APPENDIX C

Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment

GANNETT FLEMING

Cultural Heritage Report:
Existing Conditions and Preliminary Impact Assessment

Stevenson Road North
Schedule C Municipal Class Environmental Assessment

City of Oshawa
Regional Municipality of Durham, Ontario

Final Report

Prepared for:

Gannett Fleming Canada ULC
200 Bay Street, The PATH - South Tower Suite 1600
Toronto, ON M5J 2J3

Archaeological Services Inc. File: 21CH-192

September 2024 (Revised December 2024 and January and March 2025)

Executive Summary

Archaeological Services Incorporated (A.S.I.) was contracted by Gannett Fleming Canada ULC, on behalf of the City of Oshawa, to conduct a Cultural Heritage Report as part of the Stevenson Road North, City of Oshawa Schedule C Municipal Class Environmental Assessment. The Environmental Assessment involves improvements to the roadway of the Stevenson Road North corridor between Taunton Road West and Conlin Road West and the addition of a new multi-use path and boulevard in the City of Oshawa. The project footprint consists of the Stevenson Road North right-of-way and is generally bounded by rural residential properties, agricultural lands, and wooded lots. The Cultural Heritage Report study area is the project footprint plus an additional 50 metre buffer.

Beyond the scope of this Environmental Assessment, a future right-of-way expansion may be anticipated in 2051 and beyond. Additional Cultural Heritage Reporting will be required when this future project is confirmed and scheduled to be completed.

The purpose of this report is to present an inventory of known and potential built heritage resources (B.H.R.s) and cultural heritage landscapes (C.H.L.s), 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 an Indigenous land use spanning several millennia and a rural Euro-Canadian land use history dating back to the early nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are five previously identified properties of potential cultural heritage value or interest within the study area. One additional property was identified during the fieldwork completed by A.S.I. on 2 November 2022.

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 unintended negative impacts to identified B.H.R.s and C.H.L.s. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified B.H.R.s and C.H.L.s, etc.

2. Ground disturbance including grading, excavation, and vegetation removal should be limited to the extent required to complete the proposed works. Where removal of mature vegetation is required, post-construction rehabilitation with sympathetic replanting should be considered to mitigate impacts. In this respect, consultation with a qualified arborist and Indigenous communities should be completed to determine the most appropriate species.

3. To ensure that 1680 Stevenson Road North (C.H.L. 1) and 2000 Stevenson Road North (C.H.L. 3) are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the structure(s) on these properties 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.

4. 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.

5. The report should be submitted to the City of Oshawa, the Regional Municipality of Durham, and the Ministry of Citizenship and Multiculturalism for review and comment, and any other local heritage stakeholders that may have an interest in this project, including the Oshawa Historical Society. The final report should be submitted to the City of Oshawa and the Regional Municipality of Durham for their records.

Report Accessibility Features

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

Project Personnel

- **Senior Project Manager**: Lindsay Graves, M.A., C.A.H.P., Senior Cultural Heritage Specialist, Assistant Manager - Cultural Heritage Division
- **Project Coordinator:** Jessica Bisson, B.F.A. (Hon.), Dipl. Heritage Conservation, Project Administrator – Cultural Heritage Division
- **Project Manager**: John Sleath, M.A., Cultural Heritage Specialist, Project Manager - Cultural Heritage Division
- **Field Review**: Kirstyn Allam, B.A. (Hon), Advanced Dipl. Applied Museum Studies, Cultural Heritage Analyst, Technical Writer and Researcher - Cultural Heritage Division
- **Report Production**: Kirstyn Allam
- Becca Clark, B.A. (Hon.), Adv. Dipl., Cultural Heritage Technical Writer & Researcher – Cultural Heritage Division
- **Graphics Production**: Jonas Fernandez, M.S.c., Manager, Geomatics - Operations Division
- Robin Latour, B.A., M.Phil., Archaeologist, Geomatics Specialist - Operations Division
- Peter Bikoulis, P.h.D., Archaeologist, Geomatics Technician – Operations Division
- **Report Reviewer(s)**: Kirstyn Allam, Lindsay Graves, John Sleath

Qualified Persons Involved in the Project

Lindsay Graves, M.A., C.A.H.P.
Senior Cultural Heritage Specialist, Assistant Manager - Cultural Heritage Division

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

John Sleath, M.A.
Cultural Heritage Specialist, Project Manager - Cultural Heritage Division

The Project Manager for this Cultural Heritage Report 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 14 years, as an archaeologist and as a cultural heritage professional. An exposure to both land-based and underwater archaeology and above ground cultural heritage assessments has provided John with a holistic understanding of heritage in a variety of contexts. In 2015 John began working in the Cultural Heritage Division researching and preparing a multitude of cultural heritage assessment reports and for which he was responsible for a variety of tasks 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, government agencies, Indigenous Nations, and museums. John has conducted hundreds of cultural heritage assessments across Ontario, with a focus on transit and rail corridor infrastructure including bridges and culverts.

Kirstyn Allam, B.A. (Hon), Advanced Dipl. in Applied Museum Studies
Cultural Heritage Analyst, Technical Writer and Researcher - Cultural Heritage Division

The Cultural Heritage Analyst for this project is **Kirstyn Allam** (B.A. (Hon.), Advanced Diploma in Applied Museum Studies), who is a Cultural Heritage Technician and Technical Writer and Researcher within the Cultural Heritage Division. 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, including three years' experience as a member of the Heritage Whitby Advisory Committee.

Kirstyn also has experience being involved with Stage 1-4 archaeological excavations in the Province of Ontario. Kirstyn is an intern member of C.A.H.P.

Becca Clark, B.A. (Hons)
Cultural Heritage Technical Writer and Researcher, Project Administrator-Cultural Heritage Division

The Cultural Heritage Technician for this project is **Becca Clark** (B.A. Hons, Adv. Diploma Applied Museum Studies), who is a Cultural Heritage Technical Writer and Researcher and Project Administrator within the Cultural Heritage Division. She was responsible for technical reporting. With her educational and working background, Becca provides an understanding of Ontario history and built heritage as well as skilled research and analysis. Her time as a museum professional focused on local history in Southern Ontario and how it may be represented by objects and built heritage. In 2021, Becca researched, designed, and produced the Guelph Civic Museum's exhibition "The Origin of Fan: Folding Form and Function". She has since translated her knowledge of Southern Ontario's history into built heritage research. In 2023, she joined ASI's Cultural Heritage team as a Cultural Heritage Technician.

Glossary

Built Heritage Resource (B.H.R.)
Definition: "…a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers" (Ministry of Municipal Affairs and Housing, 2020, p. 41).

Cultural Heritage Landscape (C.H.L.)
Definition: "…a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms" (Ministry of Municipal Affairs and Housing, 2020, p. 42).

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

Impact
Definition: 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 Citizenship and Multiculturalism, 2006c). Indirect impacts also include potential vibration impacts (See Section 2.5 for complete definition and discussion of potential impacts).

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

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

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

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

Vibration Zone of Influence

Definition: Area within a 50 metre buffer of construction-related activities in which there is potential to affect an identified cultural heritage resource. A 50 metre buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature (Carman et al., 2012; Crispino & D'Apuzzo, 2001; P. Ellis, 1987; Rainer, 1982; Wiss, 1981). This buffer accommodates the additional threat from collisions with heavy machinery or subsidence (Randl, 2001).

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1.0 Introduction

Archaeological Services Incorporated was contracted by Gannett Fleming Canada ULC, on behalf of the City of Oshawa, to conduct a Cultural Heritage Report as part of the Stevenson Road North, City of Oshawa Schedule C Municipal Class Environmental Assessment. The purpose of this report is to present an inventory of known and potential built heritage resources (B.H.R.s) and cultural heritage landscapes (C.H.L.s), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

1.1 Project Overview

The Stevenson Road North, City of Oshawa Municipal Class Environmental Assessment involves improvements to the Stevenson Road North corridor between Taunton Road West and Conlin Road West in the City of Oshawa. The project footprint consists of the Stevenson Road North right-of-way and is generally bounded by rural residential properties, agricultural lands, and wooded lots. The study area is located in the Northwood Business Park area of Oshawa.

1.2 Description of Study Area

This Cultural Heritage Report will focus on the project footprint, Stevenson Road North corridor between Taunton Road West and Conlin Road West, plus an additional 50 metre buffer (Figure 1). This project study area has been defined as inclusive of those lands that may contain B.H.R.s and C.H.L.s 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 Oshawa, Regional Municipality of Durham.

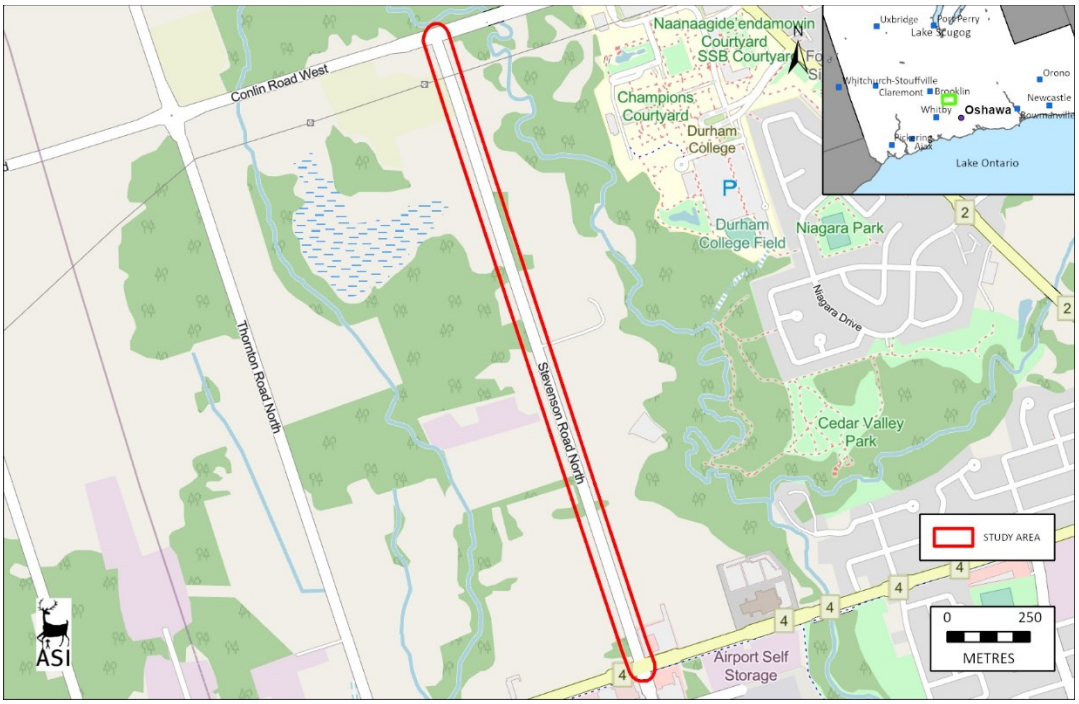

Figure 1: Location of the study area (Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (C.C.-By-S.A.))

2.0 Methodology

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

2.1 Regulatory Requirements

The *Ontario Heritage Act* (O.H.A.) (Ontario Heritage Act, R.S.O. c. O.18, 1990 [as Amended in 2021], 1990) is the primary piece of legislation that determines policies, priorities and programs for the conservation of Ontario's heritage. There are many other provincial acts, regulations and policies governing land use planning and resource development that support heritage conservation, including:

- The *Planning Act* (Planning Act, R.S.O. 1990, c. P.13, 1990), which states that "conservation of features of significant architectural, cultural, historical, archaeological or scientific interest" is a "matter of provincial interest". The *Provincial Policy Statement* (Ministry of Municipal Affairs and Housing, 2020), issued under the *Planning Act*, links heritage conservation to long-term economic prosperity and requires municipalities and the Crown to conserve significant built heritage resources and cultural heritage landscapes.
- The *Environmental Assessment Act* (Environmental Assessment Act, R.S.O. c. E.18, 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 Citizenship and Multiculturalism (hereafter "The Ministry") is charged under Section 2.0 of the O.H.A. with the responsibility to determine policies, priorities, and programs for the conservation, protection, and preservation of the heritage of Ontario. The *Standards and Guidelines for Conservation of Provincial Heritage Properties* (Ministry of Citizenship and Multiculturalism, 2010) (hereinafter "*Standards and Guidelines*") apply to properties the Government of Ontario owns or controls that have "cultural heritage value or interest" (C.H.V.I.). The *Standards and Guidelines* provide a series of guidelines that apply to provincial heritage properties in the areas of

identification and evaluation; protection; maintenance; use; and disposal. For the purpose of this report, the *Standards and Guidelines* provide points of reference to aid in determining potential heritage significance in identification of B.H.R.s and C.H.L.s. 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 Citizenship and Multiculturalism, 2006b) provides a guide to evaluate heritage properties. To conserve a B.H.R. or C.H.L., the *Ontario Heritage Tool Kit* states that a municipality or approval authority may require a heritage impact assessment and/or a conservation plan to guide the approval, modification, or denial of a proposed development.

2.2 Municipal/Regional Heritage Policies

The study area is located within the City of Oshawa in the Regional Municipality of Durham. Policies relating to cultural heritage resources were reviewed from the following sources:

- Office Consolidation *Oshawa Official Plan* 2019 (City of Oshawa, 2020a)
- Durham Regional Official Plan Consolidation 2017 (Durham Region, 2020)
- Durham Transportation Master Plan (Durham Region, 2017)

2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes

This Cultural Heritage Report follows guidelines presented in the *Ontario Heritage Tool Kit* (Ministry of Citizenship and Multiculturalism, 2006b) and *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (Ministry of Citizenship and Multiculturalism, 2016). The objective of this report is to present an inventory of known and potential B.H.R.s and C.H.L.s, and to provide a preliminary understanding of known and potential B.H.R.s and

C.H.L.s 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 B.H.R.s and C.H.L.s are subject to identification and inventory. Generally, when conducting an identification of B.H.R.s and C.H.L.s within a study area, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of B.H.R.s and C.H.L.s 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 B.H.R.s and C.H.L.s. The field review is also used to identify potential B.H.R.s and C.H.L.s 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 B.H.R. or C.H.L. based on research, the Ministry screening tool, and

professional expertise and best practice. In addition, use of a 40-year-old benchmark is a guiding principle when conducting a preliminary identification of B.H.R.s and C.H.L.s. 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 B.H.R.s and C.H.L.s within the study area, the following sections present the resources that were consulted as part of this Cultural Heritage Report.

2.4.1 Review of Existing Heritage Inventories

A number of resources were consulted in order to identify previously identified B.H.R.s and C.H.L.s within the study area. These resources, reviewed on 12 October and 1 November 2022, include:

- Heritage Oshawa Inventory of City of Oshawa Heritage Properties (Heritage Oshawa, 2023);
- mapOshawa interactive website, "Heritage Status" layer (City of Oshawa, n.d.);
- The *Ontario Heritage Act Register* (Ontario Heritage Trust, n.d.b);
- The *Places of Worship Inventory* (Ontario Heritage Trust, n.d.c);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust, n.d.a);
- The Ontario Heritage Trust's *An Inventory of Provincial Plaques Across Ontario*: a PDF of Ontario Heritage Trust Plaques and their locations (Ontario Heritage Trust, 2023);
- The Ontario Heritage Trust's *An Inventory of Ontario Heritage Trust-owned properties across Ontario*: a PDF of properties owned by the Ontario Heritage Trust (Ontario Heritage Trust, 2019);

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

2.4.2 Review of Previous Heritage Reporting

No additional cultural heritage studies are known to have been undertaken within the study area and so none were reviewed as part of this assessment.

2.4.3 Community Information Gathering

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

- Harrison Whilsmith, Planner A – Interim, City of Oshawa (email communication 2 and 7 November 2022). Email request submitted to the municipality to confirm the location of previously identified built heritage resources and cultural heritage landscapes within the study area. Request

for any additional heritage concerns was also included. A response confirmed the location of previously identified resources and clarified that 1648 Stevenson Road North and 1739 Stevenson Road North should not be included in this report as they are not "70+ Years" properties.

- The Ministry (email communication 3 November 2022). Email correspondence confirmed that to date there are no properties designated by the Minister, and that they are not aware of any Provincial Heritage Properties within or adjacent to the study area. This report was submitted for MCM review, and minor comments received in January 2025 were incorporated into the final version.
- The Ontario Heritage Trust (O.H.T., email communication 3 and 15 November 2022). A request to the Ontario Heritage Trust was submitted to confirm that there are no conservation easements or Trust-owned properties within the study area. A response confirmed that the O.H.T. does not have any conservation easements or Trust-owned properties within or adjacent to the study area.

2.5 Community Engagement

Community engagement was undertaken through submission of this Cultural Heritage Report for review and comment to City of Oshawa and Region of Durham heritage staff, Oshawa Historical Society for review and comment. No comments were received following their review (Gannett Fleming email communication 6 December 2024). Public Information Centres (P.I.C.s) for the project were held on June 22, 2023 and June 18, 2024, to present project information to the public and to solicit feedback. Any comments received though ongoing consultation and stakeholder review will be included as appropriate in the final report.

Indigenous Nations Engagement for this project was completed by Gannett Fleming to Indigenous Nations that have an interest in this study area. Notices and invitations to attend both P.I.C.s were sent to the following groups: Alderville First Nation, Beausoleil First Nation, Chippewas of Georgina Island, Curve Lake

First Nation, Hiawatha First Nation, Huron-Wendat Nation, Kawartha Nishnawbe First Nation, Métis Nation of Ontario, Mississaugas of Scugog Island, M.N.O. Peterborough and District Wapiti Métis Council, and Rama First Nation (Gannett Fleming email communication, August 8, 2024). No feedback or requests for additional information had been received from any of these groups regarding the Cultural Heritage Report for this project at the time of report submission (August 2024). Any feedback received will be considered and incorporated into the final report.

2.6 Preliminary Impact Assessment Methodology

To assess the potential impacts of the undertaking, identified B.H.R.s and C.H.L.s 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 Citizenship and Multiculturalism, 2006c). These include:

Direct impacts:

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

Indirect impacts:

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

- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

Indirect impacts from construction-related vibration have the potential to negatively affect B.H.R.s and C.H.L.s 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 B.H.R. or C.H.L. where work is taking place within 50 metres of features on the property. A 50 metre buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature (Carman et al., 2012; Crispino & D'Apuzzo, 2001; P. Ellis, 1987; Rainer, 1982; Wiss, 1981). This buffer accommodates any additional or potential threat from collisions with heavy machinery or subsidence (Randl, 2001).

Several additional factors are also considered when evaluating potential impacts on identified B.H.R.s and C.H.L.s. These are outlined in a document set out by the Ministry of Culture and Communications (now Ministry of Citizenship and Multiculturalism) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992). While this document has largely been superseded in some respects by more current policies and legislation, the guidance provided that continues to be of relevance to this specific project includes the following definitions:

- Magnitude: the amount of physical alteration or destruction which can be expected;
- Severity: the irreversibility or reversibility of an impact;
- Duration: the length of time an adverse impact persists;
- Frequency: the number of times an impact can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse impact; and

- Diversity: the number of different kinds of activities to affect a heritage resource.

The proposed undertaking should endeavor to avoid adversely affecting known and potential B.H.R.s and C.H.L.s 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 B.H.R.s and C.H.L.s. 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 B.H.R. or C.H.L. if to be demolished or relocated.

Various works associated with infrastructure improvements have the potential to affect B.H.R.s and C.H.L.s in a variety of ways, and as such, appropriate mitigation measures for the undertaking need to be considered.

3.0 Summary of Historical Development Within the Study Area

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

3.1 Physiography

The study area is situated within the Iroquois Plain physiographic region of Southern Ontario (Chapman & Putnam, 1984), which is a lowland region bordering Lake Ontario. This region is characteristically flat and formed by lacustrine deposits laid down by the inundation of Lake Iroquois, a body of water that existed during the late Pleistocene. This region extends from the Trent River,

around the western part of Lake Ontario, to the Niagara River, spanning 300 kilometres. The old shorelines of Lake Iroquois include cliffs, bars, beaches, and boulder pavements. The old sandbars in this region are good aquifers that supply water to farms and villages. The gravel bars are quarried for road and building material, while the clays of the old lake bed have been used for the manufacture of bricks (Chapman & Putnam, 1984).

Until the 1940s the Iroquois Plain was generally a farming area due to its relatively flat nature and, in the area of the Regional Municipality of Durham, well-drained soils. There was also a tendency towards horticulture and canning crops as the mellow, stone-free soils and the diminished frost hazard near the lake were beneficial to the crops. Since 1940, urbanization has taken over much of the land uses and farms have become fewer, larger, and more specialized. Continuous urban development in the later twentieth century continued to influence settlement. The physiography provided easy grades for the railways and highways that link the communities around Oshawa together and to the Greater Toronto Area at large. The Iroquois Plain provided reasonably flat sites for industrial development, such as General Motors, and being close to water further attracted more industry (Chapman & Putnam, 1984).

3.2 Indigenous Land Use and Settlement

Current archaeological evidence demonstrates that humans were present in Southern Ontario approximately 13,000 years before present (B.P.) (Ferris, 2013). Archaeological evidence of the Paleo period, beginning approximately 13,000 years B.P., demonstrates that populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P. the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (C. J. Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former

shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization and investment of labour into social infrastructure (Brown, 1995, p. 13; C. J. Ellis et al., 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2,300 B.P. – it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabeg ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), village sites focused on horticulture increased in the archaeological record while the seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised by some (Williamson, 1990, p. 317). By

1300-1450 C.E., archaeological research focusing on these horticultural societies note that this episodic community disintegration was no longer practised and these populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of these First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. Other First Nation communities continued to practice residential mobility and to harvest available resources across landscapes they returned to seasonally/annually.

By 1600 C.E., the Huron-Wendat were encountered by the first European explorers and missionaries in Simcoe County. Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the warring Haudenosaunee and Huron-Wendat were at peace with both groups and remained “la nation neutre” in the conflict. Like the Huron-Wendat, Petun, and Haudenosaunee, the Neutral or Attawandaron people were settled village agriculturalists. In the 1640s, the Attawandaron and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) were decimated by epidemics and ultimately dispersed by the Haudenosaunee. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

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

nineteenth centuries and treaties between colonial administrators and First Nations representatives began to be negotiated.

The study area is within the Johnson-Butler Purchases and in the traditional and treaty territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations, including the Mississaugas of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation and the Chippewas of Beausoleil First Nation, Georgina Island First Nation and the Rama First Nation (Williams Treaties First Nations, 2017).

The purpose of the Johnson-Butler Purchases of 1787/1788 was to acquire from the Mississaugas the Carrying Place Trail and lands along the north shore of Lake Ontario from the Trent River to Etobicoke Creek.

As part of the Johnson-Butler Purchases, the British signed a treaty, sometimes referred to as the “Gunshot Treaty” with the Mississaugas in 1787 covering the north shore of Lake Ontario, beginning at the eastern boundary of the Toronto Purchase and continuing east to the Bay of Quinte, where it meets the Crawford Purchase. It was referred to as the "Gunshot Treaty" because it covered the land as far back from the lake as a person could hear a gunshot. Compensation for the land apparently included “approximately £2,000 and goods such as muskets, ammunition, tobacco, laced hats and enough red cloth for 12 coats” (Surtees, 1984, pp. 37–45). First discussions about acquiring this land are said to have come about while the land ceded in the Toronto Purchase of 1787 was being surveyed and paid for (Surtees, 1984, pp. 37–45). During this meeting with the Mississaugas, Sir John Johnson and Colonel John Butler proposed the purchase of lands east of the Toronto Purchase (Fullerton & Mississaugas of the Credit First Nation, 2015). However, descriptions of the treaty differ between the British and Mississaugas, including the depth of the boundaries: “Rice Lake and Lake Simcoe, located about 13 miles and 48 miles north of Lake Ontario, respectively, were not mentioned as landmarks in the First Nations’ description of the lands to be ceded. Additionally, original descriptions provided by the Chiefs of Rice Lake indicate a

maximum depth of ten miles, versus an average of 15-16 miles in Colonel Butler's description" (Fullerton & Mississaugas of the Credit First Nation, 2015).

Overall then, records of the acquisition were not clear regarding the extent of lands agreed upon (Surtees, 1984, pp. 37–45). To clarify this, in October and November of 1923, the governments of Canada and Ontario, chaired by A.S. Williams, signed treaties with the Chippewa and Michi Saagiig for three large tracts of land in central Ontario and the northern shore of Lake Ontario, the last substantial portion of land in southern Ontario that had not yet been ceded to the government (Crown-Indigenous Relations and Northern Affairs, 2013).

In 2018 the Government of Canada and Province of Ontario reached a settlement with the Williams Treaties First Nations reaffirming the recognized Treaty harvesting rights in the Williams Treaties territories of each of the seven nations. Both levels of government apologized to the impacted Nations for the injustices incurred by the 1923 Williams Treaties. These were the only treaties in Canada that extinguished the harvesting, fishing, and hunting rights of the seven First Nations. The 2018 settlement agreement reaffirmed the harvesting rights for all seven Nations in the following pre-confederation treaty territories: Treaty 5, Treaty 16, Treaty 18, Treaty 20, Treaty 27 and 27 ¼, the Crawford Purchase, and the Gunshot Treaty.

3.2.1 Oral Histories

Oral histories from Indigenous communities are primary sources that can hold important historical information and their inclusion can provide an indigenous perspective to archaeological assessment reports.

The following oral histories were provided to A.S.I. for inclusion in reporting.

Michi Saagiig Nation

The following oral history was provided by Gidigaa Migizi-ban, a respected Knowledge Keeper and Elder for the Michi Saagiig Nation, relaying oral tradition provided to him by his Elders.

> "The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as "the people of the big river mouths" and were also known as the "Salmon People" who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.
>
> The Michi Saagiig were a highly mobile people, travelling vast distances to procure subsistence for their people. They were also known as the "Peacekeepers" among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.
>
> Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the "Old Ones" who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5th transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. They are the original inhabitants of southern Ontario, and they are still here today.

The traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara Region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.

Michi Saagiig oral histories also speak to the occurrence of people coming into their territories sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed annually (see Migizi & Kapyrka, 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig

The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political

and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.

Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian speaking peoples in Ontario were decimated.

The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact upon the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian speaking peoples. The Michi Saagiig were largely able to avoid the devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear. Michi Saagiig Elder Gitiga Migizi (2017) recounts:

"We weren't affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story.

There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history that needs to be corrected. We are the traditional people, we are the ones that signed treaties with the Crown. We are recognized as the ones who signed

these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.

We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.

Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn't mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis."

Often times, southern Ontario is described as being "vacant" after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation.

The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into small family groups around the present-day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation.

The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day."

3.3 Historical Euro-Canadian Township Survey and Settlement

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails that typically followed the highlands adjacent to various creeks and rivers (Archaeological Services Inc., 2006). Early European settlements occupied similar locations as Indigenous settlements as they were generally accessible by trail or water routes and would have been in locations with good soil and suitable topography to ensure adequate drainage.

Throughout the period of initial European settlement, Indigenous groups continued to inhabit Southern Ontario, and continued to fish, gather, and hunt within their traditional and treaty territories, albeit often with legal and informal restrictions imposed by colonial authorities and settlers. In many cases, Indigenous peoples acted as guides and teachers, passing on their traditional knowledge to Euro-Canadian settlers, allowing them to sustain themselves in their new homes. Indigenous peoples entered into economic arrangements and partnerships, and often inter-married with settlers. However, pervasive and systemic oppression and marginalization of Indigenous peoples also characterized Euro-Canadian colonization, with thousands being displaced from their lands, denied access to traditional and treaty hunting, fishing, and collecting grounds, and forced to assimilate with Euro-Canadian culture through mandatory attendance at Day and Residential Schools (Ray, 2005; Rogers & Smith, 1994).

Historically, the study area is located in the former Township of Whitby, County of Ontario along a road allowance between Lots 14, Concessions 3-5 and Lot 15, Concessions 3-5.

3.3.1 Township of Whitby

Whitby Township, when first laid out in the 1790s, was designated Township Nine although the name was changed shortly thereafter to Norwich. The first survey of this township was made in 1791 and the first Euro-Canadian settler arrived in 1794 (Armstrong, 1985). The first settler was said to have been Benjamin Wilson, a Loyalist from Vermont, who settled along the lakeshore east of Oshawa (Farewell, 1907). Wilson's house, built on Lot 4 in the Broken Front, was an early landmark that was depicted on several early township surveys and patent plans. Whitby was quickly settled by a mixture of Loyalists, disbanded troops, and emigrants from the United States, the United Kingdom, and Ireland. Indigenous peoples continued to utilize resources in the area during their seasonal harvesting rounds following township survey and initial Euro-Canadian settlement. Indeed, many of the earliest Euro-Canadian settlers would have had interactions with Indigenous peoples, and been engaged in business and personal relationships, including marriages. Boulton (Boulton, 1805) noted that Whitby would command "particular advantages" due to its proximity to the seat of government, and by 1846 Smith described it as a "well settled township … [where] farms are generally well cleared and cultivated, and in good order." The timber was a mixture of hardwood and pine (Smith, 1846). In 1851, Smith described it as "an exceedingly fine township…considered in point of value of property and agricultural productions, the first township in the County" (Smith, 1851). This statement is substantiated by an examination of extant census and assessment records for the township.

Two major settlements were soon established in the southern half of the township, Whitby and Oshawa. These communities were advantageously located where watersheds (such as that of Lynde Creek) were crossed by the Kingston Road. Whitby further benefited from its harbour and from the construction of the Grand Trunk Railway in the 1850s.

In 1852, Whitby Township became part of Ontario County, and the township was divided in 1857, the western portion remained as Whitby Township. The eastern

portion extending from a line between Whitby and Oshawa north to Durham County became the township of East Whitby (Hood, 1978). Throughout the next century, development occurred slowly, and the area remained in a large part agricultural. On January 1, 1968 the township was erected into a town, and on January 1, 1974, the Town of Whitby became part of the Regional Municipality of Durham (Mika & Mika, 1983).

3.3.2 City of Oshawa

The City of Oshawa was one of two major settlements in the Township of Whitby. Benjamin Wilson is said to have settled near the mouth of Oshawa Creek with his family in 1794 and lived in a log cabin that had been a French trading post. Also arriving were the Farewell brothers and Jabez Lynde at the turn of the century. One of the Farewells built a saw and grist mill on Harmony Creek along with a tavern on Dundas Street, which was to become a popular resting place along the stagecoach route. In 1809, Jabez Lynde was the first to own property in what was to become the village of Oshawa. Oshawa, was first known as Skae's Corners, named after popular merchant Edward Skae (Mika & Mika, 1983). The name was later changed when local trader Moody Farewell invited two Mississauga friends from Rice Lake to propose a more original name around 1842. They suggested *ajawi*, signifying 'crossing to the other side' or 'shore of a river or lake', and the name Oshawa evolved from it. Edward Skae went on to become the first postmaster on October 6, 1842 (Rayburn, 1997). Oshawa received village status in 1850 and town status in 1879 (Mika & Mika, 1983).

The Sydenham Harbour Company was established in the early 1840's and constructed piers and a breakwater to develop harbour facilities. The company later became the Port Oshawa Harbour Company. The port became a customs port in 1853 and in 1856 the Grand Trunk Railway, passed south of Oshawa. These two events led to industrial growth in Oshawa. In 1852, the Oshawa Manufacturing Company was created and in 1858, it was purchased by Joseph Hall. Hall was to turn the company into an important producer of farming tools. In 1861, a tin and sheet metal company was established. Ten years later, the Ontario

Malleable Iron Company was established to ensure a local source of malleable iron for Oshawa's industries and to attract developers. In 1876, Robert McLaughlin moved his carriage company to Oshawa, which grew to be the largest in the British Empire. With the increased use of cars after the turn of the twentieth century, the McLaughlins began producing them in 1908. In 1918, General Motors of Canada Limited was created after the merger of the McLaughlin Motor Car Company and the Chevrolet Motor Car Company of Canada with Robert Samuel McLaughlin as president (Mika & Mika, 1983).

The first schools in Oshawa were one-room log buildings, with one of the earliest being located at King Street and Simcoe Street as early as 1829. The Union School was constructed in 1835 and Centre Street School was built in 1856 with part of the school being used as a high school. An independent high school was built in 1865. Ward schools were constructed in 1877 after the municipality was divided into wards. Many of the early religious meetings took place at the Union School until the congregations of the various churches were able to construct their own buildings. In 1841, the Wesleyan Methodist and the Roman Catholics built their churches, followed by the Christian Church the year after. In 1843, St. George's Anglican Church was constructed, and the Presbyterians constructed a church in 1862 (Mika & Mika, 1983).

A public library began in 1864 as a Mechanics' Institute in Oshawa. A Carnegie Library was formed in 1906. Colonel R.S. McLaughlin gifted the city a library, the present McLaughlin Public Library in 1954, with further funds being donated in 1966 for an expansion of the library (Mika & Mika, 1983).

In 1922, Oshawa annexed part of East Whitby Township and was incorporated as a city in 1924. Another annexation of part of the Township occurred in 1951. When Ontario County was dissolved in 1974, Oshawa became part of the Regional Municipality in 1974 (Mika & Mika, 1983).

South of the study area is the Oshawa Executive Airport. The airport came into being after the start of the Second World War to assist with training pilots for the

war effort. Construction started in 1940 with the Canadian government expropriating lands for airport use by March 1941. Development of the airport lands included construction of runways and roadways, barracks, a canteen, hangars, and other ancillary buildings such as a bowling alley and hospital. Following the war, the airport was deemed surplus, and the Ontario County Flying Club was able to negotiate a lease for the former airbase. The airport had extensive use and considerable growth in air traffic from 1947 to 1979; however, apart from the construction of a few buildings and an air traffic control tower in 2018 it has remained unchanged physically since its original construction. The Oshawa Executive Airport is now divided into "fields", with the original "South Field" and "North Field" being where the majority of the present aviation uses are located. These fields have separate entrances and access points. There is also the "East Field" and the "West Field", which contains the Oshawa Airport Golf Course (City of Oshawa, 2019, 2020b; Cole, 2017; Heritage Oshawa, 2003).

3.4 Review of Historical Mapping

The 1860 *Tremaine's Map of the County of Ontario* (Tremaine, 1860), and the 1877 *Illustrated Historical Atlas of the County of Ontario* (Beers, 1877), were examined to determine the presence of historical features within the study area during the nineteenth century (Figure 2 and Figure 3). Historically, the study area is located on part of Lots 14 and 15, Concessions 3 to 5 in the Township of Whitby, County of Ontario.

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.

The 1860 Tremaine's Map (Figure 2) depicts the study area in a rural agricultural context with Stevenson Road North, Taunton Road, and Conlin Road West in their extant alignments. East Oshawa Creek is depicted to the east of Stevenson Road North, in a similar north-south alignment as encountered in later mapping. Agricultural lots within the study area are depicted with property owners noted, however no structures are illustrated. The 1877 Illustrated Atlas (Figure 3) depicts the study area in a similar context, with property owners labeled and residences depicted; however, no residences are within the study area. East Oshawa Creek and nearby roadways are depicted in a similar alignment as in earlier mapping.

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 1930, 1954, 1976, and 1994 (Figure 4 to Figure 7).

The 1930 topographic map (Figure 4) continues to depict the study area in a rural agricultural context. Stevenson Road North, Taunton Road West, and Conlin Road West are all illustrated as unmetalled roadways. A number of houses and some barns are depicted within or near the study area by this time. The Canadian National Railway is illustrated as intersecting with the southern portion of the study area in a northwest-southeast alignment. Few changes to the study area occur through the middle of the twentieth century as captured in the 1954 aerial photography (Figure 5). Farms are visible with associated buildings, along with agricultural fields, and woodlots. The Canadian National Railway line is now labeled as abandoned. To the south of the study area, the present Oshawa Executive Airport, labeled as the Oshawa Aerorome [sic], has been constructed with its three runways extant.

Into the late-twentieth century, some improvements to Stevenson Road North are noted. The 1976 topographic map (Figure 6) illustrates Stevenson Road North as a loose or stabilized surface, all weather road of less than two lanes; Conlin Road West is a similar road type with two lanes; and Taunton Road West is a hard surface, all weather road of two lanes. There is an increase in the number of homes lining the study area. A sports track is located to the west of the study area near the southern end and a laneway leading to a large pond, also to the west of the study area near the northern portion, is now depicted. To the east of the study area, a greenhouse is depicted and Durham College is labeled on the map southwest of the intersection of Conlin Road West and Simcoe Street North. Some changes have occurred within the study area by the end of the twentieth century. The 1994 topographic map (Figure 7) depicts a few residences along the east side of Stevenson Road North with several more along the west side. The sports track and pond to the west are no longer illustrated on the mapping. A large structure is located where the greenhouse had been and, although no longer labeled, is assumed to still be a greenhouse. The East Oshawa Creek is still following the same alignment; however, the Cedar Valley Conservation Area is now labeled along the course of the creek to the east of the study area.

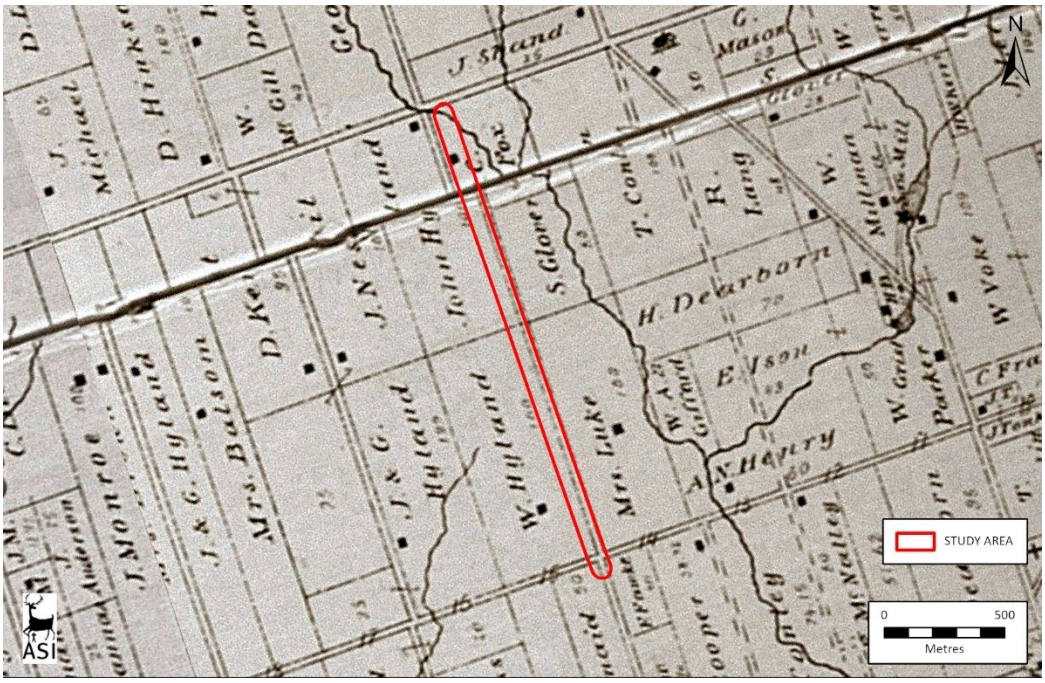

Figure 2: The study area overlaid on the 1860 *Tremaine's Map of the County of Ontario* (Base Map: Tremaine, 1860).

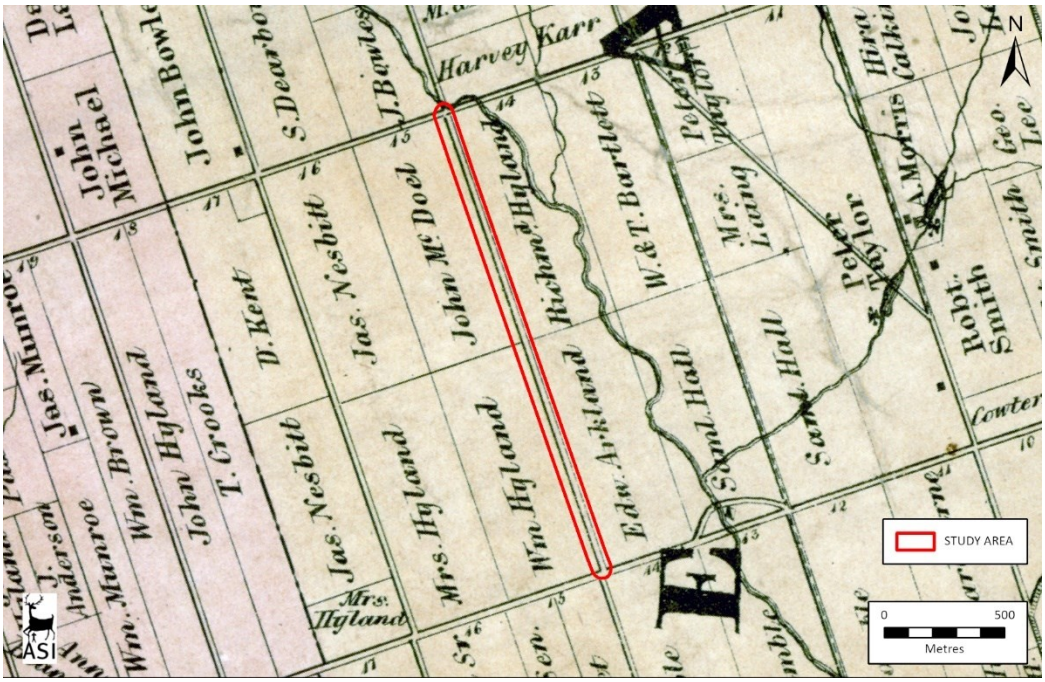

Figure 3: The study area overlaid on the 1877 *Illustrated Historical Atlas of the County of Ontario* (Base map: Beers, 1877).

Figure 4: The study area overlaid on the 1930 topographic map of Oshawa, Sheet No. 108 (Department of National Defence, 1930)

Figure 5: The study area overlaid on the 1954 aerial photograph of Southern Ontario (Hunting Survey Corporation Limited, 1954)

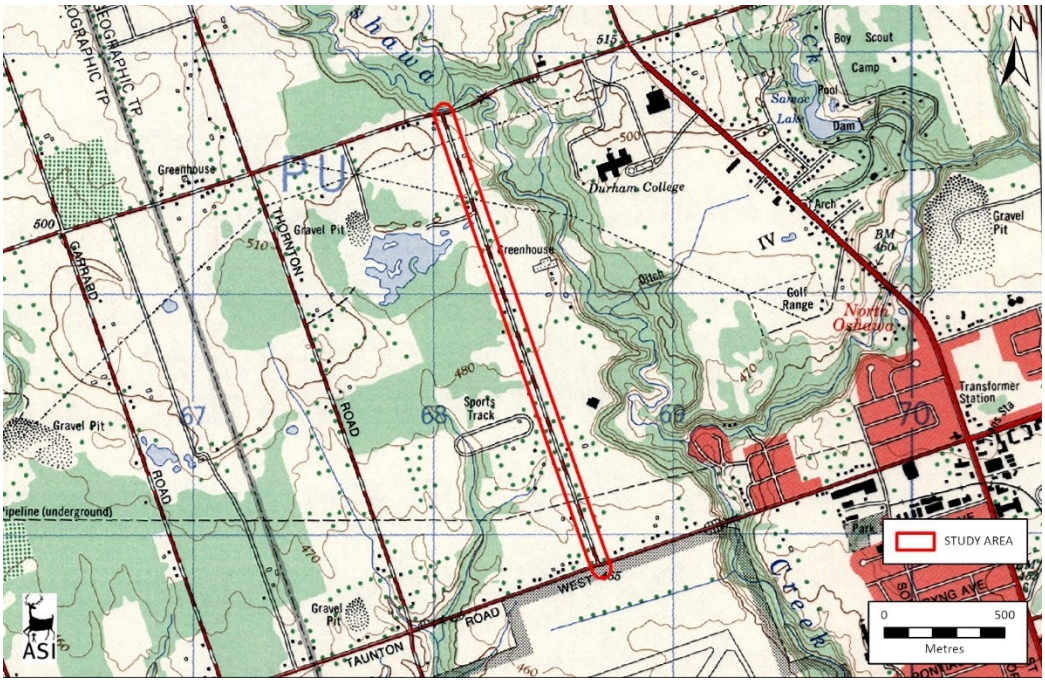

Figure 6: The study area overlaid on the 1976 topographic map of Oshawa (Department of Energy, Mines and Resources, 1976).

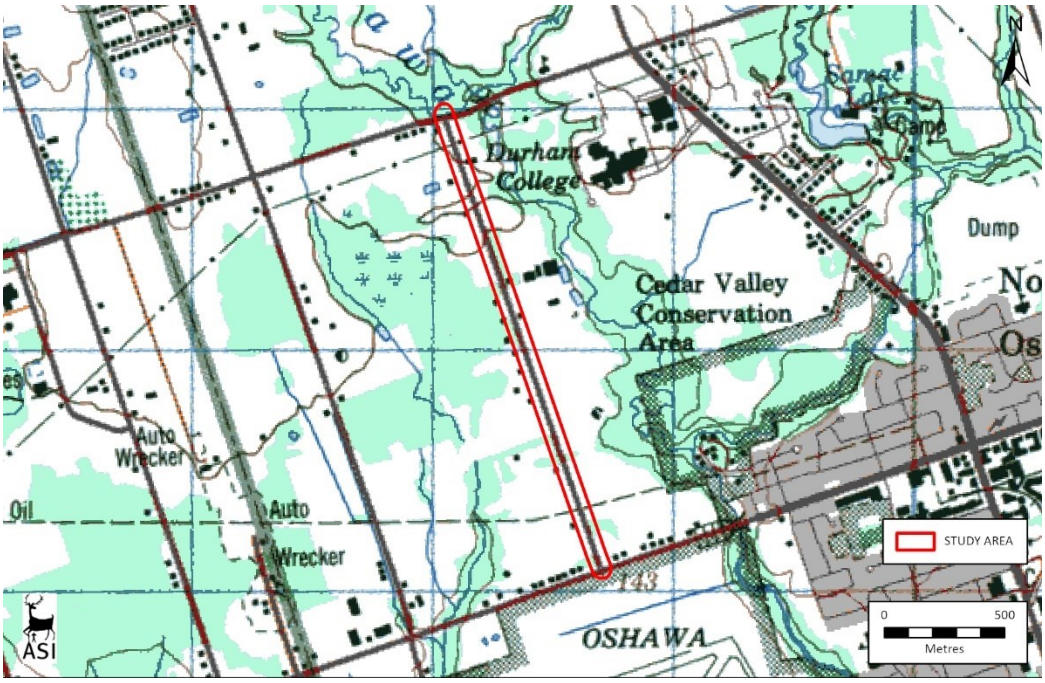

Figure 7: The study area overlaid on the 1994 topographic map of Oshawa (Department of Energy, Mines and Resources, 1994)

4.0 Existing Conditions

A field review of the study area was undertaken by Kirstyn Allam of Archaeological Services Inc., on 2 November 2022 to document the existing conditions of the study area from existing rights-of-way. The existing conditions of the study area are described below and captured in Plate 1 to Plate 12.

4.1 Description of Field Review

The study area centred on Stevenson Road North is in a rural part of the City of Oshawa, and primarily features agricultural and wooded areas, with some residences, industrial areas, and commercial structures within. North, on Conlin Road West, the study area is generally wooded with the East Oshawa Creek and its associated floodplain directly north of Stevenson Road North. The Oshawa Executive Airport is to the south of the study area, south of commercial properties at the intersection of Stevenson Road North and Taunton Road West. Generally, the study area is in a rural context to the northwest of suburban residences and commercial areas in the City of Oshawa.

Within the study area, Stevenson Road North is an undivided two-lane paved roadway oriented in a general north-south alignment with narrow paved shoulders and ditches adjacent to the roadway. A small stream of the East Oshawa Creek is carried under the roadway near the northern portion of the study area by a corrugated metal culvert.

At the southern end of the study area is the Stevenson Road North and Taunton Road West intersection. Taunton Road West is an undivided paved four-lane roadway oriented in a general east-west alignment and features a sidewalk on the north side and a multi-use path on the south.

At the northern end of the study area is the Stevenson Road North and Conlin Road West intersection. Conlin Road West carries four lanes of divided vehicular traffic in a general east-west alignment and features curbs, bike lanes, and sidewalks on both sides of the roadway.

Plate 1: Stevenson Road North and Taunton Road West intersection, looking north-northwest (A.S.I., 2022).

Plate 2: Looking south towards Oshawa Executive Airport from the intersection of Stevenson Road North and Taunton Road West (A.S.I., 2022).

Plate 3: Looking east along Taunton Road West, towards Stevenson Road North (A.S.I., 2022).

Plate 4: View south along Stevenson Road North (A.S.I., 2022).

Plate 5: Looking east to banquet property on east side of Stevenson Road North (A.S.I., 2022).

Plate 6: Residential properties on west side of Stevenson Road North, looking north (A.S.I., 2022).

Plate 7: View north along the road, rural properties on the left (west) and rural/industrial properties on the right (east) (A.S.I., 2022).

Plate 8: View of the culvert and floodplain of the stream, looking north (A.S.I., 2022).

Plate 9: View of residential property on west side of Stevenson Road North, looking west (A.S.I., 2022).

Plate 10: Looking north, towards the intersection of Stevenson Road North and Conlin Road West (A.S.I., 2022).

Plate 11: View west along Conlin Road West towards Stevenson Road North (A.S.I., 2022).

Plate 12: View of the wooded area and East Oshawa Creek, north of the study area (A.S.I., 2022).

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

Based on the results of the background research and field review, six properties of potential cultural heritage value or interest were identified within the study area. These include: five properties identified on mapOshawa as Heritage – 70 plus years and one property identified during background research and field review. A detailed inventory of these two potential built heritage resources (B.H.R.s) and four potential cultural heritage landscapes (C.H.L.s) within the study area is presented below in Table 1. See Figure 8 for mapping showing the location of identified B.H.R.s and C.H.L.s.

Table 1: Inventory of Potential Built Heritage Resources and Cultural Heritage Landscapes within the Study Area

Feature I.D.	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential C.H.V.I.	Photographs/ Digital Image
B.H.R. 1	Residence	580 Taunton Road West	Potential B.H.R. – Identified on mapOshawa as Heritage – 70 plus years	The residence is located on the north side of Taunton Road West to the west of Stevenson Road North. The potential heritage attributes include the single-storey bungalow with a hipped roof. The house has an L-shaped footprint and a porch along the western portion of the front façade (southern elevation). The residence has potential design/physical and contextual value as a representative example of an early twentieth-century residence in the rural agricultural context. The 1930 topographic map (Figure 4) depicts a residence in the vicinity of the extant house.	 Plate 13: 580 Taunton Road West (A.S.I., 2022).
B.H.R. 2	Residence	1520 Stevenson Road North	Potential B.H.R. – Identified on mapOshawa as Heritage – 70 plus years	The residence is located on the west side of Stevenson Road North and is well set back from the road right-of-way. The potential heritage attributes include the two-storey residence. The house features a rectangular footprint with a rear addition. The residence was obscured from the right-of-way by vegetation. The residence has potential design/physical and contextual value as a representative example of an early twentieth-century residence in the rural agricultural context. The 1930 topographic map (Figure 4) depicts a residence in the vicinity of the extant house.	 Plate 14: 1520 Stevenson Road North (A.S.I., 2022).

Feature I.D.	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential C.H.V.I.	Photographs/ Digital Image
C.H.L. 1	Rural Residential	1680 Stevenson Road North	Potential C.H.L. – Identified on mapOshawa as Heritage – 70 plus years	The property is located on the west side of Stevenson Road North, roughly equidistant between Taunton Road West and Conlin Road West. The potential heritage attributes include the one-and-a-half storey residence with dormer windows along the north and south elevation. The house features a square footprint with a northern single-storey addition. The property features a long driveway, garage, and large, wooded areas. The property has potential design/physical and contextual value as a representative example of an early twentieth-century residence in the rural agricultural context. The 1954 aerial photograph (Figure 5) depicts a residence in the vicinity of the extant structure.	 Plate 15: 1680 Stevenson Road North (A.S.I., 2022).
C.H.L. 2	Rural Residential	1725 Stevenson Road North	Potential C.H.L.– Identified on mapOshawa as Heritage – 70 plus years	The property is located on the east side of Stevenson Road North to the south of Conlin Road West. The potential heritage attributes include the one-and-a-half storey residence with an L-shaped footprint. The property also features a second residence that dates to the late-twentieth century, long driveway to the residences, and large outbuildings. The property has potential design/physical and contextual value as a representative example of an early twentieth-century residence in the rural agricultural context. The 1954 aerial photograph (Figure 5) depicts buildings well set back from the road, closer to the East Oshawa Creek in the vicinity of the property.	 Plate 16: 1725 Stevenson Road North (A.S.I., 2022).

Feature I.D.	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential C.H.V.I.	Photographs/ Digital Image
C.H.L. 3	Farmscape	2000 Stevenson Road North	Potential C.H.L. – Identified during background research and field review	The farmscape is located at the southwest corner of the intersection of Stevenson Road North and Conlin Road West. The potential heritage attributes include the one-and-a-half storey residence with a rectangular footprint, gable roof, and single-storey addition. The property features a driveway, outbuildings, agricultural fields, and mature trees. The property also features a late-twentieth century residence at 309 Conlin Road West. The property has potential design/physical and contextual value as a representative example of an early twentieth-century farmscape in the rural agricultural context. The 1930 topographic map (Figure 4) depicts a residence in the vicinity of the extant house.	 Plate 17: 2000 Stevenson Road North (A.S.I., 2022).
C.H.L. 4	University Campus	50 Conlin Road West	Potential C.H.L. – Identified on mapOshawa as Heritage – 70 plus years	The property is located on the north side of Conlin Road West. The property is currently part of the Durham College campus with campus buildings, recreational facilities, and parking lots all in the eastern portion of the property. The property also features agricultural fields and wooded areas following the East Oshawa Creek in the western portion. The property has potential design/physical, contextual, and historical value as an education institution in the City of Oshawa. The 1976 topographic map (Figure 6) depicts a school on the north side of Conlin Road West.	 Plate 18: 50 Conlin Road West (A.S.I., 2022).

Figure 8: Location of Identified Built Heritage Resources (B.H.R.s) and Cultural Heritage Landscapes (C.H.L.s) in the Study Area.

5.0 Preliminary Impact Assessment

The following sections provide more detailed information regarding the proposed project undertaking and analysis of the potential impacts on identified built heritage resources (B.H.R.s) and cultural heritage landscapes (C.H.L.s).

5.1 Description of Proposed Undertaking

The proposed undertaking for the Stevenson Road North, City of Oshawa Municipal Class Environmental Assessment involves the improvements to the roadway of the Stevenson Road North corridor between Taunton Road West and Conlin Road West and the addition of a new multi-use path and boulevard in the City of Oshawa. The study area consists of Stevenson Road North right-of-way and is generally bounded by rural residential properties, agricultural lands, and wooded lots. The Cultural Heritage Report study area is the project footprint plus an additional 50 metre buffer.

Beyond the scope of this Environmental Assessment, a future right-of-way expansion may be anticipated in 2051 and beyond. Additional Cultural Heritage Reporting will be required when this future project is confirmed and scheduled to be completed.

5.2 Analysis of Potential Impacts

Table 2 outlines the potential impacts on all identified B.H.R.s and C.H.L.s within the study area. Mapping of the preferred alternative is included in Figure 9 to Figure 12.

Table 2: Preliminary Impact Assessment and Recommended Mitigation Measures

Feature I.D.	**Location/Name**	**Type and Description of Potential/Anticipated Impact**	**Mitigation Strategies**
B.H.R. 1	580 Taunton Road Potential B.H.R. – Identified on mapOshawa as Heritage – 70 plus years	It is understood that the limits of the proposed improvements will encroach approximately two metres into the property at 580 Taunton Road West at the southeast corner of the property and follow Stevenson Road North for about 40 metres. It has been determined that the preferred alternative area terminates approximately 70 metres east of the heritage attributes of B.H.R. 1. Therefore, no direct or indirect adverse impacts are anticipated to any character-defining elements of the residence as listed in Section 4.2 of this report.	Ground disturbance on the eastern property frontage including grading, excavation, and vegetation removal should be limited to the extent required to complete the proposed works. Where removal of mature vegetation is required, post-construction rehabilitation with sympathetic replanting should be considered to mitigate impacts. In this respect, consultation with a qualified arborist and Indigenous communities should be completed during the detailed design phase to determine the most appropriate species.

Feature I.D.	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
B.H.R. 2	1520 Stevenson Road North Potential B.H.R. – Identified on mapOshawa as Heritage – 70 plus years	It is understood that the proposed improvements will result in minor grading changes on the property at 1520 Stevenson Road North at each of the two existing driveways. Access to the property using these driveways will continue following improvements. The limits of the proposed improvements will terminate more than 50 metres of the potential heritage attributes. Therefore, no negative impacts are anticipated as construction will not be directly or indirectly impacting any character-defining elements of the residence as listed in Section 4.2 of this report.	No further work required.

Feature I.D.	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
C.H.L. 1	1680 Stevenson Road North Potential C.H.L. – Identified on mapOshawa as Heritage – 70 plus years	It is understood that the limits of the proposed improvements will be confined to the right-of-way adjacent to C.H.L. 1. Adverse indirect impacts from construction-related vibration are possible as the structure is located within 50 metres of the proposed work. No additional indirect impacts were identified.	Construction and staging should be suitably planned to avoid impacts to C.H.L. 1. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified B.H.R.s and C.H.L.s, etc. To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.
C.H.L. 2	1725 Stevenson Road North	It is understood that the proposed improvements will result in minor grading changes on the property at	No further work required.

Feature I.D.	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
	Potential C.H.L.– Identified on mapOshawa as Heritage – 70 plus years	1725 Stevenson Road North at each of the two existing driveways. Access to the property using these driveways will continue following improvements. The limits of the proposed improvements will terminate approximately 200 metres west of the potential heritage attributes. Therefore, no negative impacts are anticipated as construction will not be directly or indirectly impacting any character-defining elements of the residence as listed in Section 4.2 of this report.	
C.H.L. 3	2000 Stevenson Road North	It is understood that the limits of the proposed improvements will encroach approximately two metres into the property at 2000 Stevenson	Construction and staging should be suitably planned to avoid impacts to C.H.L. 3. Avoidance measures may include, but are not limited to:

Feature I.D.	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
	Potential C.H.L. – Identified during background research and field review	Road North along the frontage of the property. No direct or indirect adverse impacts are anticipated as there are no potential heritage attributes adjacent to the right-of-way. Adverse indirect impacts from construction-related vibration are possible as the structure lies within 50 metres of the proposed work. No additional indirect impacts were identified.	erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified B.H.R.s and C.H.L.s, etc. To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detail design to determine potential vibration impacts.
C.H.L. 4	50 Conlin Road Potential C.H.L. – Identified on mapOshawa as	The proposed work is anticipated to be confined to Stevenson Road south of the subject property, greater than 50 metres from the identified potential heritage attributes. No direct or indirect adverse impacts are anticipated to C.H.L. 4.	No further work required.

Feature I.D.	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
	Heritage – 70 plus years		

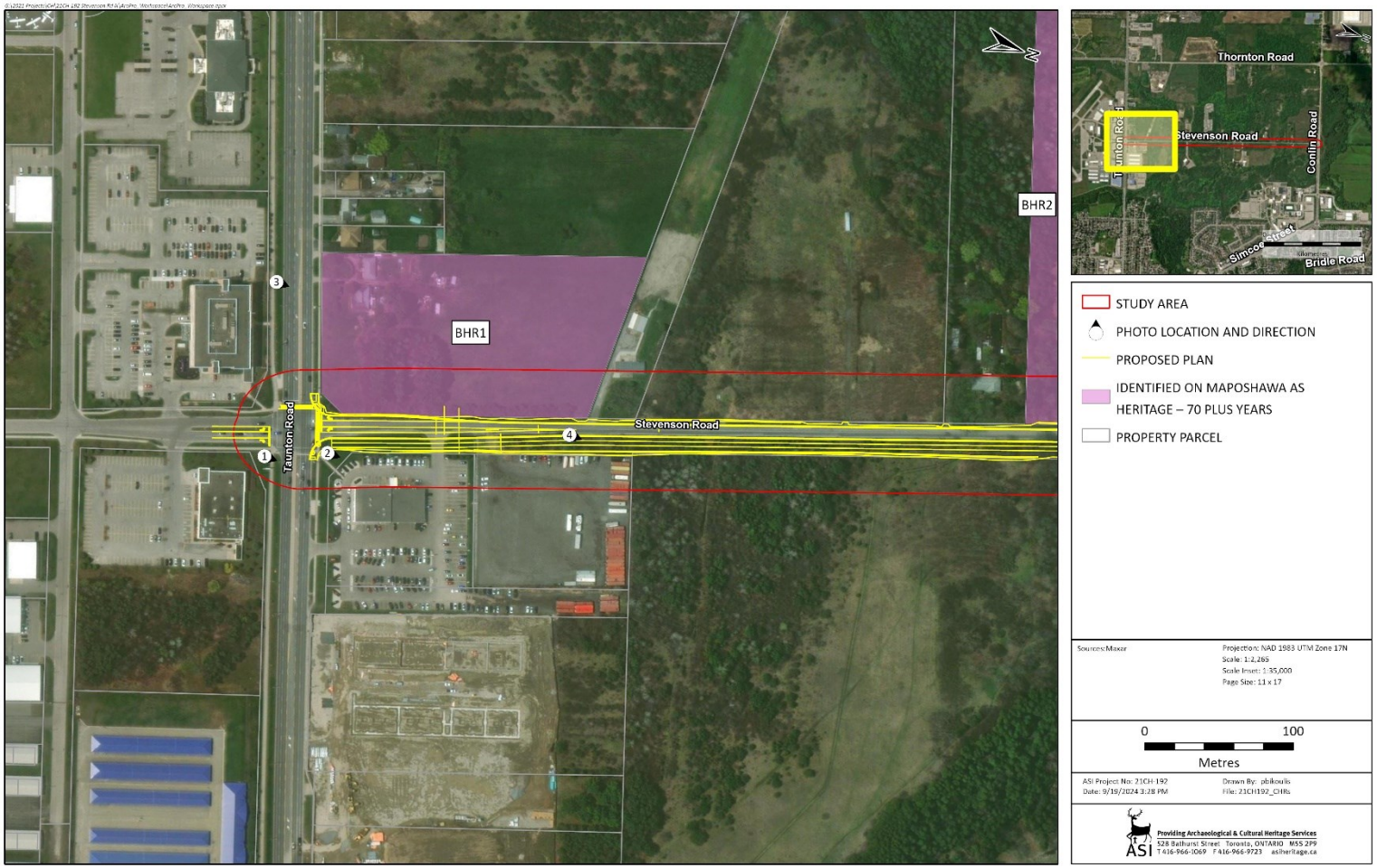

Figure 9: Map featuring known and potential B.H.R.s and C.H.L.s, the preliminary design and photo locations (Sheet 1).

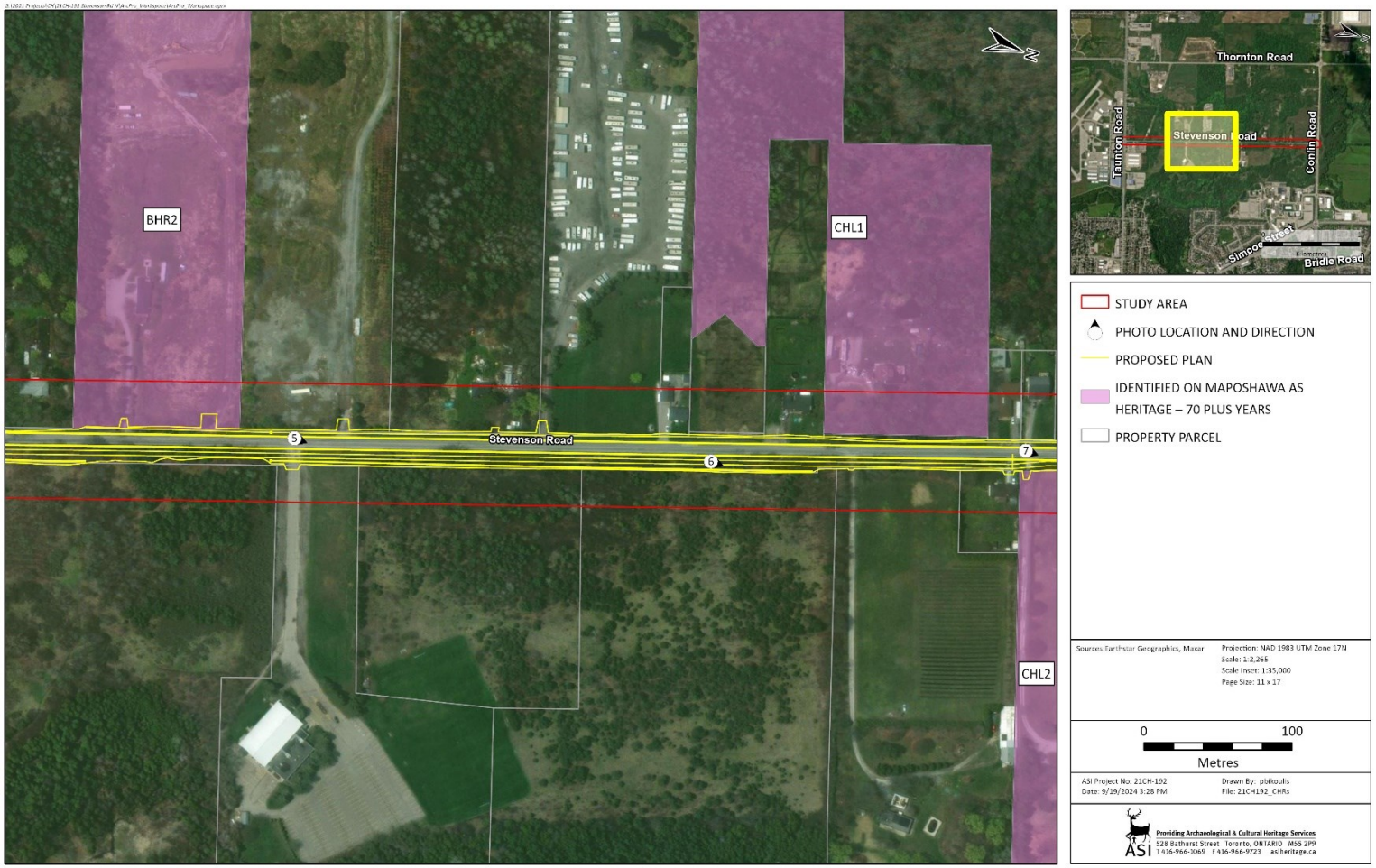

Figure 10: Map featuring known and potential B.H.R.s and C.H.L.s, the preliminary design and photo locations (Sheet 2).

Figure 11: Map featuring known and potential B.H.R.s and C.H.L.s, the preliminary design, and photo locations (Sheet 3).

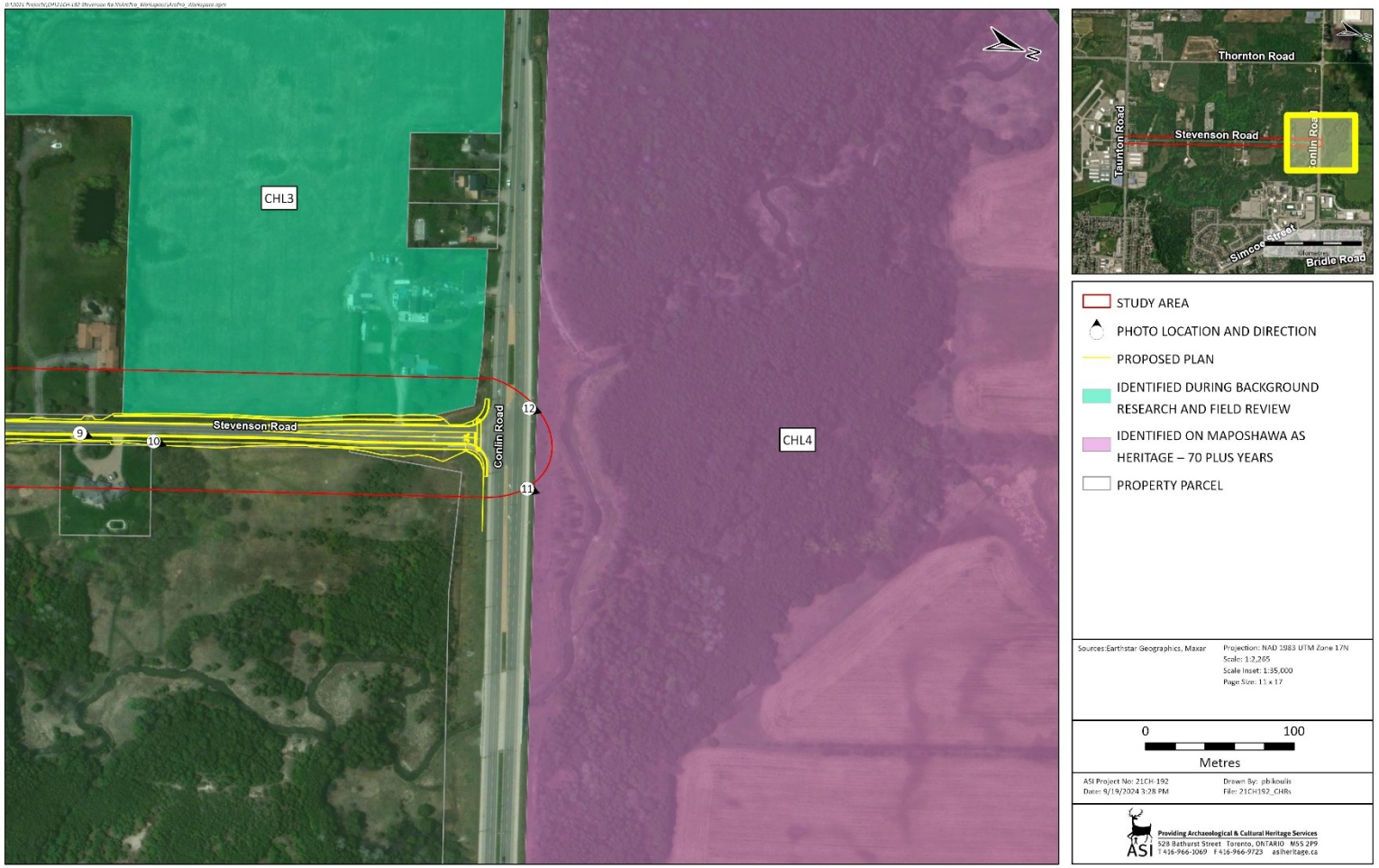

Figure 12: Map featuring known and potential B.H.R.s and C.H.L.s, the preliminary design, and photo locations (Sheet 4).

Minor property encroachment is anticipated to 580 Taunton Road (B.H.R. 1) and 2000 Stevenson Road North (CHL 3), however, no adverse impacts are anticipated to any character-defining elements of the properties as listed in Section 4.2 of this report. Ground disturbance including grading, excavation, and vegetation removal should be limited to the extent required to complete the proposed works. Where removal of mature vegetation is required, post-construction rehabilitation with sympathetic replanting should be considered to mitigate impacts. In this respect, consultation with a qualified arborist and Indigenous communities should be completed during detailed design to determine the most appropriate species.

Indirect impact to C.H.L.s 1 and 3 may occur as a result of their location adjacent to the proposed alignment. To ensure the structures on the properties at 1680 Stevenson Road North (C.H.L. 1) and 2000 Stevenson Road North (C.H.L. 3) are not adversely impacted during construction, construction and staging should be suitably planned to avoid impacts to the identified heritage attributes of the properties. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified B.H.R.s and C.H.L.s, etc.

To ensure the structures on the properties at 1680 Stevenson Road North (C.H.L. 1) and 2000 Stevenson Road North (C.H.L. 3) are not adversely impacted during construction, which is anticipated to be within 50 metres of potential heritage attributes on the properties, a baseline vibration assessment should be undertaken during detailed design. Should this advance assessment conclude that the any structures or identified heritage attributes 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.

6.0 Results and Mitigation Recommendations

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with an Indigenous

land use spanning millennia and a Euro-Canadian rural land use history dating back to the early nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are five previously identified features of potential cultural heritage value or interest within the Stevenson Road North, City of Oshawa study area. One additional feature was identified during fieldwork.

6.1 Key Findings

A total of two built heritage resources (B.H.R.s) and four cultural heritage landscapes (C.H.L.s) were identified within the study area.

- Of the six identified B.H.R.s and C.H.L.s, five are identified on mapOshawa as Heritage – 70 plus years (B.H.R. 1, B.H.R. 2, C.H.L. 1, C.H.L. 2, and C.H.L. 4) and one property was identified during background research and field review (C.H.L. 3); and
- Identified B.H.R.s and C.H.L.s are historically and contextually associated with land use patterns in the City of Oshawa.

6.2 Results of Preliminary Impact Assessment

The following is a summary of the results of preliminary impact assessment:

- Minor property encroachment is anticipated to 580 Taunton Road (B.H.R. 1) and 2000 Stevenson Road North (C.H.L. 3), however, no adverse impacts are anticipated to any character-defining elements of the properties as listed in Section 4.2 of this report;
- Ground disturbance including grading, excavation, and vegetation removal should be limited to the extent required to complete the proposed works at B.H.R. 1 and C.H.L. 3. Where removal of mature vegetation is required, post-construction rehabilitation with sympathetic replanting should be considered to mitigate impacts. In this respect, consultation with a qualified arborist and Indigenous communities should be completed during detailed to determine the most appropriate species;

- Indirect adverse impacts from construction-related vibration are possible for C.H.L. 1 and C.H.L. 3 as heritage attributes on the property are within 50 metres of the proposed works within the right-of-way;
- To address the potential for indirect impacts due to construction related vibration, undertake a baseline vibration assessment during detailed design to determine potential vibration impacts.

6.3 Recommendations

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 unintended negative impacts to identified built heritage resources and cultural heritage landscapes. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified B.H.R.s and C.H.L.s, etc.

2. Ground disturbance including grading, excavation, and vegetation removal should be limited to the extent required to complete the proposed works. Where removal of mature vegetation is required, post-construction rehabilitation with sympathetic replanting should be considered to mitigate impacts. In this respect, consultation with a qualified arborist and Indigenous communities should be completed during detailed design to determine the most appropriate species.

3. To ensure that 1680 Stevenson Road North (C.H.L. 1) and 2000 Stevenson Road North (C.H.L. 3) are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the structure(s) on these properties 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.

4. 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.

5. The report should be submitted to the City of Oshawa, the Regional Municipality of Durham, and the Ministry of Citizenship and Multiculturalism for review and comment, and any other local heritage stakeholders that may have an interest in this project, including the Oshawa Historical Society. The final report should be submitted to the City of Oshawa and the Regional Municipality of Durham for their records.

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