Alternative 1, has been chosen as the official option? If it has not, then this report, as a preliminary heritage impact assessment, should include discussion of the other alternatives as well.

When referring to ministry documents, the ministry's name as it existed at the time of publication should be included; namely, Ministry of Culture and Communications and Ministry of Culture and Recreation.

The CHRA does not include a discussion on the impacts from vibrations due to construction activity. Reference should be made to the existing literature and its findings and how they are applied to this project. Please see comments for Section 5.0.

Comments

3.2 Existing Conditions

Subsection 3.2.1 describes the sources (documents and municipal staff) that were consulted for information on existing cultural heritage resources within the study area. Please indicate whether the municipal heritage committee was contacted and, if so, whether it had any comments on the project and/or this report.

This subsection notes that 11 previously identified cultural heritage resources (CHRs) exist within or adjacent to the study area, yet Table 3 lists 12 previously identified CHRs. The former number is likely a typographical error and should be corrected.

Regarding subsection 3.2.2, MHSTCI recommends that the table in Section 7.0 be merged with Table 3 and inserted into page 21 (to follow the paragraph that continues from page 20). A new subsection should begin at "The proposed extension of Denison Avenue..." (potentially titled "Proposed Undertaking"), to differentiate it from the existing heritage conditions.

3.4 Potential Impacts of the Preferred Design Concept on Cultural Heritage Resources

Table 4 indicates that "...the proposed work is not adjacent to the identified cultural heritage resource". It is important to note that a CHR does not need to be adjacent to a project in order to be negatively impacted. Please see comments for Section 5.0.

The ultimate solution has the potential to impact CHR-4 and CHR-6, and possibly CHR-3 and CHR-8 through vibrations resulting from construction activities (including laydown and staging areas). Please see comments for Section 5.0. Table 4 should be modified to address this.

Table 4 should indicate the type of negative impact that could affect a CHR and elaborate on why no mitigation measures are required. For example, if encroachment were an impact, the mitigation measure would require no encroachment or recommend how this could be lessened.

MHSTCI recommends a map be added that depicts the project location in relation to the identified CHRs (essentially merging Figure 22 and Alternative Design 1). This would assist the reader to immediately understand the proximity of the key elements.

Table 4 indicates that a draft heritage impact assessment (HIA) was undertaken for CHR-7 (45 Mill Street N), which determined that the property does not contain cultural heritage value or interest (CHVI) as per O. Reg. 9/06. Is it possible to provide MHSTCI with a copy of the HIA for our records? Please advise if the City of Brampton and its municipal heritage committee have accepted the results of the HIA.

5.0 Recommendations

Recommendation 3 uses the distance of 10 m for establishing vibration thresholds to mitigate any negative impacts. The industry practice has been 50 m for determining vibration impacts; this distance should be used until new studies prove otherwise. As such, these recommendations and Table 4 will need to be modified to account for any CHR that is within 50 m of the project's construction activity, such as CHR-4 and CHR-6 and possibly CHR-3 and CHR-8.

7.0 Cultural Heritage Resource Inventory

This section, in table format, provides a description of each identified CHR, along with a column for known or potential cultural heritage value. Cultural heritage value is based on the criteria in O. Reg. 9/06. This column should be modified to indicate whether a property meets the criteria of O. Reg. 9/06 and should list the heritage attributes that contribute to the CHVI.

Closing Remarks

Thank you for consulting with MHSTCI on this project and please inform us when the environmental assessment report is ready for review. Should you have any questions, please contact the undersigned.

Regards,

Katherine Kirzati Heritage Planner Heritage Planning Unit <u>katherine.kirzati@ontario.ca</u>

c: Soheil Nejatian, Project Engineer, City of Brampton Marko Paranosic, Senior Project Manager, Associated Engineering (Ont.) Ltd.