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

EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

NINTH LINE IMPROVEMENTS FROM EGLINTON AVENUE WEST TO DERRY ROAD WEST

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF MISSISSAUGA REGION OF PEEL, ONTARIO

FINAL REPORT

Prepared for:

HDR Inc. 100 York Blvd Suite 300 Richmond Hill, ON L4B 1J8

ASI File: 19CH-159

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

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NINTH LINE IMPROVEMENTS FROM EGLINTON AVENUE WEST TO DERRY ROAD WEST MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STUDY

CITY OF MISSISSAUGA REGION OF PEEL, ONTARIO

EXECUTIVE SUMMARY

ASI was contracted by HDR Inc., on behalf of the City of Mississauga, to conduct a Cultural Heritage Resource Assessment (CHRA) as part of the Ninth Line Improvements from Eglinton Avenue West to Derry Road West Municipal Class Environmental Assessment. The project involves the need for improvements along the right-of-way of Ninth Line to meet the future transportation needs of the existing community to the east and the planned developments to the west. The study area centers on Ninth Line from Eglinton Avenue West to Derry Road West, which is a two lane north-south arterial road with a centre-left turn lane through most of the study area.

The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the late nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are five previously identified features of cultural heritage value within the Ninth Line Improvements from Eglinton Avenue West to Derry Road West study area. No additional features were identified during fieldwork.

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

- 1. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified BHRs and CHLs.
- Suitable mitigation including establishing no-go zones with fencing and issuing instructions to construction crews to avoid the cultural heritage resource should be considered to mitigate any unintended impacts to all cultural heritage resources.



- 3. Post construction rehabilitation including planting with sympathetic plant species and the replacement of any impacted landscape features with potential cultural heritage value should be considered to mitigate any impacts.
- 4. As the property at 6671 Ninth Line (BHR 1) is designated under Part IV of the Ontario Heritage Act and there are direct impacts anticipated, a resource-specific HIA is required as per the City of Mississauga Official Plan clause 7.4.1.12. This HIA should be completed by a qualified cultural heritage specialist following the City of Mississauga's Terms of Reference for HIAs as early as possible in detailed design.
- 5. As the properties at 5104 Ninth Line (CHL 1), 6056 Ninth Line (CHL 3), and 7044 Ninth Line (CHL 4) are listed by the City of Mississauga and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Mississauga Official Plan clauses 7.4.1.10 and 7.4.1.12. However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on any property, it is recommended that the City of Mississauga consider waiving the requirement for a HIA in these cases if suitable mitigation measures including post-construction rehabilitation with sympathetic plantings are implemented.
- 6. Indirect impacts to BHR 1 and CHL 1, and CHL 3 may occur as a result of their location adjacent to the proposed alignment. To ensure the structures on the properties at 6671 Ninth Line (BHR 1), 5104 Ninth Line (CHL 1), and 6056 Ninth Line (CHL 3) are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the any structures will be subject to vibrations, a vibration monitoring plan should be prepared and implemented as part of the detailed design phase of the project to lessen vibration impacts related to construction. Indirect impacts due to vibrations are not anticipated for CHL 4 as the structure on the property is located more than 100 m from the proposed grading on the property.
- 7. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.
- 8. The CHRA should be submitted by the proponent to the City of Mississauga and the MHSTCI for review and comment, and any other local heritage stakeholders that may have an interest in this project. The final report should be submitted to the City of Mississauga for their records.



PROJECT PERSONNEL

Senior Project Manager: Lindsay Graves, MA, CAHP

Senior Cultural Heritage Specialist | Senior Project Manager - Cultural

Heritage Division

Project Coordinator: Katrina Thatch, Hon. BA

Archaeologist | Project Coordinator - Environmental Assessment Division

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QUALIFIED PERSONS INVOLVED IN THE PROJECT

Lindsay Graves, MA, CAHP
Senior Cultural Heritage Specialist | Senior Project Manager - Cultural Heritage Division

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

John Sleath, MA Cultural Heritage Specialist | Project Manager - Cultural Heritage Division

The Project Manager for this CHRA is John Sleath (MA), who is a Cultural Heritage Specialist and Project Manager within the Cultural Heritage Division with ASI. He was responsible for the day-to-day management activities, including scoping of research activities and site surveys and drafting of study findings and recommendations. John has worked in a variety of contexts within the field of cultural heritage resource management for the past 13 years, as an archaeologist and as a cultural heritage professional. In 2015 John began working in the Cultural Heritage Division as a Cultural Heritage Assistant providing support for a multitude of cultural heritage assessment reports, including Cultural Heritage Resource Assessments (CHRA), Cultural Heritage Evaluation Reports (CHER), Heritage Impact Assessments (HIA), and Secondary Plan assessments. In 2017 John began working as a Cultural Heritage Associate, responsible for tasks related to a variety of heritage assessments including: completing archival research, investigating built heritage and cultural heritage landscapes, report preparation, historical map regression, and municipal consultation. Since 2018 John has been a project manager responsible for a variety of tasks required for successful project completion. This work has allowed John to engage with stakeholders from the public and private sector, as well as representatives from local municipal planning departments and museums. John has conducted heritage assessments across Ontario, with a focus on transit and rail corridor infrastructure including bridges and culverts.



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Kirstyn Allam, BA (Hon), Advanced Diploma in Applied Museum Studies Cultural Heritage Technician | Technical Writer and Researcher - Cultural Heritage Division

The Cultural Heritage Technician for this CHRA is **Kirstyn Allam** (BA (Hon), Advanced Diploma in Applied Museum Studies), who is a Cultural Heritage Technician and Technical Writer and Researcher within the Cultural Heritage Division with ASI. She was responsible for preparing and contributing to research and technical reporting. Kirstyn Allam's education and experience in cultural heritage, historical research, archaeology, and collections management has provided her with a deep knowledge and strong understanding of the issues facing the cultural heritage industry and best practices in the field. Kirstyn has experience in heritage conservation principles and practices in cultural resource management. Kirstyn also has experience being involved with Stage 1-4 archaeological excavations in the Province of Ontario.



GLOSSARY

Term	Definition
Adjacent	"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." (Ministry of Tourism, Culture and Sport 2010).
Built Heritage Resource (BHR)	"a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the <i>Ontario Heritage Act</i> , or that may be included on local, provincial, federal and/or international registers" (Government of Ontario 2020:41).
Cultural Heritage Landscape (CHL)	"a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the <i>Ontario Heritage Act</i> , or have been included on federal and/or international registers, and/or protected through official plan, zoning bylaw, or other land use planning mechanisms" (Government of Ontario 2020:42).
Cultural Heritage Resource	Includes above-ground resources such as built heritage resources and cultural heritage landscapes, and built or natural features below-ground including archaeological resources.
Known Cultural Heritage Resource	A known cultural heritage resource is a property that has recognized cultural heritage value or interest. This can include a property listed on a Municipal Heritage Register, designated under Part IV or V of the Ontario Heritage Act, or protected by a heritage agreement, covenant or easement, protected by the Heritage Railway Stations Protection Act or the Heritage Lighthouse Protection Act, identified as a Federal Heritage Building, or located within a UNESCO World Heritage Site (Ministry of Tourism, Culture and Sport 2016).
Impact	Includes negative and positive, direct and indirect effects to an identified cultural heritage resource. Direct impacts include destruction of any, or part of any, significant heritage attributes or features and/or unsympathetic or incompatible alterations to an identified resource. Indirect impacts include, but are not limited to, creation of shadows, isolation of heritage attributes, direct or indirect obstruction of significant views, change in land use, land disturbances (Ministry of Tourism and Culture 2006). Indirect impacts also include potential vibration impacts



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	(See Section 2.5 for complete definition and discussion of potential impacts).
Mitigation	Mitigation is the process of 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, and documentation of the cultural heritage landscape and/or built heritage resource if to be demolished or relocated.
Potential Cultural Heritage Resource	A potential cultural heritage resource is a property that has the potential for cultural heritage value or interest. This can include properties/project area that contain a parcel of land that is the subject of a commemorative or interpretive plaque, is adjacent to a known burial site and/or cemetery, is in a Canadian Heritage River Watershed, or contains buildings or structures that are 40 or more years old (Ministry of Tourism, Culture and Sport 2016).
Significant	With regard to cultural heritage and archaeology resources, significant means "resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the <i>Ontario Heritage Act</i> . While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation" (Government of Ontario 2020:51).
Vibration Zone of Influence	Area within a 50 m buffer of construction-related activities in which there is potential to affect an identified cultural heritage resource. A 50 m buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction provided from the MHSTCI (Wiss 1981; Rainer 1982; Ellis 1987; Crispino and D'Apuzzo 2001; Carman et al. 2012). This buffer accommodates the additional threat from collisions with heavy machinery or subsidence (Randl 2001).



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1.0 INTRODUCTION

1.1 Report Purpose

ASI was contracted by HDR Inc., on behalf of the City of Mississauga, to conduct a Cultural Heritage Resource Assessment (CHRA) as part of the Ninth Line Improvements from Eglinton Avenue West to Derry Road West Municipal Class Environmental Assessment. The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

1.2 Project Overview

The Ninth Line Improvements from Eglinton Avenue West to Derry Road West Municipal Class Environmental Assessment involves the need for improvements along the right-of-way of Ninth Line to meet the future transportation needs of the existing community to the east and the planned developments to the west. The study area centers on Ninth Line from Eglinton Avenue West to Derry Road West, which is a two lane north-south arterial road with a centre-left turn lane through most of the study area (Figure 1).

1.3 Description of Study Area

This CHRA will focus on the project study area which centers on Ninth Line from Eglinton Avenue West to Derry Road West. An additional 50 m buffer has been applied to this study area for the purposes of the preliminary impact assessment to be inclusive of those lands that may contain BHRs or CHLs that may be subject to direct or indirect impacts as a result of the proposed undertaking. Properties within the study area are located in the City of Mississauga.





Figure 1: Location of the study area

Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

2.0 METHODOLOGY

2.1 Regulatory Requirements

The *Ontario Heritage Act* (OHA) (Ministry of Culture 1990) is the primary piece of legislation that determines policies, priorities and programs for the conservation of Ontario's heritage. There are many other provincial acts, regulations and policies governing land use planning and resource development support heritage conservation including:

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

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is charged under Section 2.0 of the OHA with the responsibility to determine policies, priorities, and programs for the conservation, protection, and preservation of the heritage of Ontario. The Ministry of Tourism, Culture and Sport (now



administered by MHSTCI) published *Standards and Guidelines for Conservation of Provincial Heritage Properties* (Ministry of Tourism, Culture and Sport 2010) (hereinafter "Standards and Guidelines"). These Standards and Guidelines apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest (CHVI). The Standards and Guidelines provide a series of guidelines that apply to provincial heritage properties in the areas of identification and evaluation; protection; maintenance; use; and disposal. For the purpose of this report, the Standards and Guidelines provide points of reference to aid in determining potential heritage significance in identification of BHRs and CHLs. While not directly applicable for use in properties not under provincial ownership, the Standards and Guidelines are regarded as best practice for guiding heritage assessments and ensure that additional identification and mitigation measures are considered.

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

2.2 Municipal Heritage Policies

The study area is located within the City of Mississauga, in the Region of Peel. Policies relating to cultural heritage resources were reviewed from the following sources:

- City of Mississauga's Official Plan (City of Mississauga 2019)
- Region of Peel's Official Plan (Region of Peel 2018)

2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes

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

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

Background historical research, which includes consultation of primary and secondary source research and historical mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine the presence of sensitive heritage areas that correspond to nineteenth- and twentieth-century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain



information about specific properties that have been previously identified and/or designated as having cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles or construction methods, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.

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

During the cultural heritage assessment process, a property is identified as a potential BHR or CHL based on research, the MHSTCI screening tool, and professional expertise. In addition, use of a 40-year-old benchmark is a guiding principle when conducting a preliminary identification of BHRs and CHLs. While identification of a resource that is 40 years old or older does not confer outright heritage significance, this benchmark provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from having cultural heritage value or interest.

2.4 Background Information Review

To make an identification of previously identified known or potential BHRs and CHLs within the study area, the following resources were consulted as part of this Cultural Heritage Report.

2.4.1 Review of Existing Heritage Inventories

A number of resources were consulted in order to identify previously identified BHRs and CHLs within the study area. These resources, reviewed on 22 April, 2020, include:

- Heritage Register for Mississauga (City of Mississauga 2018);
- The Ontario Heritage Act Register (Ontario Heritage Trust n.d.);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust n.d.);
- The Places of Worship Inventory (Ontario Heritage Trust n.d.);
- Ontario Heritage Plaque Database (Ontario Heritage Trust n.d.);
- Ontario's Historical Plagues website (Brown 2019);
- Database of known cemeteries/burial sites curated by the Ontario Genealogical Society (Ontario Genealogical Society n.d.);
- Canada's Historic Places website (Parks Canada n.d.);
- Directory of Federal Heritage Designations (Parks Canada n.d.);
- Canadian Heritage River System (Canadian Heritage Rivers Board and Technical Planning Committee n.d.); and,
- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites (UNESCO World Heritage Centre n.d.).



2.4.1 Review of Previous Heritage Reporting

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

- Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment 407 Transitway
 TPAP From West of Brant Street to West of Hurontario Street G.W.P. 16-20003 City of Brampton
 and City of Mississauga, Peel Region; Town of Halton Hills, Town of Milton, Town of Oakville,
 and City of Burlington, Halton Region, Ontario (ASI 2020a)
- Cultural Heritage Evaluation Report 5104 Ninth Line (2020b)
- Cultural Heritage Evaluation Report 5768 Ninth Line (2020c)
- Cultural Heritage Evaluation Report 6056 Ninth Line (2020d)
- Cultural Heritage Evaluation Report 7044 Ninth Line (ASI 2020e)

2.4.2 Stakeholder Data Collection

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

- Paula Wubbenhorst, Senior Heritage Coordinator, City of Mississauga (email communication 24 and 27 April 2020). Email correspondence confirmed that there are five cultural heritage resources including four listed and one designated, Part IV of the *Ontario Heritage Act* within and adjacent to the study area. An additional three listed cultural heritage resources are within the study area, however, they will be removed from the Heritage Register for Mississauga and were excluded from the report for this reason¹. Further consultation with Paula Wubbenhorst on 12 March 2021 confirmed that the property at 5768 Ninth Line (CHL 2 in this report) had been removed from the Heritage Register for Mississauga (email consultation conducted by HDR Inc. on behalf of ASI).
- The MHSTCI (email communication 24 April 2020)². A response confirmed that there are no additional previously identified heritage resources or concerns regarding the study area.
- The Ontario Heritage Trust (email communications 24 April 2020). A response indicated that there are no conservation easements or Trust-owned properties within or adjacent to the study area.

2.5 Preliminary Impact Assessment Methodology

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



¹ Personal communication with Paula Wubbenhorst 27 April 2020.

² Contacted at <u>registrar@ontario.ca</u>.

• Direct impacts:

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

Indirect impacts

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

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

Several additional factors are also considered when evaluating potential impacts on identified BHRs and CHLs. 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* (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.

The proposed undertaking should endeavor to avoid adversely affecting known and potential BHRs and CHLs and interventions should be managed in such a way that identified significant cultural heritage resources are conserved. When the nature of the undertaking is such that adverse impacts are unavoidable, it may be necessary to implement alternative approaches or mitigation strategies that alleviate the negative effects on identified BHRs and CHLs. Mitigation is the process of 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, and documentation of the BHR or CHL if to be demolished or relocated.



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

3.0 SUMMARY OF HISTORICAL DEVELOPMENT WITHIN THE STUDY AREA

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

3.1 Indigenous Land Use and Settlement

Southern Ontario has a cultural history that begins approximately 11,000 years ago. The land now encompassed by the City of Mississauga has a cultural history which begins approximately 10,000 years ago and continues to the present. Table 1 provides a general summary of the history of Indigenous land use and settlement of the area.³

Table 1: Outline of Southern Ontario Indigenous History and Lifeways

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

³ While many types of information can inform the precontact settlement of the City of Mississauga, this summary table provides information drawn from archaeological research conducted in southern Ontario over the last century. As such, the terminology used in this review related to standard archaeological terminology for the province rather than relating to specific historical events within the region. The chronological ordering of this summary is made with respect to two temporal referents: BCE – before Common Era and CE – Common Era.



The study area is within Treaty 13a, signed on August 2, 1805 by the Mississaugas and the British Crown in Port Credit at the Government Inn. A provisional agreement was reached with the Crown on August 2, 1805, in which the Mississaugas ceded 70,784 acres of land bounded by the Toronto Purchase of 1787 in the east, the Brant Tract in the west, and a northern boundary that ran six miles back from the shoreline of Lake Ontario. The Mississaugas also reserved the sole right of fishing at the Credit River and were to retain a 1 mile strip of land on each of its banks, which became the Credit Indian Reserve. On September 5, 1806, the signing of Treaty 14 confirmed the Head of the Lake Purchase between the Mississaugas of the Credit and the Crown (Mississauga of the New Credit First Nation 2001; Mississaugas of the Credit First Nation 2017).

3.2 Historical Euro-Canadian Township Survey and Settlement

Historically, the study area is located in the Former Township of Trafalgar, County of Halton in part of Lots 5-6, Concession 2 North of Dundas Street (NDS); part of Lots 1-11, Concession 9; and part of Lots 1-11, Concession 10.

3.2.1 Township of Trafalgar

Trafalgar Township was originally surveyed in 1806 by Samuel Wilmot, Deputy Surveyor. Dundas Street, which had originally been surveyed in 1793 and was designed to both help protect Upper Canada and assist with settlement, was used as the baseline survey road through the township. The two concessions north and three concessions south to Lake Ontario formed the initial boundary and came to be known as the Old Survey in 1818, when lands to the north were secured through the Ajetance Treaty and came to be known as the New Survey. Other important early roads were the Upper Middle Road, the Lower Middle Road, and the Lakeshore Road. The concession roads of the 1806 survey, and the line roads running perpendicular, blocked out the township in areas a mile and quarter square with five 200-acre lots to a square (Mathews 1953).

The number of inhabitants gradually increased in the first two decades of the nineteenth century, as Loyalists and their descendants began to get settled. After the War of 1812, most immigration came from the British Isles. All were enticed by the fertile and available land in these early settlement years, and the majority of the population relied upon subsistence farming. By 1817, the population had increased to 548, and the township contained one grist mill and four sawmills. By 1850, the population had increased to 4,513, and contained many farms, orchards, and mills. At the same time, Trafalgar Township began to emerge as a busy stagecoach stop for those travelling between Hamilton and Toronto (Smith 1850; Trafalgar Township Historical Society 2020).

Trafalgar Township originally formed part of the West Riding of York in the Home District and following 1816, it became part of the Gore District, with Hamilton as the administrative District seat. Although the old Districts of Upper Canada were abolished by legislation in May 1849, the area which was to subsequently become Halton remained as part of the United Counties of Wentworth and Hamilton until it was finally separated and elevated to independent County status by an act of legislature in June 1853. Trafalgar was one of four Townships in the County, with the others being Nelson, Esquesing, and Nassagaweya (Pope 1877).



At the mouth of Sixteen Mile Creek, Oakville was the most prominent and most populous community in all of Halton County. It became an official Town in 1857 and developed a wide array of industries, as well as religious, educational, and municipal institutions by the end of the century. In the nineteenth century, several rural communities also began to appear in Trafalgar Township, particularly at the intersection of prominent north-south and east-west crossroads. These villages, such as Palermo, Sheridan, Trafalgar, and Omagh, provided nearby farmers with basic supplies and services. By the end of the nineteenth century, a general portrait indicates that villages had a church, tavern, schoolhouse, blacksmith shop, hotel or inn, and a general store. Once a post office was opened, a name for the area was given somewhat official status. Larger villages might also have had a Sons of Temperance Hall, Orange Hall, sawmill, grist mill, brewery or distillery, tannery, ironworks or foundry, and small shops for tailors, shoemakers, wagonmakers, and cabinet makers. For those villages located close to railway lines, which started to emerge in the 1850s, a railway station was usually erected. The combination of small shops and businesses, municipal organizing, community services, road building, and the arrival of thousands of British and Irish immigrants marked the beginning of the creation of a settled countryside (Pope 1877; Armstrong 1985; Jonasson 2006).

Throughout the twentieth century, the area north of Dundas Street remained primarily agricultural, with farms and orchards along with swathes of forested land. However, the expansion of cars, paved roads, and railway service were central to urban development in the areas south of Dundas Street over this period. Densification and suburbanization in the southern areas occurred quite rapidly in the post-World War II era. This growth coincided with significant administrative and political maturity in the postwar era. In 1962, all areas of Trafalgar Township amalgamated under the Town of Oakville name (Trafalgar Township Historical Society 2020). When Halton Region was formed on 1 January 1974, much of the southern area of the former Trafalgar Township stayed under the jurisdiction of the Town of Oakville, while much of the northern area of the former Trafalgar Township came under the jurisdiction of the Town of Milton.

3.2.2 Catholic Swamp

In Trafalgar Township, Irish immigrants began to arrive c. 1818, and many of them settled along the north-south roads of the 8th, 9th, and 10th Concessions around Britannia Road. Over the following two decades, this area would become known as the "Catholic Swamp" for its many Irish Catholic settlers and the wet and boggy terrain (Heritage Mississauga; Watt n.d.). During the mid-nineteenth century, the area maintained the moniker of the Catholic Swamp, while the name Nunan's Corners also surfaced in reference to the intersection of Ninth Line and Britannia Road (Heritage Mississauga).

3.3 Review of Historical Mapping

The 1858 Tremaine's *Map of the County of Halton* (Tremaine 1858) and the 1877 *Illustrated Historical Atlas of the County of Halton* (Pope 1877) were examined to determine the presence of historical features within the study area during the nineteenth century (Figure 2 and Figure 3).

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope



of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

Historically, the study area is located in the Former Township of Trafalgar, County of Halton in part of Lots 5-6, Concession 2 NDS; part of Lots 1-11, Concession 9; and part of Lots 1-11, Concession 10. Details of historical property owners and historical features in the study area are listed in Table 2.

Table 2: Nineteenth-century property owner(s) and historical features(s)

			ner(s) and historical fe		istorical Atlas of the
		На	lton	County	of Halton
		Property Owner(s)	Historical	Property Owner(s)	Historical Feature(s)
Lot #	Con #		Feature(s)		
5	2 NDS	Charles O'Hara	Ninth Line	Michael O'Hara	Ninth Line
			Eglinton Avenue		Eglinton Avenue
			West		West
					Residence
6		Charles O'Hara	Ninth Line	Michael O'Hara	Ninth Line
			Eglinton Avenue		Eglinton Avenue
			West		West
					Residence
1	9	Charles O'Hara	Ninth Line	William O'Hara	Ninth Line
			Eglinton Avenue		Eglinton Avenue
			West		West
					Orchard
2		Samuel Rodgers	Ninth Line	Johnson Rogers	Ninth Line
3		John Beatty	Ninth Line	John Beaty	Ninth Line
4		Francis Cummings	Ninth Line	Henry Cook	Ninth Line
5		F. Cummings	Ninth Line	Alex Cook	Ninth Line
		John Treanor	Ninth Line		Britannia Road West
			Britannia Road		Residence
			West		
6		William Nunan	Ninth Line	Est. of William	Ninth Line
			Britannia Road	Naman	Tributary of East
			West		Sixteen Mile Creek
			Tributary of East		Church
		District Tuttle o	Sixteen Mile Creek	NA L K-II-	Cemetery
7		Philip Triller	Ninth Line	Mrs. L. Kelly	Ninth Line
8		William Watson	Ninth Line	George Douglass	Ninth Line
					House
		Charles Candinales	Niinth Linn	las Hannah	Orchard
9		Charles Cordingley	Ninth Line Ninth Line	Jas. Hannah	Ninth Line
10		Robert McCurdy		Byard McCurdy	Ninth Line
			Derry Road West Church		Derry Road West Church
			Church	Masas MaCurdu	
		Jana Aaliina	Ninth Line	Moses McCurdy	Ninth Line
11		Isaac Askins	Ninth Line	Robert Askin	Ninth Line



			lap of the County of Iton		Historical Atlas of the of Halton
		Property Owner(s)	Historical	Property Owner(s)	Historical Feature(s)
Lot #	Con #		Feature(s)		
			Derry Road West Schoolhouse Labelled as "Ravenhill"	Richard Askin	Derry Road West Orchard
1	10	Murak [sic] McLeod	Ninth Line Eglinton Avenue West	William McCleod	Ninth Line Eglinton Avenue West
2		William Sparkling [sic]	Ninth Line	William and Jos. Sparling	Ninth Line
3		John O'Hara	Ninth Line	William McCarron	Ninth Line Residence
4		S. & J. Cordingley	Ninth Line	William McCarron William Hamilton	Ninth Line Residence Ninth Line Orchard
5		Owen McCarren	Ninth Line Britannia Road West	Robert McCarron	Ninth Line Britannia Road West
6		Owen McCarren William Nunan	Ninth Line Britannia Road West Ninth Line Tributary of East	Robert McCarron Est. of William	Ninth Line Britannia Road West Tributary of East Sixteen Mile Creek Ninth Line
			Sixteen Mile Creek	Naman	Orchard
7		John F. Orr	Ninth Line	Dagald McGregor	Ninth Line Orchard
8		Bartley Connor	Ninth Line	Chas. O'Connor	Ninth Line
9		Bartley Connor David Cordingly	Ninth Line Ninth Line	Chas. O'Connor John Cardingly	Ninth Line Orchard Ninth Line Orchard
10		John Cordingly	Ninth Line Derry Road West	John Cardingly	Ninth Line Orchard
11		John Mason	Ninth Line Derry Road West	Jos. Mason	Ninth Line Derry Road West

The 1858 Tremaine's *Map of the County of Halton* and the 1877 *Illustrated Historical Atlas of the County of Halton* (Figure 2 and Figure 3) both show that Ninth Line, Eglinton Avenue West, Britannia Road West, and Derry Road West were all historically surveyed roads. All the roads follow their present alignments. A tributary of East Sixteen Mile Creek is illustrated as transecting the middle portion of the study area from west-to-east across Ninth Line. The Tremaine Map depicts a church at the southwest corner of Ninth Line and Derry Road West and a schoolhouse at the northwest corner of the same intersection. By the 1877 *Illustrated Historical Atlas* depicts a number of houses and orchards within the study area. St. Peter's Mission Church and the cemetery are illustrated on the map as well as the earlier church and schoolhouse. The study area is illustrated within a rural agricultural context during the nineteenth century.



In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. This report presents maps and aerial photographs from 1909, 1954, 1973, and 1994 (Figure 4 to Figure 7).

The twentieth-century mapping and aerial photography reveals that the study area retained a rural agricultural context throughout the twentieth century. The 1909 topographic map (Figure 4) demonstrates little development within the study area. Tributaries of East Sixteen Mile Creek are now depicted on the map in three locations near the middle and southern portion of the study area draining from east to west. The houses, churches, and schoolhouse previously depicted are all similarly shown. The roadways are all unmetalled. The 1954 aerial photograph (Figure 5) depicts the study area in the same context as earlier mapping. The 1973 and 1994 topographic maps (Figure 6 and Figure 7) illustrate that the study area remains in a rural agricultural context into the late twentieth century. Two poultry farms are depicted west of Ninth Line on the 1973 topographic map. The 1994 topographic map depicts some development of additional houses and other structures along Ninth Line.

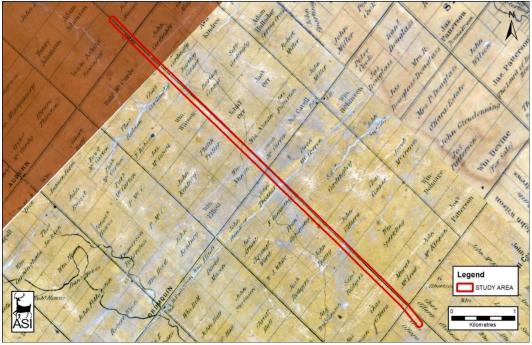


Figure 2: The study area overlaid on the 1858 *Tremaine's Map of the County of Halton*Base Map: (Tremaine 1858)



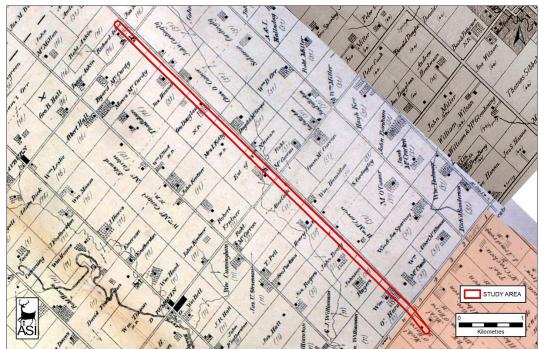


Figure 3: The study area overlaid on the 1877 *Illustrated Historical Atlas of the County of Halton*Base Map: (Pope 1877)

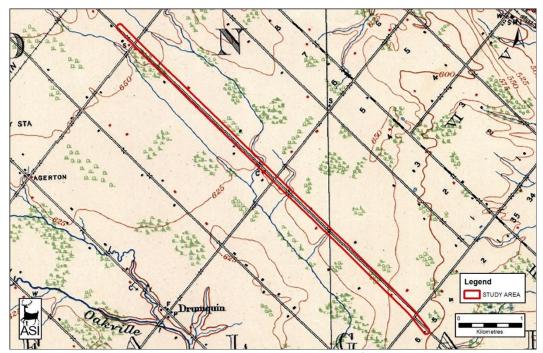


Figure 4: The study area overlaid on the 1909 topographic map of Brampton

Base Map: Brampton Sheet No. 35 (Department of Militia and Defence 1909)





Figure 5: The study area overlaid on the 1954 aerial photographs of Mississauga

Base Map: Plate 435.793 and 435.794 (Hunting Survey Corporation Limited 1954)



Figure 6: The study area overlaid on the 1973 topographic maps of Hornby and Streetsville

Base Map: Hornby Sheet 30M/12c and Streetsville Sheet 30M/12b (Department of Energy, Mines

and Resources 1973a; Department of Energy, Mines and Resources 1973b)





Figure 7: The study area overlaid on the 1994 NTS map of Brampton

Base Map: Brampton Sheet 30M/12 (Department of Energy, Mines and Resources 1994)

4.0 EXISTING CONDITIONS

4.1 Description of Field Review

A field review of the study area was undertaken by Jessica Lytle of ASI, on 9 April 2020 to document the existing conditions of the study area from existing rights-of-way. The existing conditions of the study area are described below and captured in Plate 1 to Plate 6.

The study area is in the City of Mississauga and focuses on the proposed improvements to Ninth Line from Eglinton Avenue West to Derry Road West. The study area is generally located in a mixed agricultural and residential context near the Mississauga-Milton border.

The study area is centered on Ninth Line and is approximately 6.95 km in length beginning south of the intersection of Ninth Line and Eglinton Avenue West in the south and Derry Road West to the north. Ninth Line is oriented in a north-south alignment and features one lane of northbound and one lane of southbound vehicular traffic, with a centre-left turn lane for much of the study area. Generally, the east of the study area is bounded by residential developments and the west is bounded largely by agricultural properties that have been identified for future development. The roadway features curbs on the west side and lacks curbs on the east side. On the east side are gravel shoulders and moderate ditches. Ninth Line features large boulevards along the east side and sidewalks along part of the study area.





Plate 1: Ninth Line, south of Eglinton Avenue West, looking southeast.



Plate 2: Intersection of Ninth Line and Eglinton Avenue West, looking north.



Plate 3: Residential neighbourhood, large boulevard, and sidewalk east of Ninth Line, looking north from Eglinton Avenue West.



Plate 4: Intersection of Ninth Line and Britannia Road West.



Plate 5: Agricultural field west of Ninth Line, looking southeast.



Plate 6: Intersection of Ninth Line and Derry Road West, looking north.



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

Based on the results of the background research and field review, one BHR and four CHLs were identified within the study area. There is one known BHR, a property designated under Part IV of the Ontario Heritage Act, and four CHLs listed by the City of Mississauga. No additional resources were identified during background research or field review. A detailed inventory of known BHRs and CHLs within the study area is presented in Table 3. See Figure 8 - Figure 12 for mapping showing the location of identified BHRs and CHLs.



Table 3: Inventory of Known and Potential Built Heritage Resources and Cultural Heritage Landscapes within the Study Area

eature O	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
	Farmstead	Address or Location 5104 Ninth Line	_	The property features a red brick residence with a barn behind, and a long driveway leading to the barn north from Ninth Line. ASI evaluated this property under Ontario Regulation 9/06 in the <i>Cultural Heritage Evaluation Report 5104 Ninth Line</i> (2020b) and found that the property did retain cultural heritage value or interest. The following Draft Statement of Cultural Heritage Value or Interest is taken from this report: The subject property was patented to Charles O'Hara Sr. in 1830, and transferred soon thereafter to his son Charles O'Hara Jr. It is likely that the O'Haras had been living in a log cabin on the property since about 1819 and this log house was probably the site of the first Catholic mass in all of Halton County. The log house was replaced by a Neoclassical-style brick house — which remains extant on the property today — built by Charles O'Hara Jr. in the 1850s. Members of the O'Hara family continued to live in the subject house and farm on the surrounding property until 1948. Various property owners have lived in the house since that time, and it is unclear when the additions were added to the rear of the house, or who is responsible for their construction. The one-and-half storey Neoclassical residence on the subject property retains physical/design value as a representative example of a Neoclassical residence in the local context. The residence features a central entrance with symmetrical windows, sidelights and transom, a rectangular footprint, and a moderately-pitched gable roof. While the residence is modified with vinyl cladding and rear additions, these alterations are considered to be reversable.	Photographs/ Digital Image Looking west towards the house and garage at 5104 Ninth Line
				moderately-pitched gable roof. While the residence is modified with vinyl cladding and rear additions, these alterations are considered to be reversable. The subject property retains historical and associative value from its connection with the O'Hara family, who likely lived on the property since c.1819 until 1948. Charles O'Hara Sr., an Irish Catholic Immigrant, received the original Crown Patent for the property, and was instrumental in the early settlement of the area. Further, O'Hara hosted religious services conducted by a travelling priest in his home prior to the construction of St. Peter's Mission Church c. 1823. As an early settler with an important connection to the community known as the Catholic Swamp, O'Hara is considered to be a significant contributor to the	Aerial view of the farmscape (Google Earth 2018).
		naming of Description	early settlement of the area. This contribution to the community is also commemorated locally in the naming of nearby O'Hara Park. Description of Heritage Attributes The design value of this mid nineteenth-century Neoclassical residence is reflected through the		
				retention of: • Three-bay primary east elevation featuring central entranceway with transom and sidelights flanked by symmetrical fenestration; • Rectangular footprint; • Moderately-pitched gable roof; • Window openings; and • Red brick cladding (ASI 2020b).	



Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
CHL 2	Farmscape	5768 Ninth Line	Known CHL - Listed by the City of Mississauga NOTE: The City of Mississauga confirmed that 5768 Ninth Line was removed from the Heritage Register for Mississauga (12 March 2021 email communication)	 Nineteenth-century mapping indicates that the property was owned by John Treanor and Alex Cook (Figure 2 and Figure 3). A residence is illustrated on the 1877 mapping (Figure 3) Structure partially obscured by vegetation from the public right-of-way Aerial imagery shows that the residence features structural additions. A barn is situated behind the house and a long driveway from Ninth Line leads to the residence and barn The residence, barn, and driveway are consistent with nineteenth-century settlement pattern Located on the west side of Ninth Line, an early transportation route, set back from the road Reflects nineteenth-century settlement along Ninth Line in Trafalgar Township ASI evaluated the property under Ontario Regulation 9/06 in the Cultural Heritage Evaluation Report 5768 Ninth Line (ASI 2020c) and found that the property did not retain cultural heritage value or interest.	Looking south towards the residence at 5768 Ninth Line.
					Aerial view of the farmscape (Google Earth 2018)
CHL 3	Church and Cemetery	6056 Ninth Line	Known CHL - Listed by the City of Mississauga	The property at 6056 Ninth Line is located on the west side of Ninth Line, north of Britannia Road West, in the City of Mississauga. It features a nineteenth-century cemetery and red brick church that was modified in the 1980s. The one-and-a-half storey red brick church was built c.1882 and moved back from Ninth Line (west) to its current location on the property in 1982. A basement and rear addition were constructed at this time, sympathetic to the original brick church design. The associated cemetery is located to the north of the church. ASI evaluated the property under Ontario Regulation 9/06 in the <i>Cultural Heritage Evaluation Report 6056 Ninth Line</i> (ASI 2020d) and found that the property did retain cultural heritage value or interest. The following Draft Statement of Cultural Heritage Value or Interest is taken from this report:	
				The religious property at 6056 Ninth Line was established in the early nineteenth-century to serve the local community of Irish Catholic settlers in an area known as the Catholic Swamp/Nunan's Corner. Its cultural heritage value is primarily derived from its historical and contextual association with the early settlement of the area. The property was the first in Trafalgar Township to service Catholic worshippers for a 150 square mile radius and the associated cemetery was established in 1823. The final burial took place in the 1960s. The c. 1882 brick church has architectural value as a representative example of a late	Looking northwest towards St. Peter's Mission Church and cemetery at 6056 Ninth Line.



Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
				nineteenth-century rural Gothic Revival church. Features such as pointed arch windows, buttresses, and the bell tower are recognizably Gothic in style. **Description of Heritage Attributes:** The design/physical value of this late nineteenth-century brick church is reflected through retention of: • rectangular footprint; • one-and-a-half storey (likely) timber frame construction; • steeply pitched gable roof; • square bell tower with octagonal spire and cross; • red brick stretcher bond cladding; • three-bay front facade with central entrance flanked by window openings; • double vertical board doors on the main entrance on the front (east) façade; • centrally located pointed arch ventilation window on the front (east) façade; • pointed arch windows with brick voussoirs and plain stone lug sills; and • buttresses and corresponding interior wood ribs (ASI 2020d).	Aerial view of the church and cemetery (Google Earth 2018
CHL 4	Remnant Farmscape	7044 Ninth Line	Known CHL - Listed by the City of Mississauga	 Nineteenth-century mapping indicates that the property was owned by the Askin family (Isaac Askin in 1858 and Richard Askin in 1877) (Figure 2 and Figure 3). A residence is illustrated on the 1877 mapping (Figure 3). The property features a one-and-a-half storey frame farmhouse with a one-and-a-half storey addition to the rear, a garage, a long driveway, and agricultural land. Located on the west side of Ninth Line, an early transportation route, set back from the road. Reflects nineteenth-century settlement along Ninth Line in Trafalgar Township. ASI evaluated the property under Ontario Regulation 9/06 in the <i>Cultural Heritage Evaluation Report 7044 Ninth Line</i> (ASI 2020e) and found that the property did not retain cultural heritage value or interest.	Looking west towards the residence at 7044 Ninth Line.
					Aerial view of the remnant farmscape (Google Earth)



Feature ID	Type of Property	Address or Location	Heritage Status and	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
BHR 1	Residence	6671 Ninth Line	Recognition Known BHR — Designated under Part IV of the Ontario Heritage Act (By-Law # 0163-2015)	The residence is a one-and-a-half storey clapboard structure with a T-shaped footprint with a rear addition that was constructed in 1884 (City of Mississauga 2020). The house has a gable roof and there are two brick chimneys. The centre gable is trimmed with vergeboard. According to information provided by the City of Mississauga (12 March 2021 email communication) the front porch of the residence at 6671 Ninth Line, a heritage attribute of the property, is located within the Ninth Line ROW. The following Statement of Cultural Heritage Value or Interest is taken from By-Law # 0163-2015: The Cordingley House has physical/design value because it displays a high degree of craftsmanship and artistic merit. The house is a rare example of the Gothic Revival style in the Meadowvale/Lisgar area. The property is also a rare example of one owned by the same family since the Crown patent. The Cordingley House property has historical/associative value because it yields information about McCurdy's Corners. The Cordingley House property has contextual value because it is historically linked to its surroundings. Description of Heritage Attributes: The design/physical value of the Cordingley House is reflected through retention of: • Its Gothic Revival shape and form; • the front porch, including doors, windows, transom, brackets and detailing; • the wooden clapboard and board and batten siding; and, • the brick outbuilding, including its shape, form and stone foundation The historical/associative value of the Cordingley House is reflected in: • its location on one of the actual corner lots of McCurdy's Corners (Ninth Line and Derry Road West) The contextual value of the Cordingley House is reflected in: • its proximity to Ninth Line; and • the physical relationship between the house and outbuilding within the property. For additional information, please see the by-law available at: https://www.heritagetrust.on.ca/en/oha/details?id=6675&backlinkslug=search-	The residence at 6671 Ninth Line (Courtesy of Google Streetview). Photograph of the property from 1978 (City of Mississauga 2020).
	1	I .		results&fields%5Bproperty_name%5D=6671+ninth+line	



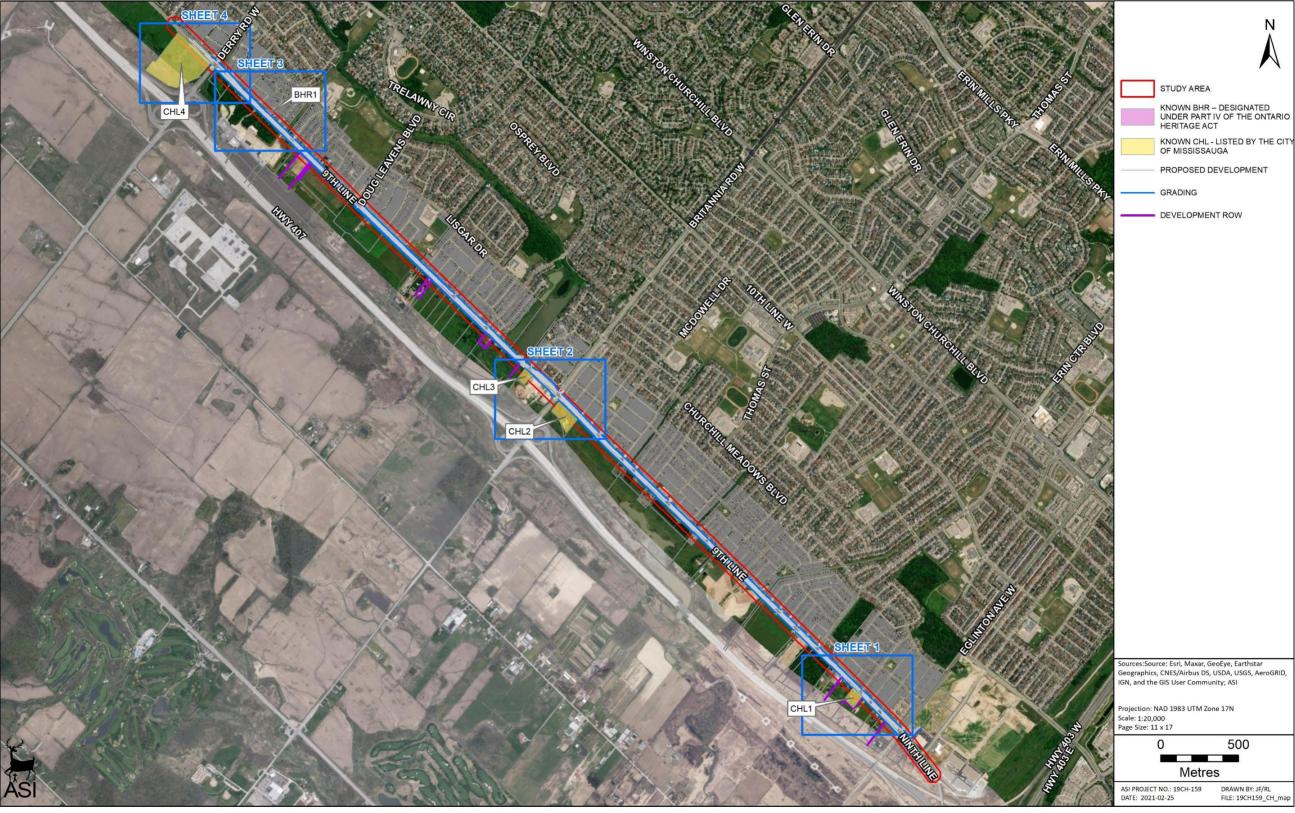


Figure 8: Location of Identified Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (Key Map)



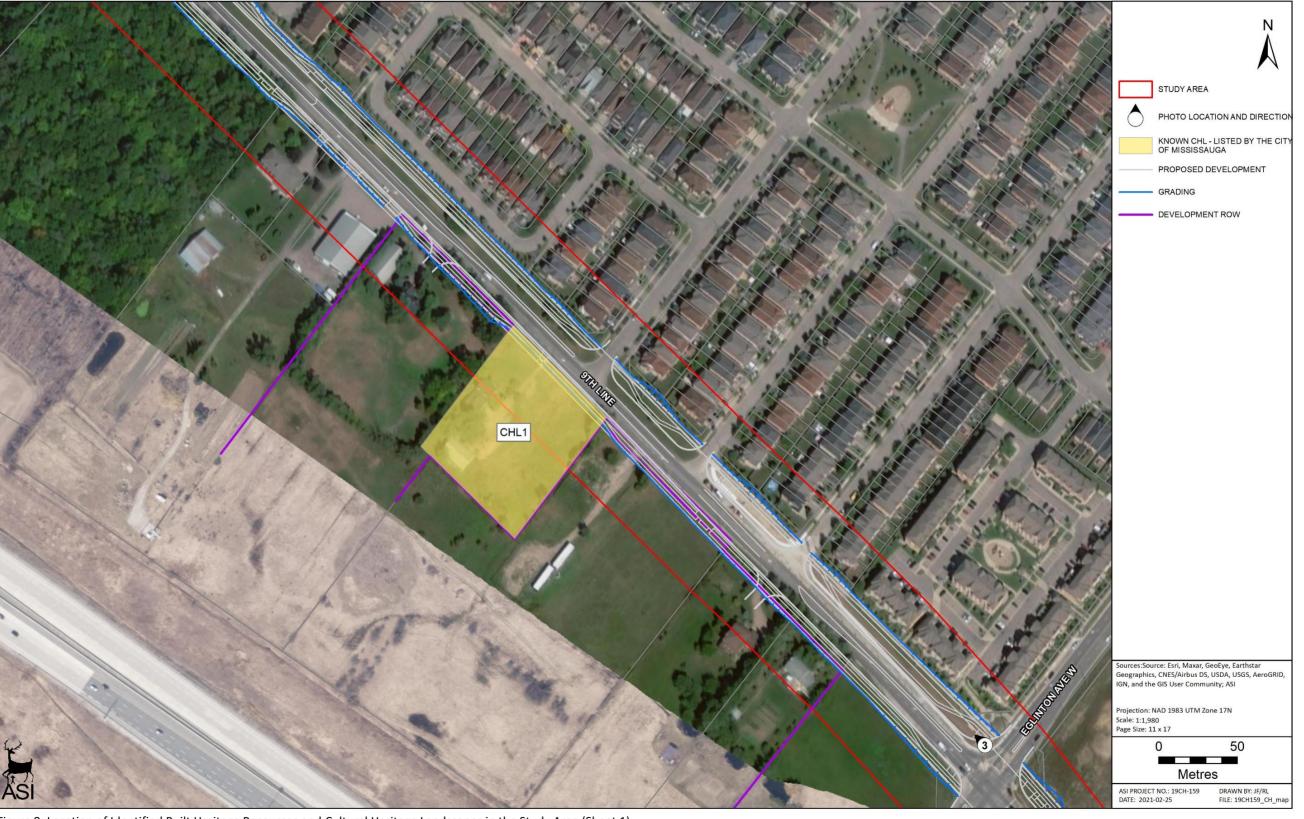


Figure 9: Location of Identified Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (Sheet 1)



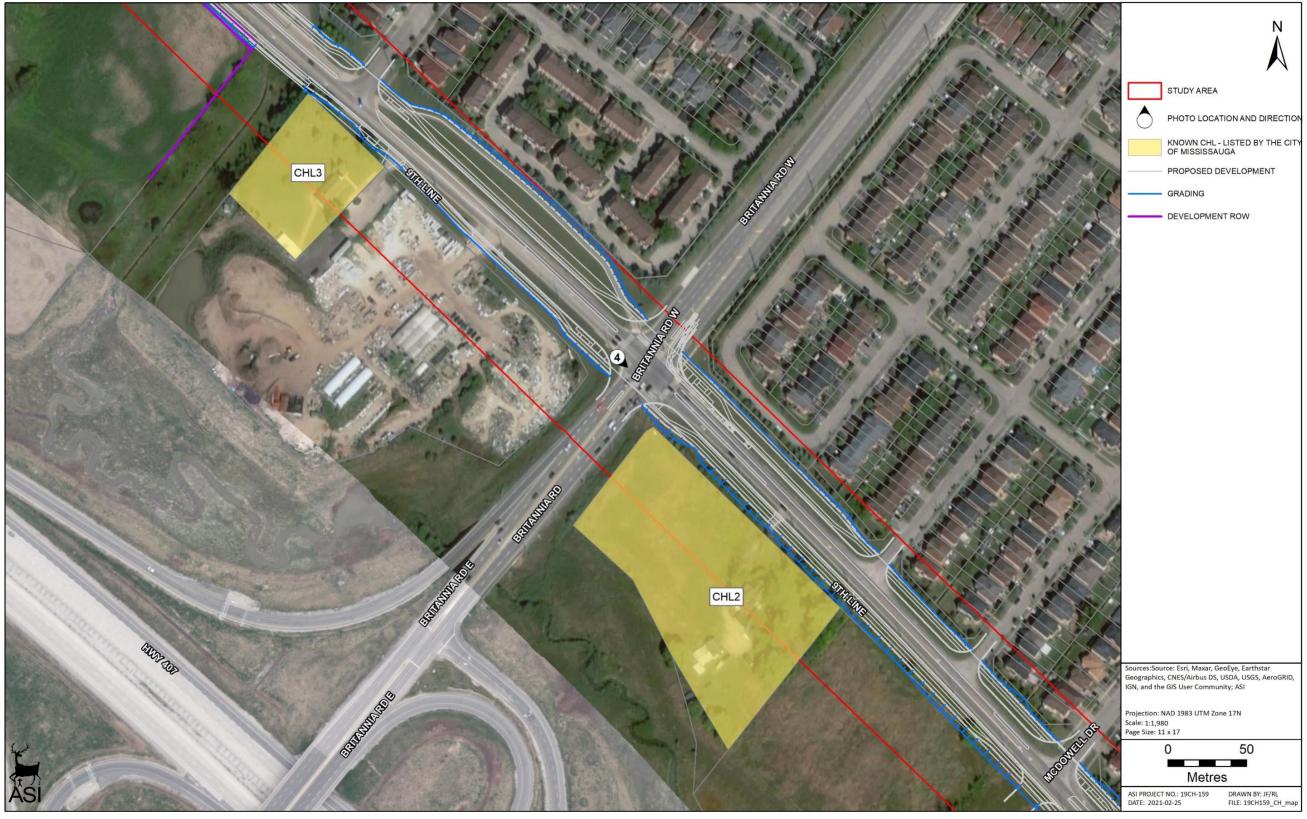


Figure 10: Location of Identified Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (Sheet 2)



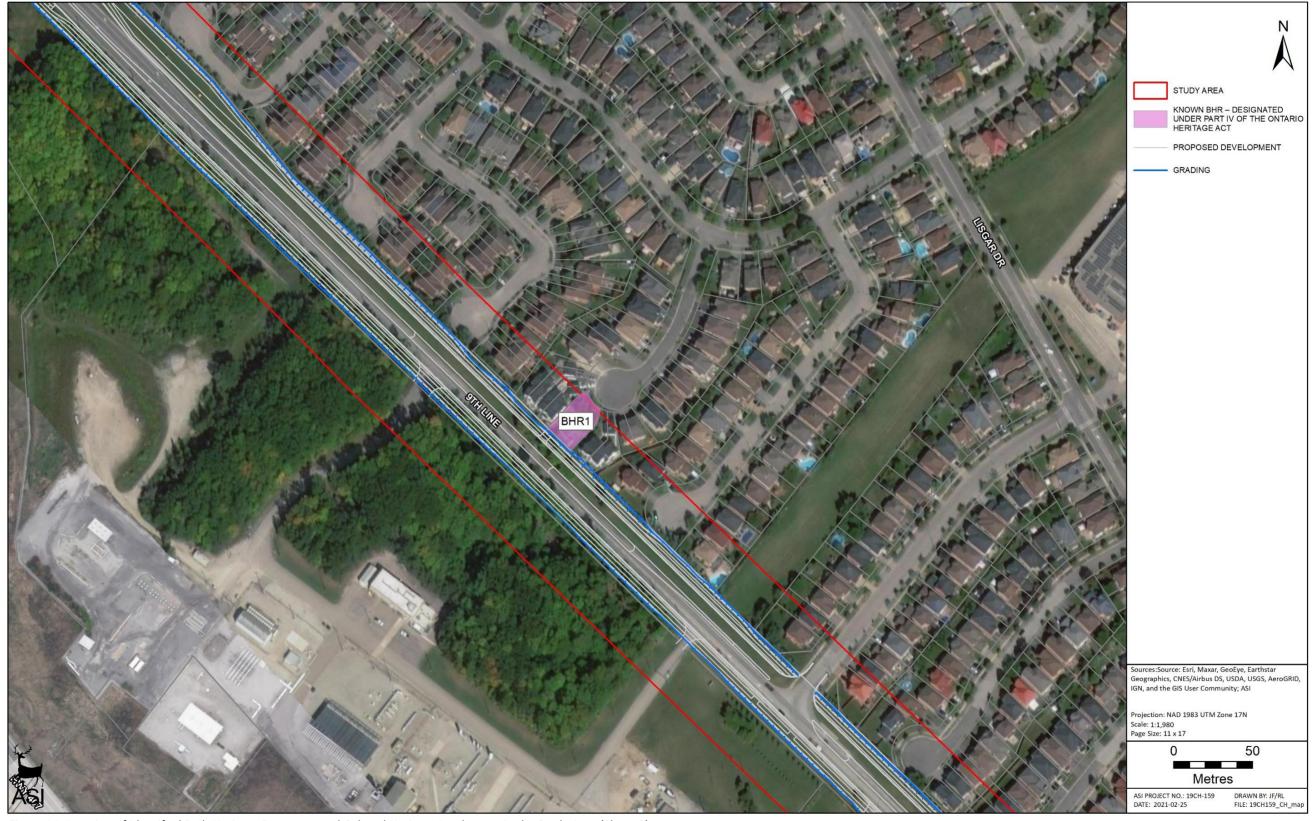


Figure 11: Location of Identified Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (Sheet 3)





Figure 12: Location of Identified Built Heritage Resources and Cultural Heritage Landscapes in the Study Area (Sheet 4)



5.0 PRELIMINARY IMPACT ASSESSMENT

5.1 Description of Proposed Undertaking

The Ninth Line Improvements from Eglinton Avenue West to Derry Road West Municipal Class Environmental Assessment involves the need for improvements along the right-of-way of Ninth Line to meet the future transportation needs of the existing community to the east and the planned developments to the west. The study area centers on Ninth Line from Eglinton Avenue West to Derry Road West, which is a two lane north-south arterial road with a centre-left turn lane through most of the study area. The proposed improvements are anticipated to consist of road widening, the installation of pedestrian sidewalks, cycle tracks, and installation of a multi-use path (MUP) on both sides of Ninth Line. Most of this work is anticipated to be confined to the existing Ninth Line right-of-way (ROW), however some sections of grading will require the acquisition of lands outside the existing ROW resulting in encroachment onto properties adjacent to the existing ROW.

5.2 Analysis of Potential Impacts

Table 4 outlines the potential impacts on all identified BHRs and CHLs within the study area.



Table 1. Droliminary Impa	act Accordment and Docar	mmended Mitigation Measures
Table 4. Freilingary Illiba	ici Assessineni and Necoi	HILLEHUEU MILLBAHOH MEASULES

Feature ID	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
CHL-1	5104 Ninth Line	 Indirect impacts to CHL 1 are anticipated to include grading within the subject property and the expansion of the existing ROW to accommodate a 2 m wide sidewalk and a 2 m cycle track. No direct impacts to any structures or landscape features of potential CHVI, including mature vegetation are anticipated. 	 Where feasible, excavation, grading, and staging activities should be planned and executed to limit impacts to this CHL. Post construction rehabilitation including planting with sympathetic plant species should be considered to mitigate any impacts. As the property at 5104 Ninth Line is listed by the City of Mississauga and there are indirect impacts anticipated due to construction onto the subject property, a resource-specific HIA may be required as per the City of Mississauga Official Plan clause 7.4.1.10. Given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted, it is recommended that the City of Mississauga consider waiving the requirement for a HIA in this case if suitable mitigation measures including post construction rehabilitation with sympathetic plantings can be implemented. To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that any structures or landscape features on this property will be subject to vibrations, prepare and implement a vibration monitoring plan as part of the detailed design phase of the project to lessen vibration impacts related to construction.
CHL-2	5768 Ninth Line	 Indirect impacts to CHL 2 are anticipated to include grading within the existing ROW adjacent to the subject property to a 2 m wide sidewalk and a 2 m wide cycle track. No direct impacts to any structures or landscape features of potential CHVI are anticipated as the property was determined not to retain CHVI (ASI 2020c). 	 As the property at 5768 Ninth Line was removed from the Heritage Register for Mississauga following the completion of the draft report in May 2020 (email consultation with the City of Mississauga on 12 March 2021), the property was determined not to retain CHVI during an ASI CHER (ASI 2020c), and potential impacts are anticipated to be confined to the existing ROW adjacent to the property, there are no anticipated impacts to any heritage attributes in this case. No further cultural heritage reporting is recommended for the property.
CHL 3	6056 Ninth Line	 Indirect impacts to CHL 3 are anticipated to include grading within the existing ROW adjacent to the subject property to accommodate a 3 m wide MUP. No direct impacts to any structures or landscape features of potential CHVI, including mature vegetation, gravestones, or fencing are anticipated. 	 Where feasible, excavation, grading, and staging activities should be planned and executed to limit impacts to this CHL. Post construction rehabilitation including planting with sympathetic plant species should be considered to mitigate any impacts. As the property at 6056 Ninth Line is listed by the City of Mississauga and there are indirect impacts anticipated due to construction in the ROW adjacent to the subject property, a resource-specific HIA may be required as per the City of Mississauga Official Plan clause 7.4.1.12. Given that potential impacts are anticipated to be confined to the existing ROW adjacent to the property and no structures or apparent landscape features of significant CHVI are anticipated to be impacted, it is recommended that the City of Mississauga consider waiving the requirement for a HIA in this case if suitable mitigation measures including post construction rehabilitation with sympathetic plantings can be implemented. To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that any structures or landscape features on this property will be subject to vibrations, prepare and implement a vibration monitoring plan as part of the detailed design phase of the project to lessen vibration impacts related to construction.
CHL 4	7044 Ninth Line	 Indirect impacts to CHL 4 are anticipated to include grading within the subject property and the expansion of the existing ROW to accommodate a 2 m wide sidewalk and a 2 m wide cycle track. No direct impacts to any structures or landscape features of potential CHVI are anticipated as the property was determined not to retain CHVI (ASI 2020e) and the structure on the property is located more than 100 m away from the proposed grading on the property. 	 Post construction rehabilitation including planting with sympathetic plant species should be considered to mitigate any impacts.



Feature ID	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
BHR 1	6671 Ninth Line	 Direct impacts to BHR 1 are anticipated to include potential grading impacts to the front porch of the residence, which is located within the Ninth Line ROW (confirmed by email communication with the City of Mississauga on 12 March 2021). The front porch is included as a heritage attribute of the property in Designation By-Law # 0163-2015 No direct impacts to any other landscape features of known CHVI, including mature vegetation, location, relationship to Ninth Line, or relationship to the outbuilding are anticipated. 	 Where feasible, excavation, grading, and staging activities should be planned and executed to limit impacts to this BHR. Post construction rehabilitation including planting with sympathetic plant species should be considered to mitigate any impacts. As the property at 6671 Ninth Line is designated under Part IV of the Ontario Heritage Act (By-Law # 0163-2015) and there are direct impacts anticipated to the front porch, an identified heritage attribute of the property located in the Ninth Line ROW (confirmed through email communication with the City of Mississauga on 12 March 2021), a resource-specific HIA is required per the City of Mississauga Official Plan clause 7.4.1.12. To ensure this property is not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that any structures or landscape features on this property will be subject to vibrations, prepare and implement a vibration monitoring plan as part of the detailed design phase of the project to lessen vibration impacts related to construction.



Direct impacts to one identified cultural heritage resources are anticipated as a result of the proposed alignment. BHR 1 (6671 Ninth Line) is anticipated to be directly impacted by the proposed undertaking, as the front porch of the residence, an identified heritage attribute of the property, is anticipated to be removed as a result of grading within the Ninth Line ROW. According to email consultation with the City of Mississauga (12 March 2021), the front porch on this residence is located within the Ninth Line ROW.

As there are direct impacts anticipated for the property 6671 Nine Line (BHR 1), which is designated under Part IV of the Ontario Heritage Act, a resource-specific HIA is required as per the City of Mississauga Official Plan clauses 7.4.1.12.

Indirect impacts to CHL 1 (5104 Ninth Line) and CHL 4 (7044 Ninth Line) are anticipated to include grading within the subject property. No impacts to any structures or landscape features of potential CHVI, including mature vegetation or agricultural fields are anticipated. Indirect Impacts to 6056 Ninth Line (CHL 3) are anticipated to include grading within the existing ROW adjacent to the subject property. No impacts to any structures or landscape features of potential CHVI, including mature vegetation, gravestones, or fencing are anticipated.

As the properties at: 5104 Ninth Line (CHL 1), 6056 Ninth Line (CHL 3), and 7044 Ninth Line (CHL 4) are listed by the City of Mississauga and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Mississauga Official Plan clauses 7.4.1.10 and 7.4.1.12. However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on any of the properties and that CHL 4 were determined not to retain CHVI (ASI 2020e), it is recommended that the City of Mississauga consider waiving the requirement of a HIA in these cases in favour of suitable mitigation measures including post-construction rehabilitation which could include sympathetic plantings where required.

As 5768 Ninth Line (CHL 2) was determined not to retain CHVI (ASI 2020c) and was removed from the Heritage Register for Mississauga following preparation of the May 2020 draft report (confirmed in email communication with the City of Mississauga on 12 March 2021), no further cultural heritage reporting is recommended for 5768 Ninth Line (CHL 2).

Indirect impacts to BHR 1, CHL 1, and CHL 3 may occur as a result of their location adjacent to the proposed alignment. To ensure that the identified BHR and CHLs are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment determine that the structures or landscape features within the BHR or CHLs will be subject to vibrations, a vibration monitoring plan should be prepared and implemented as part of the detailed design phase of the project to lessen vibration impacts related to construction. Baseline monitoring should be conducted for: 6671 Ninth Line (BHR 1), 5104 Ninth Line (CHL 1), and 6056 Ninth Line (CHL 3). Indirect impacts due to vibrations are not anticipated for CHL 4 as the structure on the property is located more than 100 m from the proposed grading on the property.

6.0 SUMMARY OF COMMUNITY DATA COLLECTION

Consultation with the community will be undertaken through submission of this report for review and comment to municipal heritage staff, the MHSTCI, and any other relevant stakeholder with an interest in



this project. Consultation will also be undertaken through Public Information Centres (PICs) conducted as part of the EA project. This section will be updated following receipt of any feedback.

7.0 RESULTS AND MITIGATION RECOMMENDATIONS

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the late nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are five previously identified features of cultural heritage value within/adjacent to the Ninth Line Improvements from Eglinton Avenue West to Derry Road West study area. No additional features were identified during the fieldwork.

7.1 Key Findings

- A total of one BHR and four CHLs were identified within the study area.
- Four cultural heritage resources are listed in the *Heritage Register for Mississauga* (CHL 1-4) and one is designated under Part IV of the *Ontario Heritage Act* (BHR 1).
- Identified cultural heritage resources are historically, architecturally, and contextually associated with land use patterns in the City of Mississauga.

Results of Preliminary Impact Assessment

- Direct impacts to one known BHR (BHR 1) are anticipated as a result of the proposed alignment.
- The proposed alignment may result in indirect impacts to three known CHLs (CHL 1, CHL 3, and CHL 4).
- Where feasible, excavation, grading, and staging activities should be planned and executed to limit impacts to this known BHR and known CHLs. Suitable mitigation including establishing nogo zones with fencing, implementing tree protection zones, and issuing instructions to construction crews to avoid the BHR and CHLs should be considered to mitigate any impacts.
- As the property at 6671 Ninth Line (BHR 1) is designated under Part IV of the Ontario Heritage
 Act and there are direct impacts anticipated, a resource-specific HIA is required as per the City
 of Mississauga Official Plan clause 7.4.1.12. This HIA should be completed by a qualified cultural
 heritage specialist following the City of Mississauga's Terms of Reference for HIAs as early as
 possible in detailed design.
- As the properties at 5104 Ninth Line (CHL 1), 6056 Ninth Line (CHL 3), and 7044 Ninth Line (CHL 4) are listed by the City of Mississauga and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Mississauga Official Plan clauses 7.4.1.10 and 7.4.1.12. However, given that no structures or apparent landscape features of significant CHVI



are anticipated to be impacted on any property, it is recommended that the City of Mississauga consider waiving the requirement for a HIA in these cases if suitable mitigation measures including post-construction rehabilitation with sympathetic plantings are implemented.

 As 5768 Ninth Line (CHL 2) was determined not to retain CHVI (ASI 2020c) and was removed from the Heritage Register for Mississauga following preparation of the May 2020 draft report (confirmed in email communication with the City of Mississauga on 12 March 2021), no further cultural heritage reporting is recommended for 5768 Ninth Line (CHL 2).

7.2 Recommendations

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

- 1. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to identified BHRs and CHLs.
- 2. Suitable mitigation including establishing no-go zones with fencing and issuing instructions to construction crews to avoid the cultural heritage resource should be considered to mitigate any unintended impacts to all cultural heritage resources.
- 3. Post construction rehabilitation including planting with sympathetic plant species and the replacement of any impacted landscape features with potential cultural heritage value should be considered to mitigate any impacts.
- 4. As the property at 6671 Ninth Line (BHR 1) is designated under Part IV of the Ontario Heritage Act and there are direct impacts anticipated, a resource-specific HIA is required as per the City of Mississauga Official Plan clause 7.4.1.12. This HIA should be completed by a qualified cultural heritage specialist following the City of Mississauga's Terms of Reference for HIAs as early as possible in detailed design.
- 5. As the properties at 5104 Ninth Line (CHL 1), 6056 Ninth Line (CHL 3), and 7044 Ninth Line (CHL 4) are listed by the City of Mississauga and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Mississauga Official Plan clauses 7.4.1.10 and 7.4.1.12. However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on any property, it is recommended that the City of Mississauga consider waiving the requirement for a HIA in these cases if suitable mitigation measures including post-construction rehabilitation with sympathetic plantings are implemented.
- 6. Indirect impacts to BHR 1, CHL 1, and CHL 3 may occur as a result of their location adjacent to the proposed alignment. To ensure the structures on the properties at 6671 Ninth Line (BHR 1), 5104 Ninth Line (CHL 1), and 6056 Ninth Line (CHL 3) are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the any structures will be subject to vibrations, a vibration monitoring plan should be prepared and implemented as part of the



detailed design phase of the project to lessen vibration impacts related to construction. Indirect impacts due to vibrations are not anticipated for CHL 4 as the structure on the property is located more than 100 m from the proposed grading on the property.

- 7. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on potential heritage resources.
- 8. The CHRA should be submitted by the proponent to the City of Mississauga and the MHSTCI for review and comment, and any other local heritage stakeholders that may have an interest in this project. The final report should be submitted to the City of Mississauga for their records.



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