



BURNSIDE

**McQuesten Park Active Transportation
Bridge**

**Municipal Class Environmental
Assessment
Schedule B
Project File Report (PFR)**

City of Hamilton



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Municipal Class Environmental Assessment Schedule B Project File Report (PFR)

City of Hamilton

**R.J. Burnside & Associates Limited
292 Speedvale Avenue West Unit 20
Guelph ON N1H 1C4 CANADA**

**August 2026
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-	May 2026	Draft Project File Report Submission
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R.J. Burnside & Associates Limited**Report Prepared By:**

Cole Roddick, BES
Environmental Planner
CR:cvh

Report Reviewed By:

Deanna De Forest, B.Sc. EP
Manager, Environmental Planning and Assessment

R.J. Burnside & Associates Limited – Additional Contributors

Tricia Radburn, RPP, MCIP, Project Manager

Christine Beard, Regional Vice President, Public Sector

Sameem Raheemi, Transportation Planner

Ariana Burgener, M.Sc., Terrestrial Ecologist & ISA Certified Arborist

Vadhul Krishnan Veerakumar, Transportation Designer

Tanner Wright, Engineering Assistant

Executive Summary

R.J. Burnside & Associates Limited (Burnside) was retained by the City of Hamilton (City) to complete a Schedule B Municipal Class Environmental Assessment (MCEA) for the proposed McQuesten Park Active Transportation (AT) Pedestrian Bridge. The proposed bridge would span the Lincoln M. Alexander Parkway (LINC), located east of Upper Wentworth Street, providing a grade-separated pedestrian and cyclist connection between T.B. McQuesten Community Park (McQuesten Park) to the south and the commercial and transit hub at Limeridge Road East and Lime Ridge Mall to the north.

The LINC is a high-volume, controlled-access parkway that currently functions as a significant physical barrier to north-south active transportation connectivity in the study area. While walking and cycling access is currently restricted to the existing bridge sidewalks along Upper Wentworth Street, that route presents numerous operational constraints, including high traffic volumes and frequent conflict points at highway on- and off-ramps. The need for a grade-separated crossing was identified in the City of Hamilton's Recreational Trail Master Plan, 2016, and the Cycling Master Plan Review and Update, 2018, to improve safety, mobility, and access to transit, commercial destinations, and recreational spaces.

The planning for an overpass was conducted in accordance with the Schedule B requirements of the MCEA process (MEA, February 2024), which is an approved process under the *Ontario Environmental Assessment Act*.

Three Alternative Solutions were considered:

Alternative Solution 1: Do Nothing – No bridge would be constructed, and the site would remain unchanged compared to existing conditions. This Alternative is mandatory for consideration in the MCEA process.

Alternative Solution 2: Eastern Option – The bridge would be constructed on the eastern side of the study area as a clear span bridge with supporting piers on each end.

Alternative Solution 3: Western Option – The bridge would be constructed on the western side of the study area as a two-span bridge with supporting piers at each end and an additional pier between the off-ramp and westbound lane of the LINC.

Based on a comparative evaluation of the alternative solutions against the natural, social / cultural, technical, and financial environments, Alternative Solution 2: Eastern Option was selected as the Preferred Solution.

The Preferred Solution consists of a single-span bridge of approximately 80 m prefabricated steel truss bridge with a cast-in-place concrete deck on a galvanized steel deck pan. The structure is designed with two piers located at each end of the bridge, providing an overhead clearance of a minimum of 8.0 m at the soffit. The bridge is positioned to link existing trails in McQuesten Park to the south and the commercial and transit hub to the north. Construction will utilize a staged approach where the substructure and superstructure progress concurrently, with the main span lifted into place by tandem mobile cranes during a scheduled two-day LINC maintenance shutdown. This solution separates active transportation facilities from adjacent high-volume traffic and is intended to accommodate standard inspection and maintenance activities. Anticipated natural environment effects are limited and include the removal of some vegetation including six trees and one sapling. To facilitate the north-side connection, the project will require the acquisition of private property.

A key component of the study included consultation and engagement with the public, Indigenous Nations, and agencies. Engagement efforts included a Notice of Commencement and Public Information Centre, a Public Information Centre (PIC), and a Notice of Completion.

The Notice of Completion for this Project File Report (PFR) is published in the local newspaper and on the City's project webpage and mailed or emailed to the public, agencies, and Indigenous Nations that may have interest in the project. As per the requirements of the MCEA, this PFR is available for public review and comment for a period of 30 calendar days following the publication of the Notice of Completion. The Notice of Completion provides a link to the electronic copy of the PFR and the names and contact information of people to whom comments can be sent. Written comments can be provided to the project team within the 30-day comment period.

If there are outstanding concerns regarding potential adverse impacts to constitutionally protected Aboriginal and Treaty rights that cannot be resolved, a request for an order requiring a higher level of study or conditions (Section 16 order) should be addressed in writing to the Minister of Environment, Conservation and Parks, the Director of the Environmental Assessment Branch, and the project team. Requests on other grounds will not be considered. Requests must be received by the Minister within 30 calendar days of the publication of the Notice of Completion and should include the requester's contact information and full name for the Ministry.

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- Appendix B Evaluation of Alternatives
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1.0 Introduction

R.J. Burnside & Associates Limited (Burnside) was retained by the City of Hamilton (City) to complete a Schedule B *Municipal Class Environmental Assessment* (MCEA) for the proposed McQuesten Park Active Transportation (AT) Pedestrian Bridge. The proposed bridge would span the Lincoln M. Alexander Parkway (LINC), east of Upper Wentworth Street, providing a grade-separated pedestrian and cyclist connection between T.B. McQuesten Community Park (McQuesten Park) to the south and the commercial and transit hub at Limeridge Road East and Lime Ridge Mall to the north.

The purpose of this MCEA is to evaluate existing conditions and alternative locations and identify design concepts in order to confirm the optimum solution for the proposed AT bridge. The LINC is a high-volume, controlled-access parkway where pedestrian and cyclist access is prohibited. It functions as a significant physical barrier to north-south active transportation connectivity in the study area. The need for a grade-separated crossing was identified in the City of Hamilton's Recreational Trail Master Plan (2016) and the Cycling Master Plan Update (2018) to improve safety, mobility, and access to transit, commercial destinations, and recreational spaces.

This Project File Report (PFR) documents the existing conditions, the identification and evaluation of alternative solutions, the assessment of potential environmental impacts, and the consultation undertaken with the public, stakeholders, regulatory agencies, and Indigenous Nations.

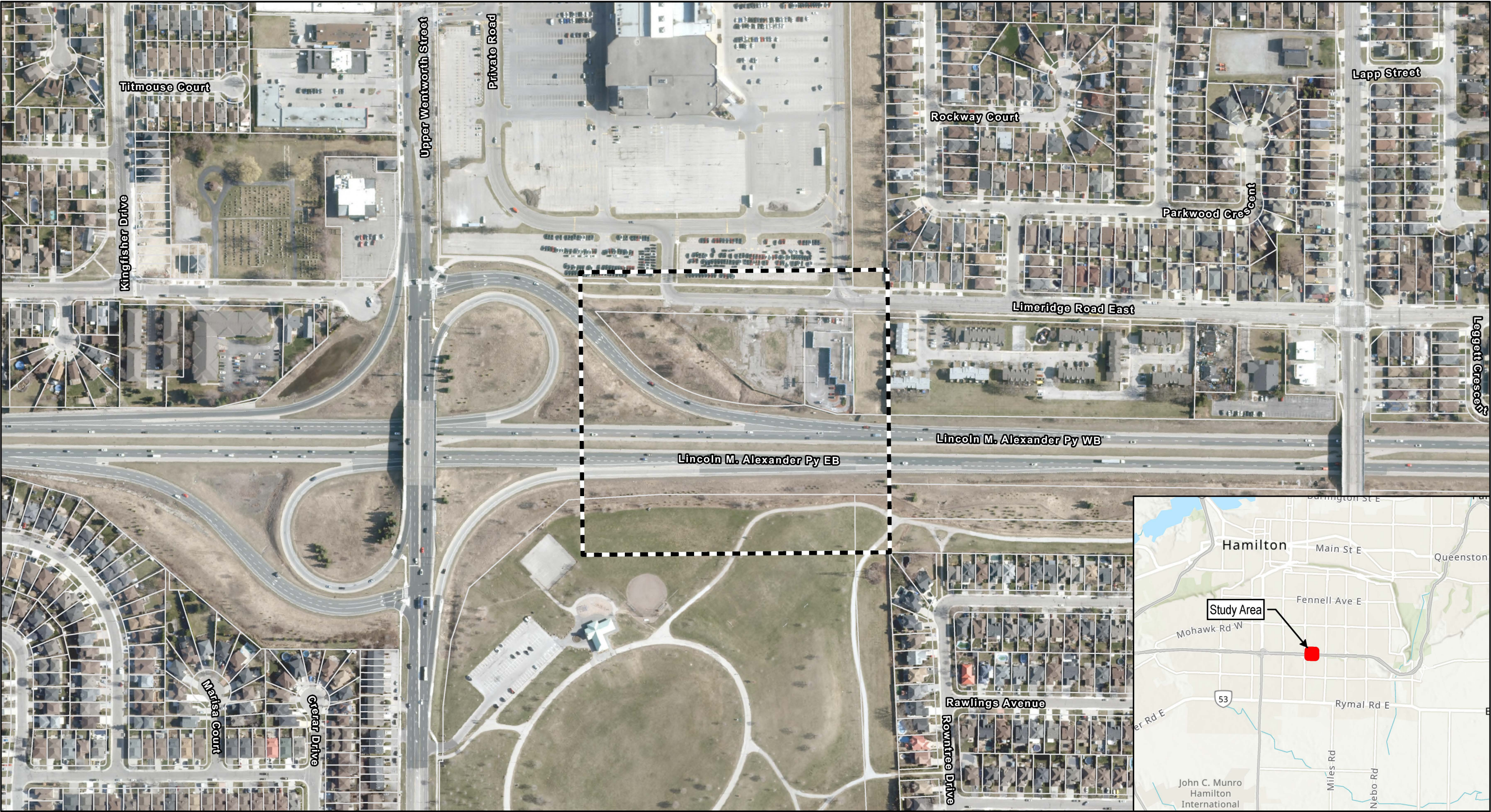
2.0 Study Area

The study area, as shown in Figure 1, is located within the City of Hamilton and encompasses McQuesten Park to the south and private lands to the north, and the proposed active transportation crossing spanning the LINC. Surrounding land uses include residential neighbourhoods to the east, west, and south of McQuesten Park, community parkland within the park itself, and commercial property to the north along Limeridge Road East. Land use designations within the study area include Neighbourhoods, Open Space, Mixed Use – High Density, Mixed Use – Medium Density, and a Utility Corridor located along the eastern edge of the study area.

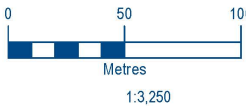
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Local topography within the study area is characterized by the LINC at a lower elevation relative to the surrounding lands, which are generally flat and situated approximately 5 to 7 m above the parkway.

MCQUESTEN PARK BRIDGE NATURAL HERITAGE EVALUATION
ECOLOGICAL LAND CLASSIFICATION - STUDY AREA



File Path: \\GUE-Nasuni-4-07-rburnside.com\\Nasuni\\VolumeGIS\\Data\\CADD\\060172\\00000008-GIS\\060172-McQuesten Park EA\\060172-McQuesten Park EA.aprx Print Date: 2025/11/27 Time: 01:53 PM



Datum: North American 1983 CSRS
Coord. System: NAD 1983 CSRS UTM Zone 17N
Projection: Transverse Mercator
Central Meridian: 81°0'0.00"W
False Easting: 500,000m
False Northing: 0m
Scale Factor: 0.99960

Project: McQuesten Park Bridge Schedule B Municipal Class Environmental Assessment
Project Number: 300060172
Date: 2025/11/27

Drawn By: HN
Checked By: TR
Client: City of Hamilton
Project Number: 300060172
Date: 2025/11/27

Study Area

Figure: 1

3.0 Study Background, Needs and Justification

The requirement for an active transportation crossing in this vicinity has been identified through multiple municipal planning initiatives over the past decade. Specifically, the connection was identified as a required improvement of the active transportation network through multiple Council approved plans and strategies, including the City's Recreational Trail Master Plan (2016), and the Cycling Master Plan Review and Update (2018), which identify the need to address the LINC as a significant barrier to north-south walking and cycling connections and coordinate with the planned future transit hub at Lime Ridge Mall. The City-wide Transportation Master Plan Review and Update: City in Motion completed in 2018 (updated in 2022), also includes a planned active transportation crossing at this location. Additionally, other recent City strategic initiatives, including the Complete Streets Design Guidelines (2022) and the (Re)envision HSR Plan – The (re)Designed HSR Network (2023), further support the need for safe, accessible travel options beyond personal vehicles.

In 2019, funding for the planning and construction of the active transportation crossing was approved through the federal Investing in Canada Infrastructure Program (ICIP), which is dedicated to improving active transportation links to public transportation hubs.

4.0 Problem and Opportunity Statement

During Phase 1 of the MCEA process, the objective is to identify the challenge or opportunity that the process is meant to resolve. This statement assists in defining the scope of the project and serves as its central theme and integrating element that sets a benchmark for the final output of the project.

The Problem / Opportunity Statement for the McQuesten Park AT Bridge is defined as the following:

“The City of Hamilton has identified a need for an active transportation connection between McQuesten Park and Limeridge Road East, which will allow pedestrians and cyclists to cross the LINC and supports a safe, cost-effective, technically feasible solution with minimal environmental effects and limited impacts to vehicle traffic in the study area.”

In accordance with the requirements of the MCEA planning process for Schedule B projects, the City initiated this MCEA to identify and evaluate Alternative Solutions to address this Problem / Opportunity Statement.

5.0 Study Methodology

5.1 MCEA Process

The planning of public sector projects or activities that have the potential for environmental effect is subject to an MCEA as required by Ontario's *Environmental Assessment Act*, R.S.O. 1990.

The MCEA process was developed by the Municipal Engineers Association (MEA), in consultation with the Ministry of the Environment, Conservation and Parks (MECP), as an alternative method to Individual Environmental Assessments for recurring municipal projects that were similar in nature, usually limited in scale and with a predictable range of environmental impacts, which were responsive to mitigating measures. The MCEA solicits input from regulatory agencies, the municipality, Indigenous Nations, and the public. This process leads to an evaluation of Alternative Solutions in view of the significance of the environmental effects, including the technical, natural, social / cultural, and economic impact of a project, and the choice of effective mitigation measures.

Based on the project description and classification criteria outlined in the Municipal Class Environmental Assessment (2024), and considering the nature of the Alternative Solutions and the estimated project cost, the planning of the project was completed in accordance with the Schedule B requirements (Phases 1 and 2) of the Municipal Engineers Association Municipal Class Environmental Assessment Guide for Municipal Class EAs (February 2024), which is approved under the *Ontario Environmental Assessment Act*.

As a Schedule B project, feasible Alternative Solutions are identified and evaluated with input from agencies, Indigenous Nations, and stakeholders toward a recommendation for a Preferred Solution. As a minimum, two points of public consultation are required under a Schedule B project. At the conclusion of Phase 2, the appropriate MCEA planning schedule is confirmed and the planning and decision-making process is documented in a Project File Report (PFR), prepared for public review prior to proceeding to design and implementation of the project.

The phases of the MCEA process are illustrated in Figure 2 and summarized as follows:

- Phase 1 – Identify the problem (deficiency) or opportunity.
- Phase 2 – Identify alternative solutions to address the problem or opportunity by taking into consideration the existing environment and establish the preferred solution, including public input. At this point, determine the appropriate schedule for the undertaking and document decisions in a PFR for Schedule B projects.

For a Schedule C project, proceed through the following phases:

- Phase 3 – Examine alternative methods of implementing the preferred solution, based upon the existing environment, public review agency input, anticipated environmental effects, and methods of minimizing negative effects and maximizing positive effects.
- Phase 4 – Document, in an Environment Study Report (ESR), a summary of the rationale and the planning, design, and consultation process of the project as established through the above phases and make such documentation available for review by agencies and the public.
- Phase 5 – Complete contract drawings and documents, proceed to construction and operation, and monitor construction for adherence to environmental provisions and commitments. Where special conditions dictate, also monitor the operation of the completed facilities.

5.2 Class Environmental Assessment Section 16(6) Order

In accordance with the requirements of the MCEA, this PFR is available for review and comment for a period of 30 calendar days following the publication of the Notice of Completion.

Interested persons may provide written comments to our project team within the 30-day comment period. All comments and concerns should be sent directly to the project team at:

Stephen Oguegbu

Project Manager, Capital Planning

City of Hamilton

Tel: 905-564-2424 ext. 3871

Email: Stephen.Oguegbu@hamilton.ca

Tricia Radburn, MCIP, RPP

Project Manager

R.J. Burnside & Associates Limited

Tel: 1-800-265-9662 ext. 1778

Email: Tricia.Radburn@rjburnside.com

Additionally, a request may be made to the MECP for an order requiring a higher level of study (i.e., requiring an individual / comprehensive MCEA before being able to proceed), or that conditions be imposed (e.g., require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered.

The MECP has the authority and discretion to make an Order under Section 16 of the *Environmental Assessment Act*. Section 16 Order requests may require that the proponent of a project going through an MCEA process:

- Submit an application for approval of the project before they proceed. This is generally referred to as an Individual Environmental Assessment.
- Meet further conditions in addition to the conditions in the MCEA. This could include conditions for:
 - Further study
 - Monitoring
 - Consultation

The Minister can also refer a matter in relation to a Section 16(6) Order request to mediation.

A Section 16(6) Order can be requested if:

- You have outstanding concerns that a project going through an MCEA process may have a potential adverse impact on constitutionally protected Aboriginal and treaty rights.
- You believe that an Order may prevent, mitigate, or remedy this impact.

Requests should include the requester contact information and full name for the MECP. Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual / comprehensive environmental assessment), how an order may prevent, mitigate, or remedy those potential adverse impacts, and any information in support of the statements in the request. This will ensure that the MECP is able to efficiently begin reviewing the request.

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The request should be sent in writing or by email to:

Minister of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
Minister.MECP@ontario.ca

And

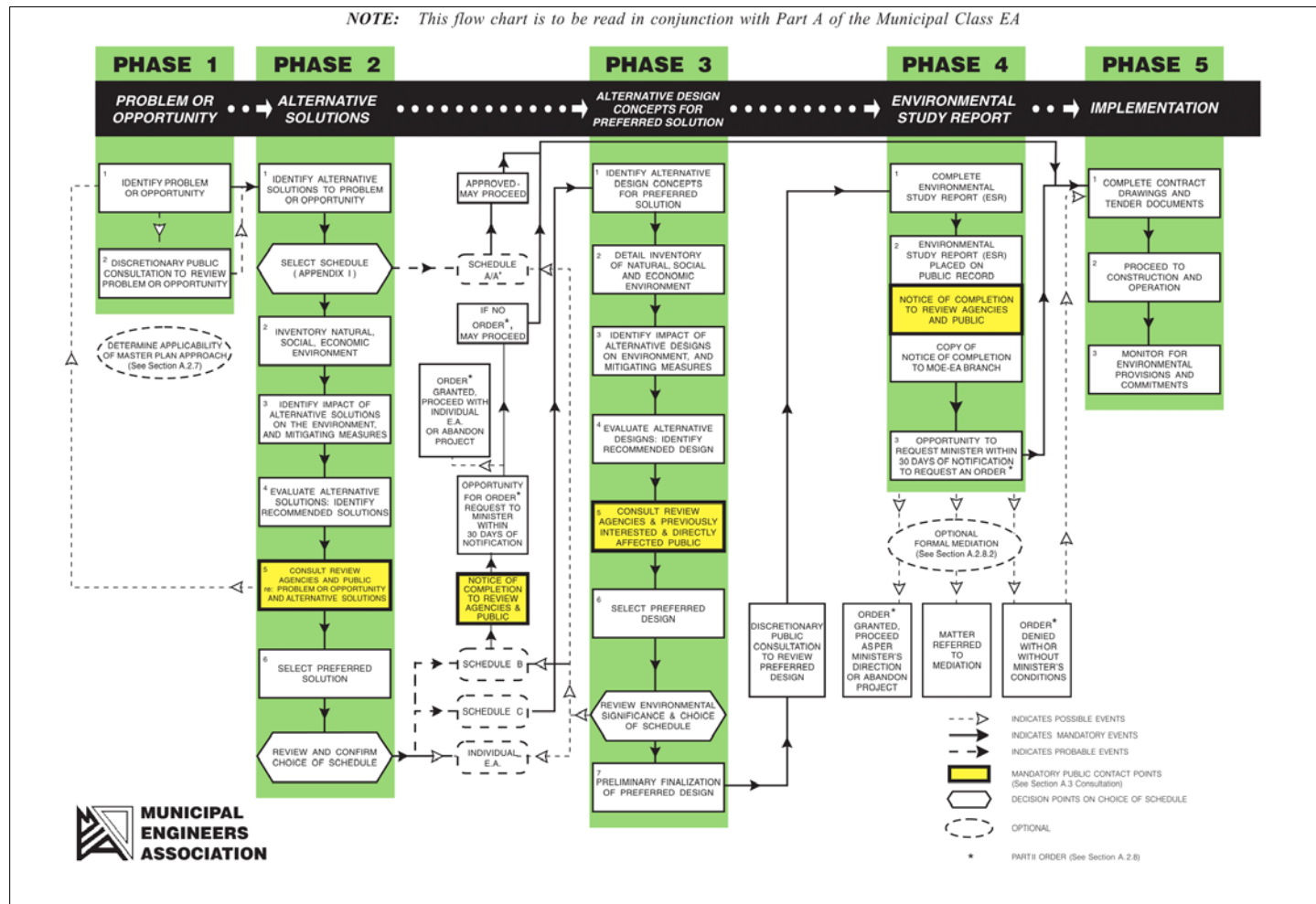
Director, Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto ON M4V 1P5
EABDirector@ontario.ca

Requests must also be sent to the project team.

If the Minister does not receive a request for a Section 16 Order within 30 calendar days, then the project will move forward to detailed design, approvals process, and subsequent implementation of the Preferred Design Concept.

McQuesten Park Active Transportation Bridge
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Figure 2: Municipal Class Environmental Assessment Process Flow Chart



6.0 Existing Conditions

The existing natural, cultural, social, and built / technical environment within the study area was characterized through a review of existing data sources and on-site field investigations. This review provides the baseline to evaluate possible constraints and potential impacts of the proposed AT bridge. A summary of findings is provided in the following sections, with additional details provided in the technical memos and reports in Appendix A.

6.1 Technical Environment

The characterization of the built / technical environment involved a review of municipal records and digital databases to identify existing infrastructure and utilities. This included an assessment of the current road network, existing pedestrian and cycling facilities, and both above ground and subsurface municipal and private infrastructure. Coordination with utility providers was undertaken to identify the location of telecommunications, electrical, and gas distribution networks within the study area.

6.1.1 Existing Roads, Trails, and Infrastructure

The existing road network in the study area is comprised of collectors, arterials and a parkway. The LINC is classified as a parkway by the City's Official Plan, intended to carry high volumes of intra-municipal and inter-regional traffic. As a controlled-access roadway with a basic maximum right-of-way (ROW) width of approximately 60.96 m, the LINC strictly prohibits direct land access as well as use by pedestrians and cyclists. Consequently, the parkway functions as a significant physical barrier to north-south active transportation connectivity between established residential areas and McQuesten Park to the south and the commercial and transit node at Limeridge Road East and Lime Ridge Mall to the north.

Currently, walking and cycling access across the LINC is limited to the existing bridge sidewalks along Upper Wentworth Street, which is designed as a Major Arterial Road. There are no bike lanes along this road, and cyclists are required to travel in mixed traffic when crossing over the LINC. This route presents numerous operational constraints for active transportation users, including high traffic volumes and frequent conflict points at highway on- and off-ramps. Safety for vulnerable road users is further compromised by the lack of controlled pedestrian crossings at interchanges; existing crossings often lack clear

pavement markings or other visual cues to alert drivers, making pedestrian movements less predictable and increasing the likelihood of hazardous interactions.

McQuesten Park is situated immediately south of the LINC and comprised of open green spaces and community recreational amenities, including a baseball diamond in the northwestern corner of the park and a trail network.

Topographically, the study area is defined by a grade separation, with the LINC corridor situated approximately 5 to 7 m lower than the elevation of the adjacent park and commercial lands.

Infrastructure in the area also includes subsurface and above-ground utility networks. Public municipal services identified within the study area include storm sewers, sanitary sewers, and watermains. Furthermore, private utility providers with assets in the vicinity include Alectra Utilities, Enbridge Gas, Bell, and Rogers. A Hydro One utility corridor runs along the eastern boundary of the study area.

6.2 Socio-Cultural Environment

A review of existing municipal and provincial planning and policy information was conducted to obtain secondary source information relating to the natural and social environment within the study area and to provide an overview of the existing policy framework in the study area.

Key documents reviewed include the following:

- *Migratory Birds Convention Act and Migratory Birds Regulations*, 1994
- *Endangered Species Act*, 2007, updated to *Species Conservation Act*, 2024
- *Provincial Planning Statement*, 2024
- *City of Hamilton Recreational Trails Master Plan*, 2016
- *City of Hamilton Cycling Master Plan Review and Update*, 2018
- *City of Hamilton Transportation Master Plan Review and Update: City in Motion*, 2018
- *Hamilton Complete Streets Design Guidelines*, 2022
- *Urban Hamilton Official Plan*, 2013

- *(Re)Envision the HSR – the (re)Designed HSR Network, 2023*
- *Vision Zero Hamilton Action Plan 2019 – 2025, 2019*

6.2.1 Migratory Birds Convention Act and Migratory Birds Regulations

The *Migratory Birds Convention Act*, 1994 (MBCA) and the *Migratory Bird Regulations*, 2022 (MBR) are federal legislative requirements that are binding on members of the public and all levels of government, including federal and provincial governments. The legislation protects certain species, controls the harvest of others, and prohibits commercial sales of all species.

One key responsibility under the MBCA is described in Section 6 of the associated MBR:

“Subject to subsection 5(9), no person shall disturb, destroy or take a nest, egg, nest shelter, eider duck shelter, or duck box of a migratory bird, or have in his possession a live migratory bird, or a carcass, skin, nest, or egg of a migratory bird except under authority of a permit therefor.”

The “incidental take” of migratory bird nests or the disturbance destruction or taking of the nest of a migratory bird are prohibited under Section 6 of the MBR under the authority of the MBCA. Nests’ contents (eggs and young) are protected by virtue of the MBCA which has implications on development and construction activities that might occur during the breeding season (Canadian Wildlife Service, July 2012).

The nests of all migratory bird species are protected when they contain a live bird or a viable egg. The nests of 18 species (listed in Schedule 1 of the regulations), whose nests are reused by migratory birds, continue to have year-round nest protection, unless they have been shown to be abandoned.

The MBCA has recently updated and modernized the MBR. The new MBR came into force on July 30, 2022. Further regulatory amendments are planned.

Implementation of the Preferred Solution will consider potential impacts to terrestrial habitat including habitat for migratory birds and mitigation measures such as seasonal timing of tree and vegetation removal to avoid or minimize potential impacts to terrestrial habitat.

6.2.2 Endangered Species Act / Species Conservation Act

The *Endangered Species Act*, 2007 (ESA) provided protection for Species at Risk (SAR) and their habitat. The ESA was administered by the MECP and provided policies for the protection of Extirpated, Endangered, and Threatened species. Species listed as provincially rare or special concern did not receive legal protection under the provincial ESA; however, a species management plan was to be prepared and they may receive protection from some agencies, such as provincial and national parks, or other Acts, such as the *Ontario Fish and Wildlife Conservation Act*, which prohibits the killing, capturing, injuring, harassment, and trapping of specifically protected species. These four categories of species formed the Species at Risk in Ontario (SARO) List, which was classified by the Committee on the Status of Species at Risk in Ontario (COSSARO). COSSARO is also responsible for maintaining criteria for assessing and classifying SAR.

The ESA helped protect species (Section 9) and their habitat (Section 10). Section 9(1)(a) of the ESA states:

“...no person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species.”

Section 10(1)(a) of the ESA states:

“...no person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario List as an endangered or threatened species.”

The ESA included general habitat regulations, as well as species-specific habitat regulations. Species uplisted to Endangered or Threatened automatically received general habitat protection under the ESA. The province was then required to prepare a species recovery strategy and establish a habitat regulation according to requirements of the ESA.

Regulatory amendments under the ESA were issued by the province in 2022 which streamlined ESA Authorizations for activities that have “predictable effects and common and routine mitigation actions with well understood requirements to minimize adverse impacts.” Proponents are still required to avoid and minimize impacts on SAR and their habitats.

The use of a SAR Conservation Fund was enabled for five designated conservation fund species when they see permits and agreements related to these species [Easternwhip-poor-will (*Antrastomus vociferus*), Blanding's turtle (*Emydoidea blandingii*)], or register for conditional exemptions [Eastern meadowlark (*Sturnella magna*), Bobolink (*Dolichonyx oryzivorus*), Butternut (*Juglans cinerea*)].

In 2024, the Province of Ontario repealed the ESA and replaced it with the new *Species Conservation Act* (SCA). The SCA came into force March 30, 2026, and includes the Protected Species in Ontario List under the SCA, consisting of 168 species classified as extirpated, endangered or threatened. New projects started after March 30, 2026, must obtain new registration or permit under the SCA. Existing ESA permits, agreements and registrations remain valid under the SCA, and conditions continue to apply or transition to new SCA permit may be requested. Several changes from the previous ESA have been made including among others:

1. A new "habitat" definition replaced the definition of "habitat" that was in the ESA, and "harass" has been removed from the prohibitions regarding harm to species.
2. The requirement for the government to develop recovery strategies for species has been removed.
3. The Species Conservation Program has been created.
4. The Species at Risk Conservation Fund will no longer accept funds and there is no longer an option for proponents to pay a charge.
5. New permits and amendments to existing permits are available; however, agreements are no longer available.
6. There are no longer specific permit types or specific preconditions to the issuance of a permit.

It is the proponent's responsibility to practice due diligence to ensure that the SCA and its regulations are not violated. It is also the proponent's responsibility to be apprised of any amendments to the Act that may come into force for the duration of this project.

6.2.3 Provincial Planning Statement

The *Provincial Planning Statement, 2024* (PPS) came into effect on October 20, 2024, and was issued under Section 3 of the *Planning Act*. The PPS 2024 effectively replaces both the *Provincial Policy Statement, 2020*, and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019*. Provincial policies are implemented through municipal official plans and planning decisions and set the foundation for the efficient use of land, resources, and public investment in infrastructure. Land use planning decisions made by municipalities must be consistent with the PPS.

The PPS provides directions to guide land use planning and optimize land resources and public investments for the next 30 years. It promotes efficient development patterns through transit-oriented development and active transportation, prioritizing intensification near transit corridors, while integrating diverse housing options, including affordable units, employment, recreation, parks, and open spaces to align development with infrastructure.

The PPS focuses growth and development within settlement areas. Development in natural heritage areas is not permitted unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. In general, projects should have consideration for energy conservation, air quality, climate change, management of resources, and protecting public health and safety. Relevant policies are to be applied to each situation.

Chapter 3 of the PPS provides specific direction for the planning and development of infrastructure and facilities including: transportation related policies, land use compatibility, servicing, and public spaces. Chapter 4 of the PPS provides guidance on the wise use and management of resources including protection of natural heritage features, water, agriculture, cultural heritage and archaeology. Chapter 5 of the PPS provides guidance on protecting public health and safety from natural and humanmade hazards.

The evaluation of the bridge within the study area considers direction and guidance for transportation, protection of natural and cultural heritage features and efficient traffic flow.

6.2.4 City of Hamilton Recreational Trails Master Plan

The *City of Hamilton* Recreational Trails Master Plan (RTMP), 2016, serves as the overarching strategic framework for the City of Hamilton concerning its multi-use recreational trail network. Bridges serve as essential components of the overall trail infrastructure, connecting multi-use trails, including those that pass over highways. Understanding the need for the crossing of drainage ditches, creeks, highways, or shallow ravines, the RTMP recommends new bridge structures on a site-specific basis. It recommends following the requirements specified in the Canadian Highway Bridge Design Code (CHBDC) for pedestrian bridges. The following are general design considerations for bridge structures:

- Prefabricated steel truss bridges are often practical, cost-effective solutions.
- Railings should be required if bridge height exceeds 0.6 m above the surrounding grade and should be designed with rub rails to prevent entanglement of bicycle pedals and handlebars.
- Site-specific construction of bridges may be suitable for short crossings.
- When considering barrier free bridge accesses, appropriate hardened surfaces should be employed on trail approaches. Also, bridge deck boards should be suitably spaced to allow for ease of passage by mobility-assisted devices.
- It is recommended that deck boards run perpendicular to travel paths.
- Signage should be provided for trails. This includes, but is not limited to trail style, use, accessibility, degree of difficulty, length, directional information, and interpretive signage. All signage developed in the City must adhere to applicable *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) guidelines.

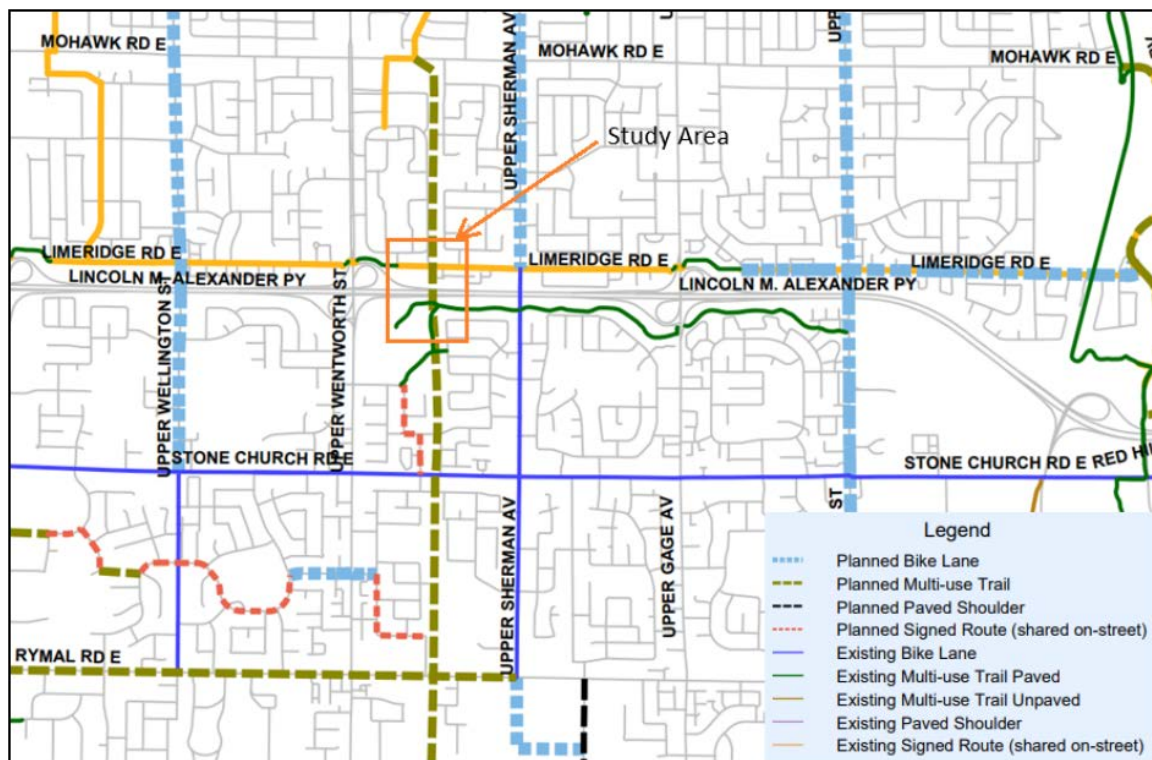
6.2.5 City of Hamilton Cycling Master Plan Review and Update

The *City of Hamilton's Cycling Master Plan Review and Update* (CMP), 2018, focuses on identifying revisions to the CMP (originally approved in 2009). The purpose of this review was to update the existing plan, which is part of a broader effort to create a sustainable and balanced transportation blueprint for the growing City. Key components of the update includes expanding and enhancing the cycling network, which is planned to reach nearly 1,000 km, and implementing new cycling facilities based on street typology. Expansion of multi-use trails (MUTs) to support cycling is one of the milestones of the CMP, which includes a trail crossing over the LINC.

The MUT bridge over the LINC is listed as a special project. The special projects are pedestrian-bicycle specific structures – such as bridges – to overcome barriers. The CMP allocated around \$7 million for such projects. The CMP proposed a 4 m wide paved multi-use recreational trail (MurT) between Mohawk Road East and Rymal Road East with a length of 3.8 km, which includes a bridge between McQuesten Park and Limeridge Road East. This project is identified as a priority ranking of 190 in the CMP Review and Update and is in Ward 7 of the City of Hamilton.

6.2.6 City of Hamilton Transportation Master Plan Review and Update: City in Motion

City in Motion is the City of Hamilton *Transportation Master Plan* (TMP) which was reviewed and updated in 2018. The City-wide TMP acts as a strategic policy framework to guide future transportation projects and decisions through the 2031 planning horizon and beyond. Its main objective is to provide a comprehensive and attainable transportation blueprint that balances all modes of transportation to help the City become healthier for all users. The TMP is multi-modal, addressing walking, cycling, transit, automobiles, and goods movement. Figure 3 shows the City's planned cycling network. As seen in Figure 3, the planned MUT crosses over the LINC.

Figure 3: City of Hamilton, Planned Active Transportation Network¹

The TMP integrates the RTMP (2016), which provides specific policy direction and network planning for MUTs used by pedestrians, cyclists, and other trail users. The City-wide TMP emphasizes integrating and expanding the network of MUTs across the City. The policy directions provided by the TMP are summarized below.

- Integrate cycling infrastructure needs into the 10-Year Capital Budget for all road reconstruction, rehabilitation, and new roads as guided by the updated CMP, with an emphasis on achieving physical separation.
- Maintain an annual capital budget for the implementation of the updated CMP and associated facilities.
- As part of the implementation of the cycling network, undertake an evaluation of alternatives to select routes which maximize safety for cyclists and promote continuity of the network across the City.
- Maximize the coordination and connectivity of bicycle, pedestrian, and transit networks (including public bike share) to improve first and last mile connections to transit.

¹ City of Hamilton - *City Wide Transportation Master Plan – Planned Cycling Network*

6.2.7 Hamilton Complete Streets Design Guidelines

The City's *Complete Street Design Guidelines* (CSDG), 2022, outlines processes, designs, and best practices for creating “complete streets”, which are defined as roadways planned and designed to balance the needs of all road users – including pedestrians, cyclists, transit users, and motorists to allow individuals to travel safely regardless of age, ability, or chosen mode of transportation. This guide is a source for planning, design, and maintenance of roadways; however, it emphasizes that principles and elements of the guide should still be used when designing for other structures, including bridges. The CSDG recommends that separate cycling / pedestrian facilities and MUTs should be preferred. The relevant guidelines are provided below.

- Prioritize safety following Safe Systems and Vision Zero approaches.
- Provide safe and accessible options (all ages and abilities).
- Prioritize connectivity by designing the new infrastructure to enhance the City network utilization by cyclists and pedestrians.
- Balance the needs of all road users.
- Use separation when a cycling lane abuts a sidewalk.
- Incorporate principles of universal design, paying close attention to accessibility requirements.
- Minimize conflict between different modes of transportation.
- Account for equity to eliminate structural barriers to mobility.
- Create attractive and vibrant places with an attractive environment built at a pedestrian scale.
- Consider cost-effectiveness and aim to reduce the need for costly future retrofits.

6.2.8 Urban Hamilton Official Plan

The *Urban Hamilton Official Plan* (OP), 2013, is a guiding, legal document that sets out the goals and policies for managing the City's communities, land use change, and physical development until 2051. Hamilton is expected to reach a population of 820,000 and 360,000 jobs by 2051. To manage the City's growth, the OP provides 10 strategic directions. The OP's strategic direction emphasizes the expansion of transportation options through the development of complete

streets that encourage travel by foot, bike, and transit, and enhance efficient inter-regional transportation connections.

The overarching objective of the OP is to safely and efficiently move people and goods seamlessly and effectively through an integrated transportation network. Multi-modal connectivity is identified as a key component of complete communities (inclusive of complete streets). Complete communities must develop balanced transportation networks that offer choice, allowing people to walk, cycle, take transit, or drive. These networks create the vital link between activities and land uses throughout the City. The relevant objectives from the OP are outlined below:

- Active transportation is a key component of the transportation network and must be prioritized and accommodated in complete streets design and operation.
- Infrastructure must be provided and maintained to maximize safe and convenient passage for pedestrians and cyclists along streets.
- The City must continuously improve and expand the existing network of pedestrian and bicycle infrastructure, including multi-use paths and bike lanes, while achieving a high standard of connectivity.
- The creation of mid-block connections for pedestrians, cycling, transit, and other active transportation modes is encouraged in existing and planned development.

6.2.9 (Re)Envision the HSR – The (re)Designed HSR Network

(Re)envision the Hamilton Street Railways (HSR) – the (re)Designed HSR Network, 2023, is a comprehensive proposal to modernize Hamilton's transit system and ensure it is "rail ready" for the upcoming Light Rail Transit (LRT). Developed through four iterations, the Plan transitions from a downtown-centric "hub and spoke" model to a hub connectivity model designed to minimize transfers. This new structure classifies routes into a five-tier hierarchy – Rapid, Core, Feeder, Local, and On-Demand – to improve efficiency and passenger clarity while standardizing minimum operating hours to promote equity. This (re)Designed HSR Network acts as a structural blueprint, realigning the City's transit routes to serve as the efficient arterial system that will feed into the new LRT heart of Hamilton's future transportation network. Figure 4 illustrates a snip of the (re)Designed HSR Network in the study area. Lime Ridge Terminal is a

The map displays the CF Lime Ridge area in Regina, Saskatchewan, with various streets and transit routes. A central box highlights the 'CF Lime Ridge' area, showing route numbers 50, 60, 60A, 24, 25, 34, and 35. A legend on the right side of the map provides details about the transit network, including route types, frequencies, and other transit options.

CF Lime Ridge

50 60 60A
24 25
34 35

Study Area

Concept (Re)envision Transit Network

Route Type	Goes Downtown	Does Not Go Downtown
Rapid (Limited Stop)		
Rapid (All Stop)		
Flexible		
myRide On-Demand		

Frequency (Peak Periods)

Frequency	Other Transit
<10 Minutes	Terminal
10 Minutes	Rapid Stop
15 Minutes	myRide On-Demand
20 Minutes	GO Transit
	Other Rail
	Bus Rapid Transit
	One-Way Service
	990 Dundas BRT

Legend

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A well-functioning and fully accessible transit network can help in alleviating traffic congestion, increasing citizen mobility choices across multiple modes of transportation, and is directly related to supporting the City's Official Plan and TMP objectives.

Section 5.1.9 of the City of Hamilton’s Official Plan states that the City supports “the development of Employment Areas which are transit-supportive with reduced surface parking”, while Section 5.1.10 of the Official Plan states that these areas “be easily accessible with a high degree of connectivity between all modes of transportation such as transit, active transportation, and automobiles”.

² (Re)envision the Hamilton Street Railways (HSR) – the (re) Designed HSR Network Map

6.2.10 Vision Zero Hamilton Action Plan 2019-2025

The City of Hamilton has developed a comprehensive *Vision Zero Action Plan* in 2019 to eliminate traffic-related fatalities and serious injuries on its roadways. This initiative adopts a data driven approach, emphasizing that no loss of life is acceptable and that the transportation system must account for human error. The framework is built upon five core pillars – Evaluation, Engineering, Enforcement, Education, and Engagement. By focusing on these areas, the City aims to protect vulnerable road users, such as pedestrians and cyclists, while reducing the massive societal costs associated with collisions. The Plan introduced key action plans under each of the five pillars, and those most applicable to this study are identified below:

- Identify and fill in gaps in the cycling and pedestrian networks.
- Develop and initiate pedestrian and cyclist road safety programs.
- Develop an interactive Vision Zero website to provide information to the community, to provide a means for road users to communicate safety concerns and comments.
- Create an Engagement Program for the community to promote the program, identify concerns and challenges, as well as successes.

6.2.11 Ontario Regulation 41/24, Prohibited Activities, Exemptions and Permits

The study area is located within the jurisdiction area of the Hamilton Conservation Authority (HCA). *Ontario Regulation (O. Reg.) 41/24, Prohibited Activities, Exemptions, and Permits*, under the *Conservation Authorities Act*, requires written permission for some works within an area which is regulated by the Conservation Authority, including but not limited to, site grading, changing or interference with a wetland or watercourse. Construction activities within the regulated limits of the HCA will require a permit from the HCA.

Although the study area is located within HCA's jurisdiction, there are no regulated lands within the study area.

6.2.12 Clean Water Act – Source Water Protection

As a result of the *Clean Water Act (O. Reg. 287/07)*, communities in Ontario are required to develop Source Protection Plans to protect their municipal sources and develop strategies to reduce or eliminate these risks.

Ontario's Source Water initiative is focused on protecting municipal drinking water sources. Key areas include wellhead protection areas (areas that drain down towards municipal wells), highly vulnerable aquifers (where groundwater lies close to ground surface), and significant groundwater recharge areas (areas that feed aquifers).

The study area falls within the Hamilton Region Source Water Protection Area, which is part of the Halton-Hamilton Source Protection Region. There are no surrounding wetlands, and no Significant Groundwater Recharge Areas within the study area; however, the study area does fall within a Highly Vulnerable Aquifer. The study area is located within the Upper Ottawa subwatershed, which is characterized as having low groundwater vulnerability. The vulnerability of an aquifer is dependent on the overlying geological materials. The vulnerability increases as the amount of protection provided by the overlying geological materials decreases.

There are no Wellhead Protection Areas within 10 km surrounding the study area, nor is the study area located within a Wellhead Protection Area³. The size of a Wellhead Protection Area is determined by how quickly water travels underground to the well, measured in years.

The *Clean Water Act* defines a "prescribed threat" as "an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water and includes an activity or condition that is prescribed by source protection regulation as a drinking water threat". The province has identified 22 activities that could pose a threat if they are present in vulnerable areas (listed in Section 1.1. of *O. Reg. 287/07*, under the *Clean Water Act*, 2006)⁴. Project activities associated with the bridge improvements are not identified as prescribed drinking water threats.

Project activities are not expected to pose an increased risk to drinking water.

³ Ministry of the Environment, Conservation and Parks. (n.d.). Source Protection Information Atlas. <https://www.livestrong.gov.on.ca/SourceWaterProtection/index.html?viewer=SourceWaterProtection.SWPViewer&locale=en-CA>

⁴ Government of Ontario. (September 1, 2025). *O. Reg. 287/07: General. Clean Water Act, 2006* *O. Reg. 287/07 General*. <https://www.ontario.ca/laws/regulation/070287#BK3>

6.2.13 Cultural Heritage Resources

Cultural heritage resources include Built Heritage Resources and Cultural Heritage Landscapes, as well as Archaeological Resources.

Built Heritage Resources consist of a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous Nation (Ministry of Municipal Affairs and Housing, 2024, p. 40).

Cultural Heritage Landscapes are 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 Nation. 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 (Ministry of Municipal Affairs and Housing, 2024, p. 41).

The *Criteria for Evaluating Archaeological Potential* checklist, and the *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* checklist are both provided in Appendix A.

Archaeological Resources include artifacts, archaeological sites and marine archaeological sites, as defined under the *Ontario Heritage Act* (Ministry of Municipal Affairs and Housing, 2024, p. 40).

6.2.13.1 Built Heritage Resources and Cultural Heritage Landscapes

The *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* checklist was completed for the study area and determined that there is low potential for the presence of built heritage resources or cultural heritage landscapes.

The proposed bridge is located in an area that has been disturbed by existing transportation infrastructure and urban development, including the construction and operation of the LINC, adjacent arterial roadways, and surrounding residential and commercial land uses. As a result, it is inferred that potential historical land use patterns, landscape features, or built form characteristics that may have contributed to cultural heritage value have been substantially disturbed or removed.

No properties within or adjacent to the study area are known to be designated or listed under the *Ontario Heritage Act*, and no cultural heritage landscapes are identified within the project limits. Given the high degree of existing disturbance, and anticipated footprint of the improvements, the proposed bridge is not anticipated to impact built heritage resources or cultural heritage landscapes. The need for further cultural heritage studies is not anticipated.

6.2.13.2 Archaeological Resources

The *Criteria for Evaluating Archaeological Potential* checklist was completed for the study area. The screening determined that there is low potential for archaeological resources. The corridor is situated within a highly urbanized and extensively disturbed environment, characterized by the construction and continued operation of the LINC, associated grading and earthworks, major roadway infrastructure, and surrounding residential and commercial development. These activities are inferred to have substantially altered original landforms and soil profiles, limiting the likelihood that archaeological resources remain within the study area.

Based on the results of the Archaeological Potential checklist, the need for further archaeological assessment is not anticipated.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering archaeological resources must cease alteration of the Site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with O. Reg. 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites⁵. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at

⁵ Government of Ontario. (March 1, 2022). *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, Chapter 33. *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33. <https://www.ontario.ca/laws/statute/02f33>

archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Archaeological assessments are required to be undertaken by an archaeologist licensed under the *Ontario Heritage Act*, who is responsible for submitting the report directly to Ministry of Citizenship and Multiculturalism (MCM) for review.

6.3 Natural Environment

A review of existing natural heritage conditions and secondary source information was conducted to characterize vegetation and aquatic communities and assess the potential for wildlife habitat and habitat of SAR in the study area.

The following sources and databases were consulted:

- Aerial photography and 1:10,000 Ontario Base Mapping (OBM)
- Ministry of Natural Resources (MNR) databases, including Make a Map, the Natural Heritage Information Centre (NHIC), and Land Information Ontario
- The Ontario Breeding Bird Atlas and citizen science records from iNaturalist and eBird
- Regulatory mapping from the HCA and the *Urban Hamilton Official Plan*
- Relevant legislation, including the *Endangered Species Act*, the *Federal Fisheries Act*, and the *Migratory Birds Convention Act*

Field observations were carried out on October 14, 2025, to characterize natural heritage features. The field assessment included:

- Ecological Land Classification (ELC): Vegetation communities were identified and described using the First Approximation for Southern Ontario and updated 2008 codes.
- SAR Assessment: Habitat suitability was evaluated for species identified in the background review, including Bobolink (*Dolichonyx oryzivorus*), Grasshopper Sparrow (*Ammodramus savannarum*), and Peregrine Falcon (*Falco peregrinus*). A targeted search was also conducted for Butternut (*Juglans cinerea*) trees.

- Significant Wildlife Habitat (SWH): The area was screened for SWH based on the *Significant Wildlife Habitat Technical Guide* (2000), with specific emphasis on searching for reptile hibernacula and habitat for species of conservation concern.

The scope of the field characterization was limited to the study area, as no natural heritage features were identified on adjacent lands during the background review that required an extended area of study.

6.3.1 Physiography and Topography

A review of available mapping by Geology Ontario was undertaken to characterize the general topography, and surficial and bedrock geology of the study area.

The study area is located within the Haldimand Clay Plain physiographic region of southern Ontario and is more specifically situated within the Clay Plains physiographic landform⁶.

Surficial geology mapping indicates that the study area is underlain by Unit 8a – massive well-laminated deposits, consisting of fine-textured glaciolacustrine materials. These deposits are composed predominantly of silt and clay, with minor amounts of sand and gravel. Bedrock geology within the study area is classified as Unit 56a, comprising sandstone, shale, dolostone, and siltstone⁷.

6.3.2 Climate Normals

Local climate conditions were obtained from Canada's Environment and Climate Change Hamilton meteorological station (ID 6153193, Latitude 43°10'25.000" N, Longitude 79°56'06.000" W). The Hamilton meteorological station is located approximately 11 km southwest of the study area.

According to the Canadian Climate Normals (calendar years 1991 to 2020) for this station, the daily average annual temperature is 8.1°C. The warmest month

⁶ GeologyOntario. (n.d.). Physiography of Southern Ontario (MRD228).
<https://mndm.maps.arcgis.com/apps/mapviewer/index.html?webmap=651b93b051a549c490a7772fc0f8e760>

⁷ GeologyOntario. (n.d.). GeologyOntario Spatial Search.
<https://mndm.maps.arcgis.com/apps/webappviewer/index.html?id=66ee0efe4d3c4816963737dbdb890708>

of the year is July with an average temperature of 20.9°C, and the coldest month is January with an average temperature of -5.3°C.

The Hamilton meteorological station recorded a total annual precipitation (snow and rain) of 902.3 mm, 764.6 mm of which was rain. The maximum mean monthly precipitation is 97.5 mm and occurs in July⁸.

6.3.3 Terrestrial Environment

The study area, situated east of the Upper Wentworth Street junction and adjacent to the LINC, primarily consists of naturalized meadow, tree plantings along the LINC ROW, maintained lawn in McQuesten Park, and an undeveloped commercial lot.

A field investigation conducted on October 14, 2025, identified three ELC communities within the study limits. No provincially rare plants or Butternut (*Juglans cinerea*) trees were encountered during targeted searches. The identified ELC communities are:

- Dry-Fresh Graminoid Meadow (MEGM3): Located along the LINC ROW and the edges of McQuesten Park, these meadows are dominated by introduced grasses and old-field forbs such as, but not limited to, Kentucky Bluegrass (*Poa pratensis*), Canada Thistle (*Cirsium arvense*), and Common Milkweed (*Asclepias syriaca*).
- Parkland (CGL_2): Covering McQuesten Park and the power utility corridor, this community is characterized by manicured lawns and common lawn weeds, with maintained ornamental tree plantings.
- Business Sector (CVC_1): This area includes the Lime Ridge Mall parking lot and an abandoned lot that is beginning to naturalize with weedy grasses and opportunistic shrubs.

⁸ Environment and Climate Change Canada. (n.d.). Climate Normals 1991-2020 Data. https://climate.weather.gc.ca/climate_normals/results_1991_2020_e.html?searchType=stationName_1991&txtStationName_1991=Hamilton&searchMethod=contains&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&climate_id=6153193&dispBack=1



6.3.4 Aquatic Habitat

A review of background mapping and field observations confirmed that there are no regulated watercourses or permanent aquatic features within the study area. Consequently, no fish habitat is present on the subject or adjacent lands. Authorization under the *Federal Fisheries Act* is not required for the proposed works.

6.3.5 Species at Risk (SAR)

Based on a background review of the NHIC database and observations made during field assessments, several SAR identified under the ESA were evaluated for their potential presence. Although species such as the Bobolink (*Dolichonyx oryzivorus*) (Threatened) and Grasshopper Sparrow (*Ammodramus savannarum*) (Special Concern) were identified in the background review, suitable breeding habitat is absent due to the fragmented nature of the meadow patches and significant noise disturbance from the LINC interchange. While the Peregrine Falcon (*Falco peregrinus*) (Special Concern) has been recorded incidentally at Lime Ridge Mall for hunting, no tall building ledges suitable for breeding habitat exist within the study area. No SAR or their protected habitats were identified within the project footprint. Additionally, a targeted search for Butternut (*Juglans cinerea*) was conducted and none were identified.

6.3.6 Wildlife and Significant Wildlife Habitat (SWH)

The study area was assessed for Significant Wildlife Habitat, including reptile hibernacula and habitat for species of conservation concern. Due to the absence of high-quality habitat features, no SWH was identified on the subject lands or adjacent areas. General wildlife activity is restricted to species highly adapted to urban environments. While no negative impacts on resident wildlife are anticipated, potential disturbance to migratory breeding birds may occur during vegetation removal, necessitating compliance with the *Migratory Birds Convention Act*.

7.0 Identification of Alternative Solutions

Alternative solutions for the proposed AT pedestrian bridge include:

1. Do Nothing
2. Eastern Option
3. Western Option

7.1 Alternative Solution 1: Do Nothing

For this alternative solution, no bridge would be constructed. The Alternative Solution of Do Nothing is a mandatory consideration within the MCEA process.

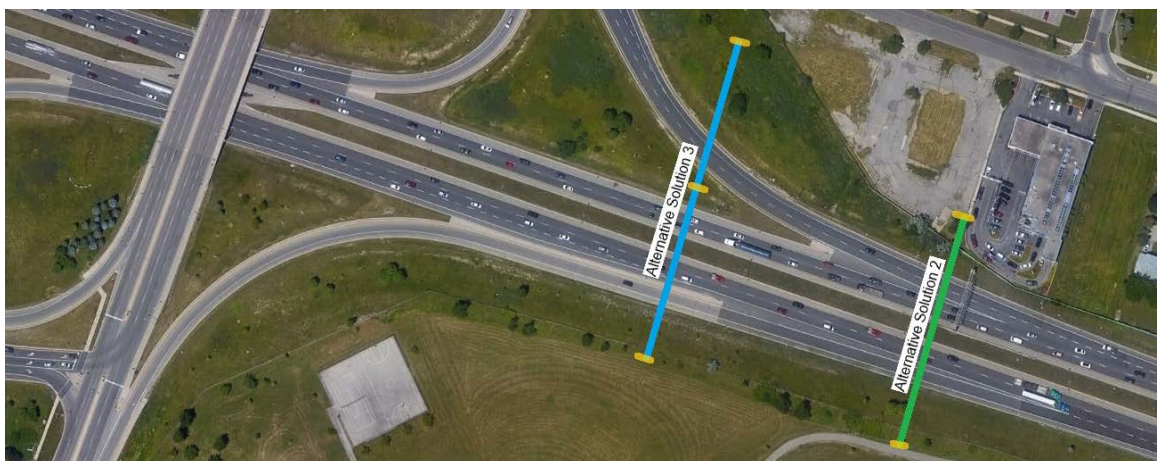
7.2 Alternative Solution 2: Eastern Option

The bridge would be constructed on the eastern side of the study area as a clear span bridge with supporting piers on each end.

7.3 Alternative Solution 3: Western Option

The bridge would be constructed on the western side of the study area as a two-span bridge with supporting piers at each end and an additional pier between the off-ramp and westbound lane of the LINC.

Figure 6: Alternative Solutions



8.0 Evaluation of Alternative Solutions

The evaluation of alternative solutions is a step-by-step process that compares alternatives that are feasible within the project environment to meet the project objectives outlined in the Problem / Opportunity Statement.

The impacts of the alternatives are evaluated relative to each other, against a set of equally weighted criteria, including possible mitigating measures. The criteria are developed based on the inventory of the natural, social / cultural, financial, and technical environment of the study area, and identification of key considerations, including:

- Potential impact to existing natural features
- Minimizing encroachment onto private property and the potential for land acquisition
- Ability to support active transportation and a connected trail network
- Working within existing planning policy and regulations
- Maintaining traffic flow and connection, as well as providing capacity for future growth and active transportation
- Financial costs
- Potential impact to utilities
- Consideration of community and agency input

A high-level summary of the evaluation is provided below under each of the project environments. A detailed evaluation of the alternative solutions is presented in Appendix B. The results of the evaluation are discussed in the following sections.

Table 1: Evaluation of Alternative Solutions

Alternative Solutions	Natural Environment	Social-Cultural Environment	Financial Factors	Technical Factors	Addresses Problem / Opportunity Statement
1. Do Nothing	Most preferred	Most preferred	Most preferred	More Preferred	No
2. Eastern Option	More Preferred	More Preferred	Somewhat Preferred	More Preferred	Yes
3. Western Option	More Preferred	Somewhat Preferred	Less Preferred	More Preferred	Yes

8.1 Alternative Solution 1: Do Nothing

The Do Nothing alternative is characterized by the decision that no bridge will be constructed. This option would not impact trees or vegetation or have direct temporary or permanent impact on wildlife habitat or the habitat of SAR. This alternative does not impact current conditions for greenhouse gas emissions, carbon sinks, or the overall resilience and vulnerability of the site to climate change.

From a socio-cultural and technical perspective, it was determined that there is low potential for the presence of cultural heritage resources in the study area, as such, impact to cultural heritage resources is not anticipated. Private property acquisition is not required. While existing conditions meet required public safety standards, safety concerns persist for cyclists and pedestrians on Upper Wentworth Street due to high traffic volumes, multiple interchange ramps, and complex vehicle movements. Additionally, this alternative does not support a connected trail network and includes no modifications to meet AODA guidelines. Financially, there are no capital, operational, or maintenance costs associated with this option.

Previous planning studies, including Master Plan studies completed in accordance with the MCEA process, have established the need for the active transportation bridge over the LINC. Ultimately, this alternative does not address the Problem / Opportunity Statement and is not carried forward.

8.2 Alternative Solution 2: Eastern Option

Alternative Solution 2, the Eastern Option, is associated with moderate capital costs for construction and lower operational and maintenance costs than Alternative Solution 3, the Western Option, primarily because the bridge design for Alternative 2 is shorter (i.e., 80 m) and requires two piers, rather than three piers.

This option would involve the removal of vegetation and some individual trees. SAR or SWH are not anticipated to be located within the study area and therefore are not anticipated to be impacted by the alternative. The proposed bridge supports climate change objectives by creating an opportunity for active transportation as a feasible alternative to motorized vehicles for short trips, while vegetation removal is not expected to significantly affect available carbon sinks.

From a socio-cultural perspective, there is low potential for the presence of cultural heritage resources in the study area, as such, impact to cultural heritage resources is not anticipated. The proposed bridge requires the acquisition of private property on the north side. The bridge is positioned to connect to the existing trail network within McQuesten Park and the commercial and transit hub at Limeridge Road East and Lime Ridge Mall to the north. A new trail connection is required on the north side to connect to Limeridge Road East.

The bridge is designed as a single span of approximately 80 m with two piers, one at each end. The design avoids direct impacts to existing utilities and would be designed to meet AODA guidelines, and comply with public safety standards, including a minimum of 8.0 m overhead clearance at the soffit above the LINC. Future construction and maintenance of the bridge may necessitate lane closures on the LINC for short periods of time. By separating active transportation from high-volume traffic and complex vehicle movements on Upper Wentworth Street, this alternative significantly improves safety for cyclists and pedestrians. Due to these factors, the Eastern Option is identified as the Preferred Alternative Solution.

This solution addresses the Problem / Opportunity Statement by providing a dedicated active transportation crossing of the LINC.

8.3 Alternative Solution 3: Western Option

Alternative 3, the Western Option, is associated with higher capital costs for construction with a longer bridge (i.e., 140 m) and additional need for a third support pier. Maintenance on the central pier is expected to require the closure of one or more lanes on the LINC during construction or major maintenance, resulting in higher operational and maintenance costs when compared to Alternative Solution 2.

Similarly to Alternative Solution 2, this alternative is anticipated to require the removal of vegetation and some individual trees. SAR or SWH are not anticipated to be located within the study area and therefore not anticipated to be impacted by the alternative. This alternative supports climate change objectives by creating an opportunity for active transportation as a feasible alternative to motorized vehicles for short trips, while vegetation removal is not expected to significantly affect available carbon sinks.

There is low potential for the presence of cultural heritage resources in the study area, as such, impact to cultural heritage resources is not anticipated. This alternative requires property acquisition on the north side of the bridge. Additionally, this option is likely to impact the uses of the park to the south during and following construction and may encroach on the use of the baseball diamond in McQuesten Park as a result of a new trail connection to the existing trail network.

The need for an additional pier, located between the off-ramp and the westbound lanes of the LINC, increases the complexity of construction. The design avoids direct impacts on utilities and is intended to meet AODA guidelines, while maintaining a minimum of 8.0 m overhead clearance at the soffit above the LINC. Although the bridge improves safety by separating active transportation from high-speed traffic, the additional pier within the LINC ROW introduces a fixed-object hazard that may require guiderails or clear zones.

This option addresses the Problem / Opportunity Statement by providing an active transportation link.

9.0 Consultation Summary

Consultation is an important part of the MCEA process to ensure that anyone with an interest in the project has an opportunity to provide input into the decision-making process.

The Schedule B MCEA requirements include two mandatory public points of contact during the MCEA process. The mandatory public points of contact for this project included a Notice of Commencement and a Notice of Completion. A Public Information Centre (PIC) was also held as an additional public point of contact for this project.

The key features of the consultation process included:

- Identifying key stakeholders, agencies, local residents, Indigenous Nations, and other interested or potentially affected parties to be notified during the MCEA process
- Notifying key stakeholders, agencies, local residents, Indigenous Nations, and other interested or potentially affected parties of the study at key points of the MCEA process
- Engaging key stakeholders, agencies, local residents, Indigenous Nations, and other interested or potentially affected parties at key points of the MCEA process to gather input and help inform key decision-making
- Responding to inquiries or comments in an efficient and timely manner

A Project Contact List was developed as a mailing list to distribute project Notices. The Project Contact List consisted of technical and provincial agencies, municipalities, utilities, local interest groups, businesses, and Indigenous Nations that may have an interest in the project, as well as local residents within the vicinity of the study area. Throughout the MCEA process, the Project Contact List was used to maintain contact information for those interested in the study, as well as to summarize comments received about the project and study team responses.

A copy of the Project Contact List including a summary of comments and responses is provided in Appendix C.

9.1 Notices

Project Notices were published in the local newspaper, the Hamilton Spectator, emailed or mailed to those on the Project Contact List, and were posted on the City's project webpage. A project webpage was established to provide project information throughout the MCEA process and engage residents and the public that may have an interest in the project [<https://www.hamilton.ca/environmental-assessments/mcquesten-park-active-transportation-pedestrian-bridge>]. Project information was also posted through the City's social media platforms.

The Notice of Commencement and Public Information Centre #1 inviting public input was posted on January 30, 2026, and issued in the Hamilton Spectator on January 30, 2026, and February 6, 2026. A copy of the Notice of Commencement and PIC are provided in Appendix C. At the conclusion of the MCEA process for the project, a Notice of Completion will be published in the Hamilton Spectator, on the project webpage, and mailed / emailed to all on the Project Contact List. The Notice of Completion will provide members of the public with the dates and methods to view the PFR, including names and addresses of individuals to whom they can send their comments.

9.2 Public Information Centre (PIC)

A PIC was hosted in-person on February 10, 2026, from 6:00 p.m. to 8:00 p.m. at the Sackville Hill Seniors Recreation Centre.

The PIC was held as a drop-in style open house with project information displayed around the room, and representatives from the study team were present to answer questions as well as discuss the project with interested members of the public. The PIC materials were posted on the City's project webpage following the PIC for the public to view and download anytime during the PIC comment period from February 10, 2026, to February 24, 2026.

Opportunities for public feedback were made available through a printed Comment Sheet available at the PIC and a digital comment form provided on the City's webpage for the project, or by contacting the study team with written comments by email.

A copy of PIC materials and summary of comments received during the PIC commenting period are included in Appendix C.

Summary of Comments

A summary of comments received during the MCEA PIC and subsequent comment period is provided under the following themes, along with how the comments were considered in the evaluation of the alternatives.

Safety and Accessibility:

- Need for improved safety for pedestrians and cyclists compared to current bridge sidewalks and highway ramps
- A lack of physical protection for pedestrians at the LINC on-ramps
- Questions regarding safety measures at other crossing points along the LINC

Comments regarding safety and accessibility for pedestrians and cyclists in the study area are addressed in the alternative solutions to provide a dedicated pedestrian bridge crossing of the LINC, separating pedestrians and cyclists from other road users.

Cost:

- Questions on whether the project is a “need” versus a “want” compared to housing or road repairs
- A desire for more financial transparency and project cost estimates
- Concerns that public funds are being used on solutions that do not fix underlying risks at highway ramps

Funding for the project is being provided through the federal Investing in Canada Infrastructure Program (ICIP), which is dedicated to active transportation enhancements. A preliminary cost estimate for the preferred solution is provided in subsequent sections of the PFR.

Network Connectivity:

- Interest in the City coordinating with Hydro One and property owners to use corridors for trail development

The bridge is strategically located to provide a direct connection to the future transit hub at Lime Ridge Mall, supporting a multimodal network. While Hydro One is currently not in favour of trail development within the utility corridor, the City remains in on-going discussions to explore future opportunities.

Design, Maintenance, and Preservation:

- The importance of preserving community assets like the McQuesten Park baseball diamond
- Concerns regarding the stability of the bridge and potential vibration or shaking
- Requirements for consistent winter maintenance and the costs of specialized snow removal equipment

The importance of maintaining and preserving the use of the McQuesten Park baseball diamond for sports programming as an important community asset and the potential for the footprint of the alternatives to impact the McQuesten Park baseball diamond was considered in the evaluation of alternatives.

The structural stability of the pedestrian bridge to mitigate vibration will be considered as an essential design detail. Additionally, a maintenance and operations plan will be developed that includes an assessment of specialized equipment for snow and debris removal.

Alternatives and Redundancy:

- Worry that the bridge may distract drivers on the LINC
- Suggestions for alternative safety measures at intersections, such as enhanced signals or flashers
- Feedback that existing routes through McQuesten Park and Upper Sherman Avenue are already sufficient

The bridge is to be designed to be aesthetically compatible with the highway to minimize driver distraction.

Process and Implementation:

- Questions about the acquisition of private property on the north end and its impact on the schedule
- Requests for specific construction timelines and details on potential traffic disruptions on the LINC

Property acquisition discussions are not expected to delay the project schedule. The MCEA project is anticipated to finish in 2026, with construction targeted for 2031; traffic on the LINC will be maintained throughout the project.

Other Comments and Recommendations outside of the study area or beyond the scope of the MCEA include:

- Suggestions for extending the multi-use pathway to Mohawk Road and adding trails south of the LINC
- Requests for clarification on public parking at Lime Ridge Mall for park events
- Mixed aesthetic preferences ranging from high-profile landmarks to simple functional designs
- Specific design suggestions to prevent theft and reduce maintenance, such as a covered bridge or welded steel rails

9.3 Indigenous Nations

MECP has developed guidance on the steps to rights-based consultation with Indigenous Nations. Indigenous Nations with a potential interest in the project were identified through correspondence and direction provided by the MECP (correspondence: Joan Del Villar Cuicas, Regional Environmental Planner, MECP, dated October 16, 2025). A copy of this correspondence with MECP is provided in Appendix C.

Individual correspondence along with project notices were sent by email / mail to the Indigenous Nations identified as having a potential interest in the MCEA.

Six Nations of the Grand River acknowledged receipt of the Notice of Commencement and Public Information Centre #1 and requested to be contacted when capacity funding is available for Six Nations' review of project documents. The City replied that archaeological impact is not anticipated within the study area due to existing developments and that capacity funding is not available outside of archaeological review.

A summary of communication with Indigenous Nations was maintained on the Project Contact List in Appendix C and is summarized in Table 2. Copies of all correspondence with Indigenous Nations is provided in Appendix C.

Table 2: Summary of Correspondences with Indigenous Nations

Indigenous Nations	Notices Sent	Comments Received	Study Team Correspondence
Haudenosaunee Development Institute	Yes	None	260127_Email. Circulated NOCm and PIC.
Six Nations of the Grand River	Yes	260127_Email. Acknowledged NOCm and PIC and requested to be contacted when capacity funding is available for Six Nations to review project documents.	260127_Email. Circulated NOCm and PIC. 260209_Email. City replied that archaeological impact is not anticipated within the study area due to existing developments and the built-up environment. Noted that the City does not have authority to provide capacity funding outside of that.
Mississauga of the Credit First Nation	Yes	None	260127_Email. Circulated NOCm and PIC.
Wendat Nation	Yes	None	260127_Email. Circulated NOCm and PIC.

9.4 Technical Advisory Committee

A Technical Advisory Committee (TAC) was formed to include staff from several City departments and services to provide technical advice and input to the project. The TAC included staff from Engineering Services, Infrastructure Renewal, Public Works, Transportation, Water, Parking Planning and Economic Development, Growth Management, Planning, Transit, Environmental Services, and Healthy and Safe Communities. Input is summarized as follows:

- **Prioritizing Safety and Direct Access:** Creating a direct link between McQuesten Park and Lime Ridge Mall that avoids the high-speed traffic and conflict points of the existing highway on-ramps
- **Optimal Bridge Dimensions:** To balance structural weight with multi-use functionality, preference was for a bridge width between 3 and 4 m
- **Year-Round Accessibility:** Integrated snow storage or removal solutions were identified as essential to ensure the bridge remains accessible for active transportation during winter months
- **Aesthetic Alignment:** Design recommendations suggested reflecting the visual theme of existing local pedestrian structures
- **The Eastern alignment option** requires a shorter bridge length, which avoids encroachment into existing slope and trail infrastructure to the south
- **The design of the Eastern alignment** better accommodates future LINC widening plans
- **Simplified Construction of the Eastern alignment option** with its 80 m single-span design eliminates the need for a central pier within the LINC corridor, reducing construction complexity, cost, and traffic disruption
- **The Eastern Option** minimizes impact to the McQuesten Park baseball diamond that would limit its future programming

10.0 Preferred Solution

The feedback received during the MCEA is considered in the evaluation of the preferred solution along with potential impact to the natural, socio-cultural, technical and financial environment and the recommendations of the various council approved City Master Plans (e.g., Recreational Trail Master Plan, Cycling Master Plan Review and Update) which have identified the need for a dedicated crossing of the LINC, recognized as a barrier to north-south active transportation connectivity.

Based on the evaluation of the Alternative Solutions, the comments received from stakeholders, agencies, Indigenous Nations, and other interested parties, the Preferred Solution for the active transportation pedestrian bridge is Alternative 2: Eastern Option.

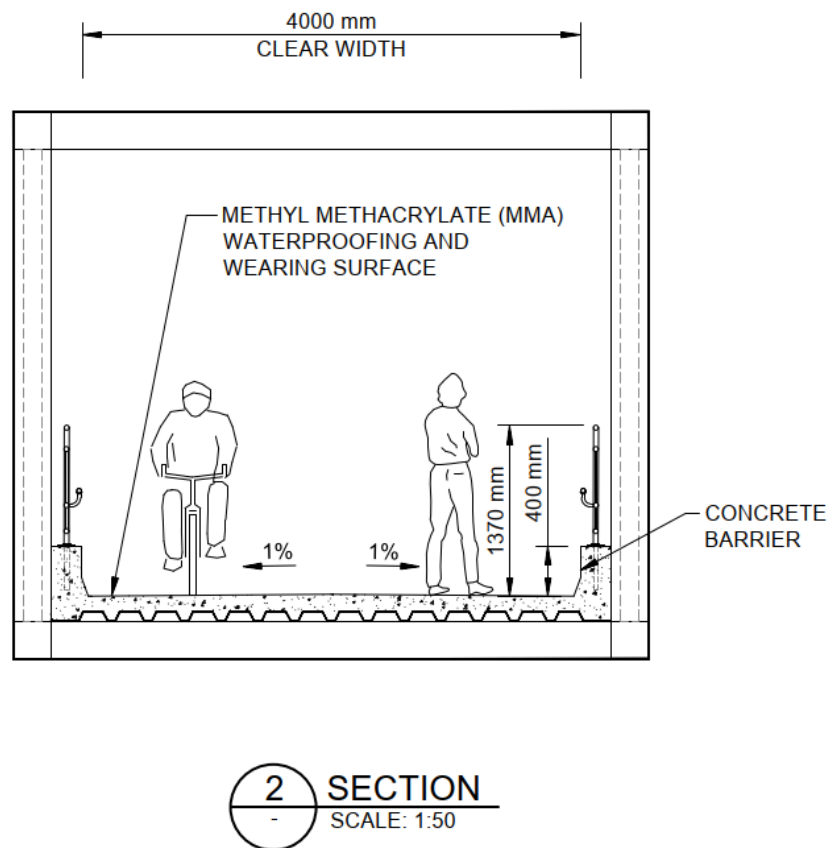
The Preferred Solution consists of a single-span prefabricated steel truss bridge with a cast-in-place concrete deck on a galvanized steel deck pan with an approximately 80 m span. The structure is designed with two piers, located at each end of the bridge. The south approach will consist of a 20 m long retaining wall approach to meet grade at McQuesten Park, while the north approach will consist of a 65 m long multi-use trail supported by a retaining wall system to provide a connection to the surrounding trail network. The Preferred Solution's infrastructure is located outside of the LINC ROW to avoid future LINC widening impacts. The lower topographical elevation of the LINC relative to the generally flat terrain of the adjacent lands, which are approximately 5 to 7 m higher than the parkway, supports the configuration of the bridge structure and the development of approach ramps. These ramps will be AODA-compliant and will be designed with a maximum running slope of 1:15.

In accordance with the City's requirements for MUTs, the trail on the bridge will have a 4 m clear width and incorporate at least a 400 mm high concrete barrier wall to allow for snow accumulation between maintenance cycles. A multi-use trail barrier to cyclist height will be mounted on top of the concrete barrier, and an AODA compliant handrail will be installed for the length of the bridge at a height between 0.865 m and 0.965 m. There are some options which will need to be addressed during detailed design including the level of durability desired in the deck, and aesthetics for railings. The bridge will provide an overhead clearance of a minimum of 8.0 m from the soffit, consistent with local standards, and will include a full-enclosure configuration using mesh / chain link or similar cladding to meet public safety requirements. The bridge structure is assumed to have a

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longitudinal slope of 2%, and the approach ramps will be designed with level landings at intervals not exceeding 9.0 m to provide rest areas for users in accordance with AODA standards. The proposed cross-section consists of a prefabricated pedestrian truss bridge with a galvanized deck pan to accept a cast-in-place concrete deck.

Figure 7: Proposed Bridge Cross-Section



The bridge is positioned to support a connected trail network, linking the existing trails in McQuesten Park on the south side of the LINC to the commercial and transit hub at Limeridge Road East and Lime Ridge Mall to the north. To facilitate this connection, a new trail segment is planned for the north side of the bridge to connect the bridge to Limeridge Road East Trail. Due to the difference in elevation between the bridge deck and the existing grade at the north approach of the structure, a MUT ramp is recommended to provide an accessible connection from the pedestrian bridge to the surrounding trail network. The approach ramps for the pedestrian bridge should be designed in accordance with

the requirements of the AODA – *Integrated Accessibility Standards Regulation* (O. Reg. 191/11).

10.1 Implementation

Construction will utilize a staged approach where the substructure and superstructure progress concurrently, with the main span lifted into place by tandem mobile cranes during a scheduled two-day LINC maintenance shutdown period.

Temporary staging areas will be required at both ends. On the north side the staging area will be on private property, and an agreement will be required. At the south end, the primary staging area will be within the park. Subject to geotechnical investigation, surveys, and coordination with Hydro One and the City's traffic operations group, the project is constructible within the corridor's physical regulatory, and operational constraints and can be delivered on the approximate three-year schedule outlined in the Construction Staging and Implementation Report in Appendix A.

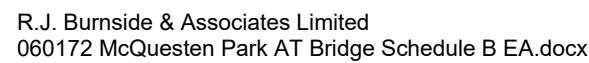


Figure 9: Construction Staging
(Figure 7 from Constructability Report)



11.0 Impacts

Project activities associated with the Preferred Solution (Eastern Option) for the McQuesten Park Active Transportation Pedestrian Bridge are anticipated to include excavation, grading, and some vegetation and tree removal within the LINC road right-of-way and adjacent property construction limits to accommodate the proposed bridge structure.

11.1 Technical Environment

The Preferred Solution provides improved operational safety for all road users, including vehicles, pedestrians, and cyclists. By providing a dedicated crossing, active transportation is separated from the high-volume traffic, higher vehicles speeds, and complex movements associated with the Upper Wentworth Street interchange ramps.

The Preferred Solution provides a single span structure that places the support piers outside of the LINC right-of-way and avoids the technical complexity and traffic hazards associated with placing a central pier within the LINC right-of-way. The selection of a single-span superstructure is reinforced by the presence of a storm sewer main within the LINC median, which precludes the use of a centre pier. The design maintains a minimum 8.0 m overhead clearance from the underside of the soffit, meeting all local and provincial safety standards.

The higher, generally flat terrain provides stable ground for the bridge abutments and approach ramps while allowing for gently sloped connections that meet AODA accessibility requirements without the need for extensive grading or massive retaining structures. However, the introduction of bridge abutments near the highway right-of-way introduces fixed objects that may increase the severity of run-off-road collisions for motorists.

No utility relocations are anticipated for this design option as there is no direct physical conflict with underground services. However, safety measures will be required to maintain a 15 m mandated horizontal clearance from existing Hydro One transmission lines located east of the structure throughout construction. It is noted that the bridge will be situated adjacent to an existing roadway lighting pole on the north side of the LINC, which may partially obstruct the intended distribution of light to the roadway. Temporary or permanent relocation of this light pole and its associated conduit is anticipated and will be coordinated during detailed design.

11.2 Natural Environment

Construction of the Preferred Solution will result in the removal of a small number of isolated trees. Specifically, this option requires the removal of six trees in the 10 to 19 cm diameter at breast height (DBH) range, as well as one Norway Maple sapling under 10 cm DBH. These trees are located across multiple environments, including one on private land, two within maintained areas of McQuesten Park, and others within the naturalized park buffer and LINC ROW.

Provincially significant features, such as Significant Wetlands, Valleylands, or Woodlands, are not located within the study area. No regulated watercourses or permanent aquatic features are present, and as such there is no impact to fish or fish habitat on the subject or adjacent lands. No SAR or their protected habitats were identified within the project footprint.

During the construction phase, temporary displacement of and disturbance to general wildlife adapted to urban environments may occur due to noise, light trespass, and human activity. Potential disturbance to migratory breeding birds may also occur during the removal of vegetation.

11.3 Socio-Economic / Cultural Environment

The Preferred Solution will establish a key link in the multi-use path network, connecting recreational land use and residential neighbourhoods south of the LINC to the commercial and transit hub at Limeridge Road East and Lime Ridge Mall to the north. This connection supports municipal objectives for active transportation and provides a safer environment for vulnerable road users. Construction of the preferred solution will require the acquisition of private property on the north side of the LINC. The City intends to work with the landowner to minimize impacts on future land uses of the remaining property.

11.3.1 Built Heritage Resources and Cultural Heritage Landscape Impacts

A Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes checklist was completed for the study area. The screening determined that there is low potential for built heritage or cultural heritage landscape features in the study area. The study area is primarily characterized by the construction and continued operation of the LINC and roadway infrastructure and surrounding residential and commercial development. Based on the results of the Built Heritage Resources and Cultural Heritage Landscapes

checklist, the need for further built heritage resources and cultural heritage landscapes assessment is not anticipated.

11.3.2 Archaeological Resources Impacts

A *Criteria for Evaluating Archaeological Potential* checklist was completed for the project. The screening determined that there is low potential for archaeological resources. The corridor is situated within a highly urbanized and extensively disturbed environment, characterized by the construction and continued operation of the LINC, associated grading and earthworks, major roadway infrastructure, and surrounding residential and commercial development. These activities are inferred to have substantially altered original landforms and soil profiles, limiting the likelihood that archaeological resources remain within the study area. Based on the results of the Archaeological Potential checklist, the need for further archaeological assessment is not anticipated.

11.4 Financial

The Preferred Solution is associated with moderate capital costs and lower operational and maintenance requirements compared to the longer, multi-span alternative. Since the bridge is a shorter, single-span structure requiring only two piers, it represents a more cost-effective solution for the City. The specific budget estimate for the construction of the bridge is \$7.8 million. More accurate cost estimates are expected to be developed during the detailed design stage. Staged construction sequencing will be utilized as a more cost-effective method, enabling substructure work and superstructure fabrication to be completed concurrently.

The preliminary cost estimate for the preferred solution is provided in Appendix D. A summary is provided below.

General Work	\$158,000.00
Temporary Works	\$351,250.00
Bridge Works	\$3,543,100.00
Approach Works	\$992,500.00
Restoration Works	\$160,000.00

12.0 Mitigation Measures

The following mitigation measures and design approach should be implemented to mitigate negative impacts of the proposed project on the environment of the study area and considered for future improvements. It is also recommended that the following mitigation and monitoring measures be included within the detailed design process and reporting, and within the Special Provisions Section of the Tender documents, as applicable.

All Design and Construction Reports and Plans will be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of the impacted areas.

12.1 Surface Water / Hydrology and Sedimentation

Potential Effects:

- Potential for sediment to enter the terrestrial environment due to excavation and grading activities
- Coordination of work during wet periods could lead to increased erosion and indirect impacts to adjacent vegetation

Mitigation Measures:

- The footprint of disturbed areas should be minimized to the extent feasible, and the limit of disturbance should be clearly fenced or signed to prevent encroachment
- Appropriate erosion and sediment control (ESC) measures should be implemented throughout the construction process to protect adjacent terrestrial habitats
- Work should be coordinated to avoid wet and rainy periods, where possible, to minimize erosion

12.2 Soil and Groundwater

Potential Effects:

- Soil compaction and damage to tree roots from the storage of materials and equipment
- Disturbed soils following grading may be susceptible to erosion if not stabilized

Mitigation Measures:

- Disturbed soils and areas of grading should be stabilized and re-vegetated as soon as possible following construction
- Re-vegetation should utilize St. Williams' Base Restoration mix (or an approved substitute) containing a mix of native wildflower and grass species

12.3 Trees and Vegetation

Potential Effects:

- Loss of approximately six trees with a DBH of 10 – 19 cm and one sapling under 10 cm to accommodate the bridge supports and approaches
- Potential for damage to retained trees from construction equipment and felling activities

Mitigation Measures:

- A detailed Tree Protection Plan (TPP) should be prepared during the detailed design phase once final grading, access, and staging areas are confirmed
- Tree protection fencing should be installed around trees designated for preservation and reviewed daily; no storage of equipment, debris, or liquids is permitted within the tree protection fencing
- Tree removals will be compensated for on a 1-for-1 basis in accordance with the City of Hamilton's Tree Protection Guidelines
- Trees should be felled into the construction footprint to avoid damaging the trunks or roots of retained trees
- All retained trees should be reviewed post-construction to determine if additional pruning is required to reduce risks to property or residents

12.4 Wildlife / Habitat

Potential Effects:

- Temporary displacement of general urban-tolerant wildlife due to construction noise and light
- Risk of harm to migratory birds if vegetation clearing occurs during active nesting periods

Mitigation Measures:

- To ensure compliance with the *Migratory Birds Convention Act*, timing constraints should be applied to avoid vegetation clearing and grubbing during the breeding bird period (April 1 to August 31)
- Active nests of protected migratory birds cannot be destroyed at any time. If an active nest is identified near the construction site, all activities in that area must stop until a qualified biologist and the City determine appropriate mitigation
- Construction fencing should be installed prior to work to prevent wildlife from entering the area; the excluded zone should be searched immediately after installation to safely relocate any trapped wildlife
- If construction activities would result in harm to wildlife that does not move from the work one, activities should temporarily stop and a qualified ecologist should be contacted for direction

12.5 Fish and Fish Habitat

Potential Effects:

- No direct or indirect effects are anticipated as there are no regulated watercourses or permanent aquatic features within the study area

Mitigation Measures:

- As no fish habitat is present, no specific fish habitat mitigation measures or authorizations under the *Federal Fisheries Act* are required

12.6 Noise / Air Quality / Greenhouse Gas Emissions

Potential Effects:

- Temporary nuisance noise and disturbance to local residents and wildlife during the construction phase
- Long-term positive impact on greenhouse gas emissions by providing a feasible alternative to motorized vehicle trips

Mitigation Measures:

- Construction activities should proceed in a continuous fashion to minimize the overall duration of noise and disturbance.
- Noise control measures, such as restricted hours of operation and the use of appropriate machinery / mufflers should be implemented where required. Vehicles / machinery and equipment should be in good repair, equipped with emission controls, as applicable, and operated within regulatory requirements. If required, dust control measures may include the wetting of surfaces using a non-chloride-based compound to protect water quality.
- Lighting installed for the bridge should be AODA compliant and focused toward the ground to minimize light pollution while enhancing safety.

12.7 Cultural Heritage

Potential Effects:

- No direct or indirect effects are anticipated as there is low potential for cultural heritage resources in the study area

Mitigation Measures:

Should earthworks activities be completed outside the study area, consideration should be given to potential impacts to cultural heritage resources through completion of the MCM screening checklists or completing a Stage 1 Archaeological Assessment, as required.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed

consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with O. Reg. 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites⁹. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Archaeological assessments are required to be undertaken by an archaeologist licensed under the *Ontario Heritage Act*, who is responsible for submitting the report directly to Ministry of Citizenship and Multiculturalism (MCM) for review.

13.0 Climate Change Considerations

Climate change is defined as any significant change in long-term weather patterns. The term can apply to any major variation in temperature, wind patterns, or precipitation that occurs over time. Global warming describes the recent rise in the average global temperature caused by increased concentrations of greenhouse gases (GHGs) trapped in the atmosphere.

Scientists have concluded that human activity is largely responsible for recently observed changes to our climate since GHGs are mainly caused by burning fossil fuels to produce energy.

The MECP finalized a document entitled *Considering Climate Change in the Environmental Assessment Process*, 2017 that provides guidance relating to the Ministry's expectations for considering climate change during the MCEA process. It is suggested that this guide be consulted if an approved MCEA has no climate consideration method.

⁹ Government of Ontario. (March 1, 2022). Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, Chapter 33. Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c. 33. <https://www.ontario.ca/laws/statute/02f33>

There are two types of climate change effects that can be considered. The first is the effect that a project can have on climate change. In this case, the degree to which the project can provide some climate change mitigation measures is to be assessed. The second is the effect climate change has on the project. In this case, the degree to which the project can demonstrate adaptation to climate change impacts is assessed. Climate change was considered during this MCEA and is discussed in this section.

13.1 Effects of the Project on Climate Change

There is potential for the works proposed to impact the atmosphere through the emission of GHGs on an on-going basis.

The construction of the AT pedestrian bridge has the potential to alleviate traffic congestion through providing individuals with an option for alternative multimodal travel. Other sources of carbon emissions related to the project may include construction vehicle use. Emissions can be decreased through improved operational efficiency and routine maintenance of equipment.

Landscape alterations may also influence climate change. A carbon sink is described as a land or ocean mass that can take in carbon, in particular carbon dioxide, from the atmosphere. Vegetation can assist in removing carbon dioxide from the atmosphere.

The proposed works will involve some vegetation removal during construction activities; however, it is not anticipated to significantly impact the availability of carbon sinks.

13.2 Effects of Climate Change on the Project

The bridge deck and infrastructure are vulnerable to deterioration caused by freeze-thaw cycles. Additionally, bridge drainage systems may be affected by the increasing frequency and intensity of precipitation events in Ontario, a trend linked to climate change. These conditions can lead to flooding and erosion or snow accumulation.

To address these risks, the detailed design of the bridge and associated infrastructure will incorporate considerations for snow and drainage capacity, ensuring resilience against future climate-related impacts.

14.0 Conclusions

The Eastern Option (Alternative Solution 2) has been identified as the Preferred Solution for the McQuesten Park Active Transportation Pedestrian Bridge. This alternative addresses the Problem / Opportunity Statement by establishing a safe, technically feasible active transportation connection between McQuesten Park and Limeridge Road East, allowing pedestrians and cyclists to cross the LINC. The Preferred Solution consists of a single-span bridge of approximately 80 m, which improves operational safety for all road users by separating active transportation from the high-volume traffic and complex vehicle movements on Upper Wentworth Street. This structure provides a minimum of 8.0 m overhead clearance above the LINC and will be designed to meet AODA accessibility requirements while minimizing technical complexity and maintenance needs when compared to the other alternative solutions.

During the detailed design and construction phases of the project, the following commitments and on-going measures are required to minimize impacts and ensure regulatory compliance:

- Mitigation measures as detailed in Section 11.0.
- The City will be required to secure all necessary permits and/or authorizations required for the project. Potential permits and authorizations, and considerations may include:
 - Review lighting requirements during detailed design for the pedestrian bridge and potential impact to existing lights on the LINC and relocation
 - Obtaining required permits and authorizations (e.g., LINC closures, Hydro One permits, utility relocations, tree removals, environmental approvals, property agreements, crane permits, oversized load permits, and potential noise or night work exemptions)

The design elements of the Preferred Solution, including details of the bridge architectural aesthetic, exact bridge placement and trail connections, will be refined during detailed design.

As per the requirements of the MCEA, this Project File Report (PFR) is available for public review and comment for a period of 30 calendar days following the publication of the Notice of Completion. Interested individuals may provide written comments to the study team within the 30-day comment period. All

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comments and concerns should be sent directly to either of the following study team members:

Stephen Oguegbu

Project Manager, Capital Planning

City of Hamilton

Tel: 905-564-2424 ext. 3871

Email: Stephen.Oguegbu@hamilton.ca

Tricia Radburn, MCIP, RPP

Project Manager

R.J. Burnside & Associates Limited

Tel: 1-800-265-9662 ext. 1778

Email: Tricia.Radburn@rjburnside.com

Additionally, a request may be made to the MECP for an order requiring a higher level of study (i.e., requiring an comprehensive MCEA approval before being able to proceed), or that conditions be imposed (e.g., require further studies), only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Details are provided in Section 5.2.

References

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