Highway 401 Improvements from Steeles Avenue in Milton westerly to 1.5 km west of the Halton-Wellington Boundary

Preliminary Design & Class Environmental Assessment Study (GWP 2030-23-00)

Public Information Centre (PIC) 1 (Online)
May 29 to June 25, 2025
PIC Live Event: June 12, 2025 from 6:00 p.m. - 8:00 p.m.

If you require any assistance regarding the accessibility of these materials, please let us know by emailing ProjectTeam@Highway401Milton.ca. We would be happy to assist you.

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Welcome to Public Information Centre 1!

- On June 12, 2025, from 6:00 p.m. - 8:00 p.m. an online Public Information Centre (PIC) will be held and will include a presentation and a question-and-answer period.
- If we are unable to answer your question during the online PIC, we will respond after the event.
- Please register for the online PIC via the Project website.
- We encourage you to fill out the PIC Comment Form.
- Comments will be accepted on the PIC materials between May 29 and June 25, 2025.

Your input is important to us!

Comment Form

PIC 1 Content Available on the Project Website

The following information is available to view on the Project website for this PIC:

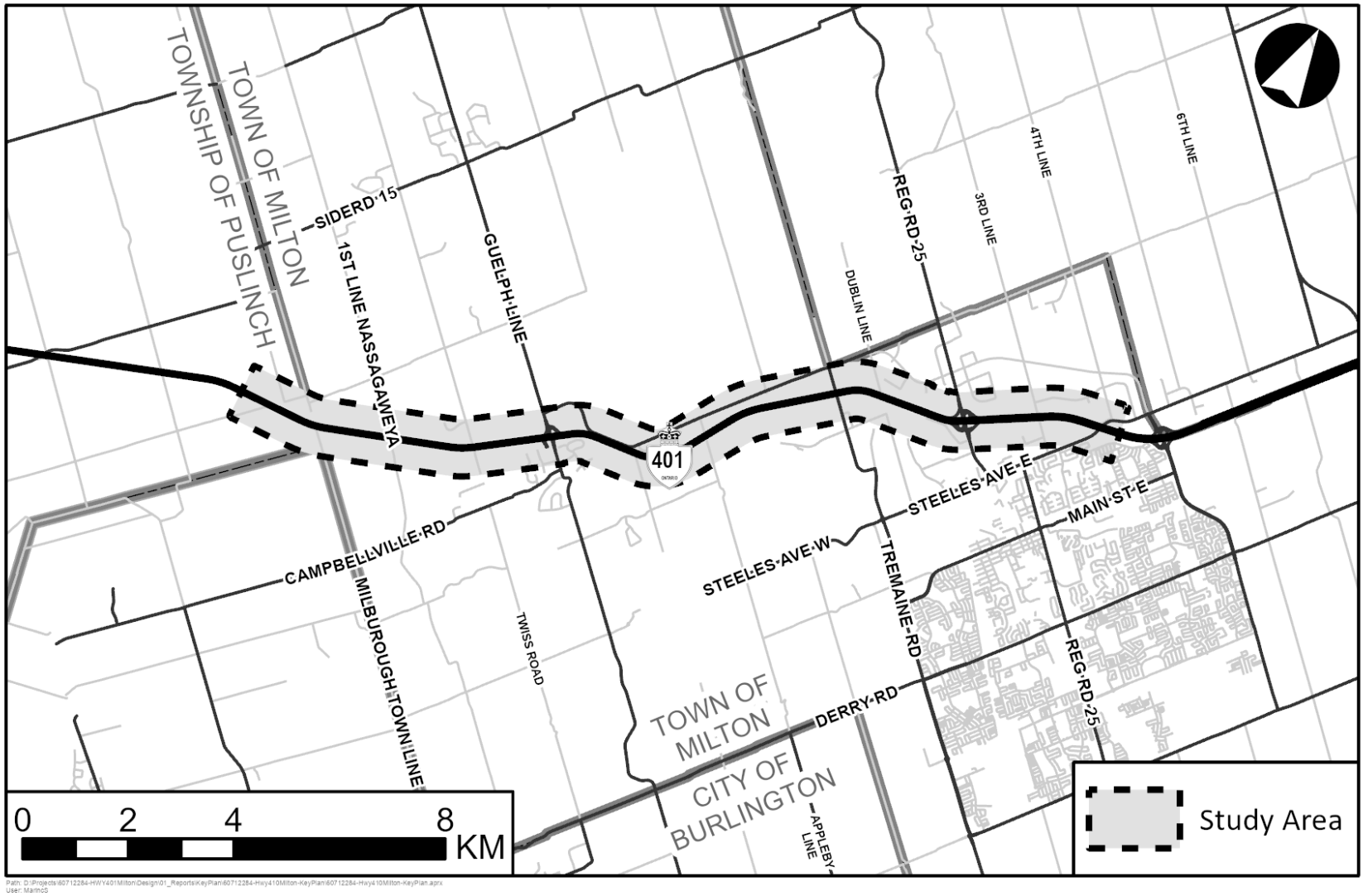
- PIC 1 boards.
- Roll plans illustrating the Study Area.
- Answers to Frequently Asked Questions.
- PIC Comment Form.

Project Overview

The Ministry of Transportation of Ontario (MTO) has retained AECOM Canada ULC (AECOM) to complete the Preliminary Design and Class Environmental Assessment (EA) Study for Highway 401 Improvements from Steeles Avenue in Milton, westerly to 1.5 km west of the Halton-Wellington boundary ("the Project"), in the Town of Milton, Halton Region and the Township of Puslinch, the County of Wellington.

This Study includes the consideration of potential improvements along the Highway 401 corridor to address both existing and long-term transportation and operational needs within the Study Area. Improvements investigated as part of this Study include highway expansion to provide additional capacity, High Occupancy Vehicle (HOV) lanes, and bridge, illumination, drainage, and interchange modifications.

Project Study Area



Purpose of PIC 1

This PIC presents the Project's Study Area and scope and provides updates on the Environmental Assessment Study and Preliminary Design progress.

Throughout the presentation slides you will also find information on:

- MTO projects adjacent to the Project's limits.
- The Study process.
- The types of environmental studies being undertaken for the Project.
- The existing environmental features.
- The traffic study.
- The Project's next steps and how you can participate in the Project's consultation process.

Provide your Feedback

The Project Team is looking to receive feedback on the following aspects of the Project:

- Key objectives of the Project.
- Alternatives to the undertaking.
- The alternatives.
- Proposed evaluation criteria.

We want to hear from you: Comment Form

Adjacent MTO Projects

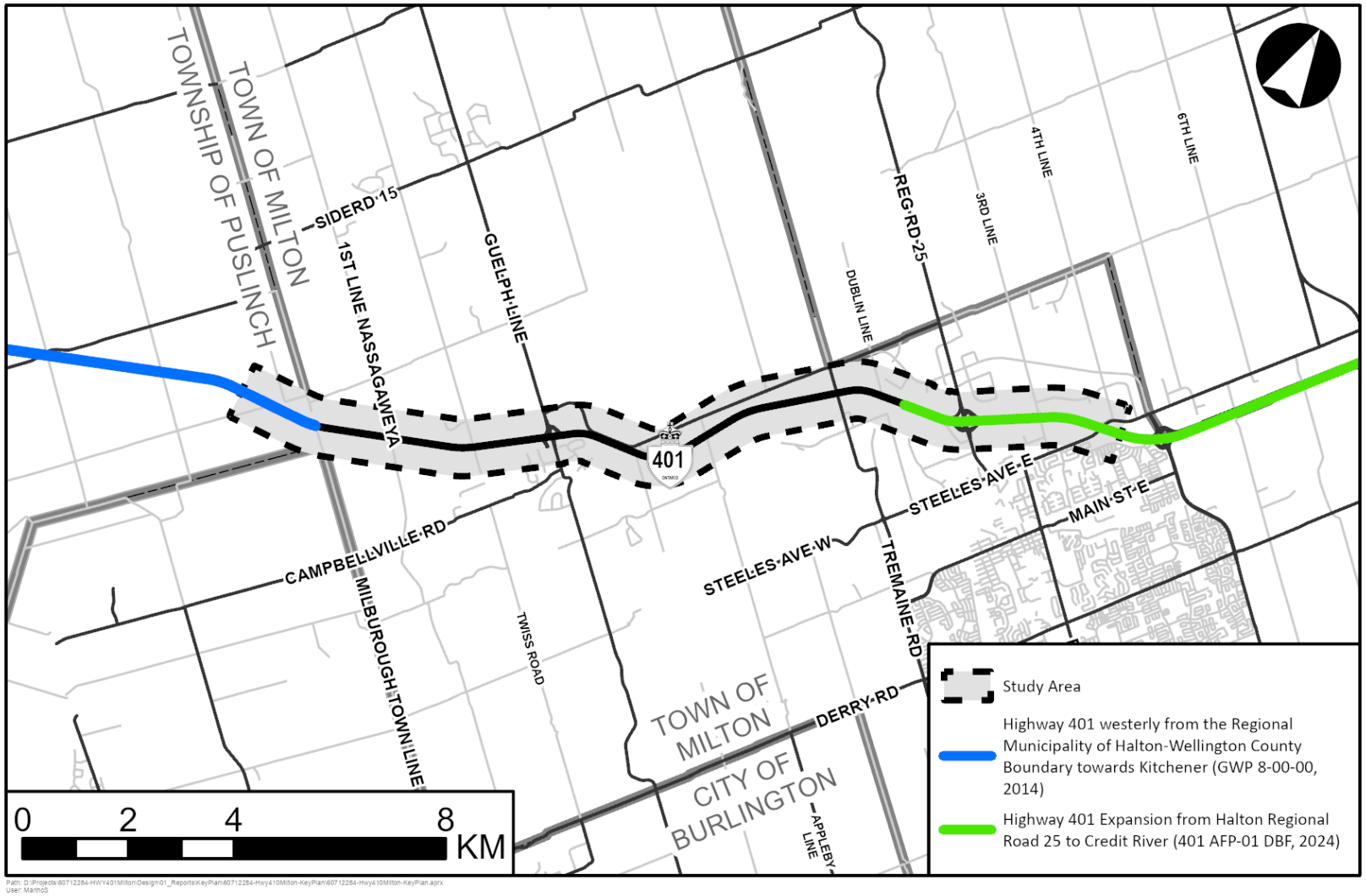
The Highway 401 Milton Project is the first EA Study to focus on operational improvements of the existing Highway 401 from Regional Road 25 to the Halton-Wellington boundary. Similar projects to the east and west are currently in various stages of completion:

Project	Recommended Plan / Completed
Highway 401 westerly from Regional Municipality of Halton-Wellington County Boundary towards Kitchener (GWP 8-00-00, 2014)	Approved preliminary design and Class EA complete to expand Highway 401 from the existing 6 lanes to 10 lanes including High Occupancy Vehicle (HOV) lanes.
Highway 401 Expansion from Halton Regional Road 25 to Credit River (401 AFP-01 Design-Build-Finance, 2024)	Recently constructed Highway 401 expansion from 6 lanes to 10 or 12 lanes including HOV lanes.

Adjacent MTO Projects (Continued)

The Highway 401 Milton Project is a key component of the broader framework of MTO Class EA studies and projects required to improve the movement of people and goods along the critical Highway 401 corridor through this area.

With the constructed highway expansion to the east and approval to expand the highway to the west of the Highway 401 Milton Project Limits, the Project is reviewing how to address both existing and long-term transportation and operational needs for the Study Area.



Study Process

This Project is following the approved planning process for a 'Group B' project under the *MTO Class Environmental Assessment for Provincial Transportation Facilities (amended 2000)* (Class EA). Alternatives will be generated and evaluated based on technical and environmental factors and in consultation with Indigenous Communities, the public, stakeholders, municipalities and government agencies. Public Information Centres will be held during this Study to provide interested parties with the opportunity to discuss the Study and provide input to the Project Team.

A Transportation Environmental Study Report (TESR) will be prepared and made available for public and agency comment at the completion of the Project, and will document:

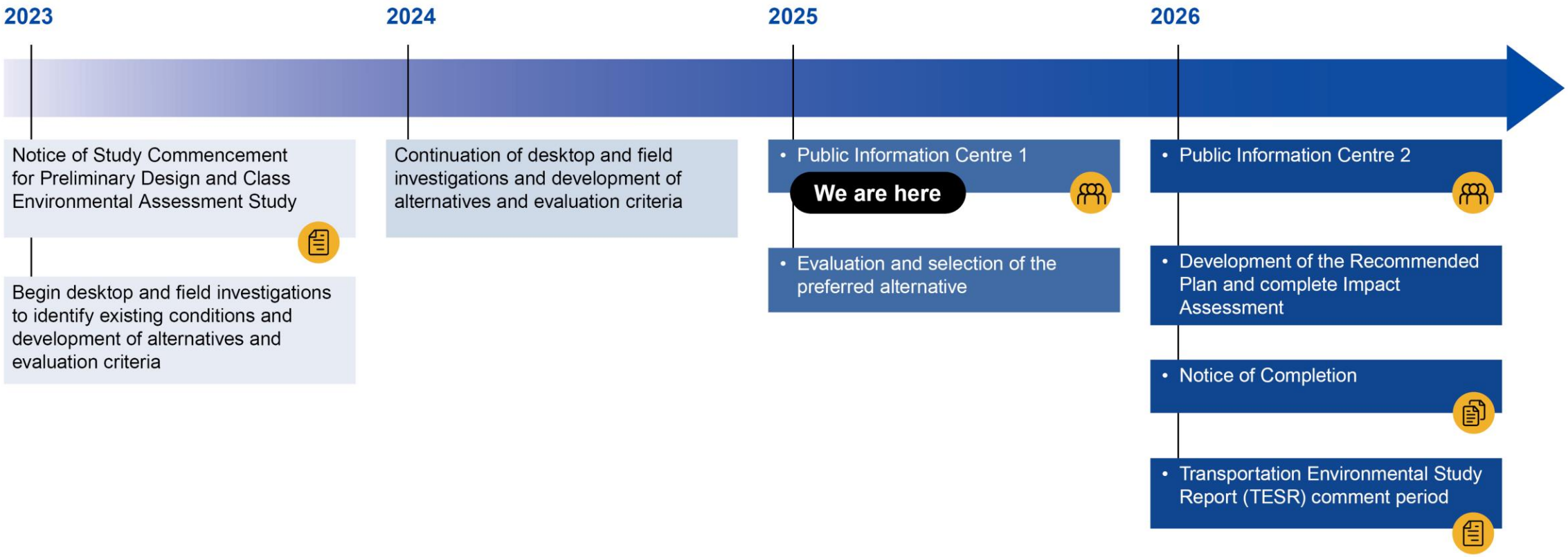
- A description of the evaluation of alternatives and selection of the Recommended Plan;
- A summary of potential environmental effects and mitigation measures; and
- A summary of consultation undertaken throughout the Project.

Notification of the times and locations of the availability of the TESR for comment will be published in local newspapers, the Project website and provided to those on the Project contact list.

To be added to the Project contact list, please complete a Comment Form.

Class EA Study Process

Study Process



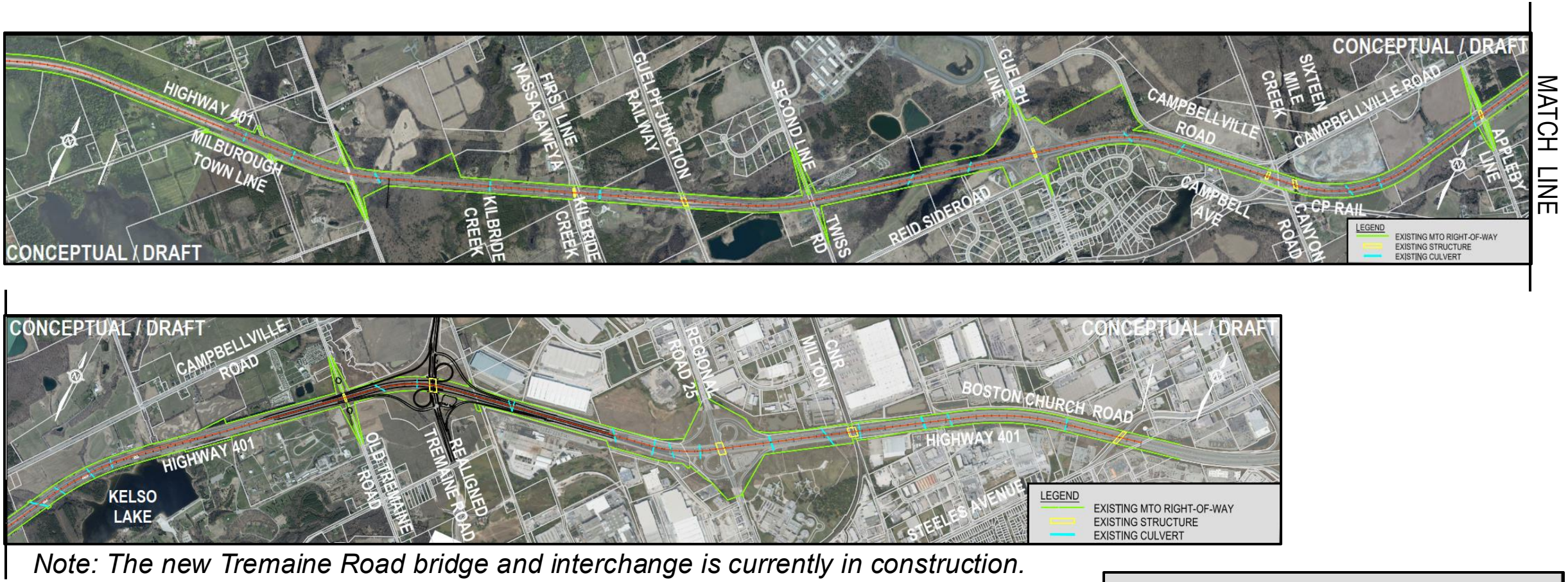
Key Objectives of the Project

The Project's key objectives are to:

- Address existing operational issues on Highway 401 throughout the Project limits.
- Address future capacity needs of this Highway 401 corridor.
- Minimize the impacts of the Project on the natural, socio-economic, and cultural environments.

We want to hear from you: Comment Form

Existing Highway 401 Milton Corridor



Note: The new Tremaine Road bridge and interchange is currently in construction.

LEGEND
EXISTING MTO RIGHT-OF-WAY
EXISTING STRUCTURE
EXISTING CULVERT

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Overview of Environmental Studies

The following environmental studies are currently being completed or scheduled to take place within the Study Area as part of this Study:

- Fish and Fish Habitat
- Terrestrial Ecosystems
- Noise Assessment
- Land Use/Designated Areas
- Agricultural Assessment
- Built Heritage and Cultural Heritage Landscapes
- Archaeology
- Air Quality
- Groundwater
- Surface Water
- Contaminated Properties and Waste Management
- Landscape Composition
- Snow Drift
- Erosion and Sediment Control

Results of these studies will be summarized in a **Transportation Environmental Study Report (TESR)** which will document the design and environmental process, as well as potential environmental impacts and mitigation measures. The TESR will be made available for public comments at the end of this study.

Overview of Existing Environmental Features

Natural Environment Features within the Study Area:

- Waterbodies
- Water crossings
- Wooded areas
- Wetlands
- Areas of Natural Scientific Interest
- Potential Species at Risk habitat*

Cultural Heritage Features within the Study Area:

- Properties of known cultural heritage value (e.g. Country Heritage Park is a Provincial Heritage Property of Provincial Significance)

Socio-Economic Features within the Study Area:

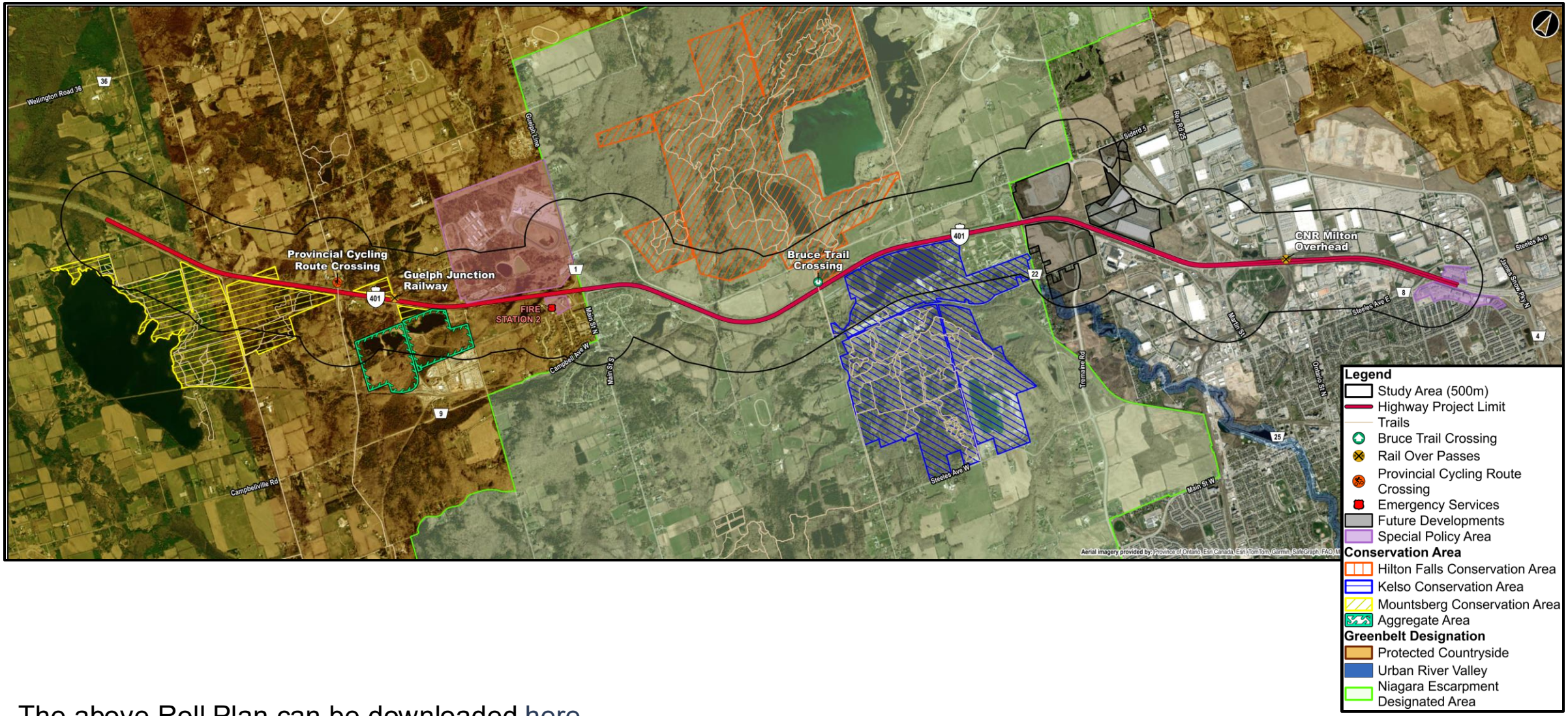
- Bruce Trail
- Railway lines
- Provincial cycling route crossing
- Emergency services (i.e., Fire Station)
- Current development applications
- Special policy areas
- Conservation areas
- Aggregate areas
- Designated lands (Greenbelt and Niagara Escarpment)

**Note: Potential Species at Risk habitat is not mapped due to sensitivity.*

Natural Environment Features

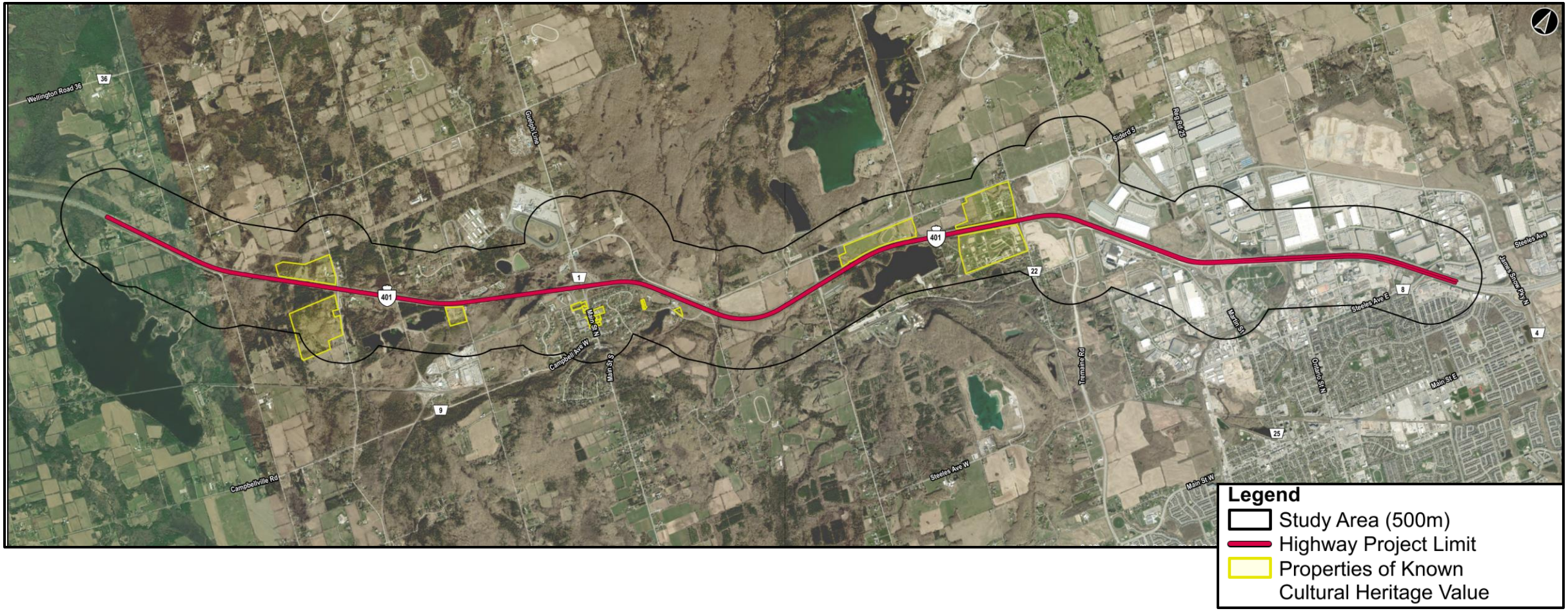
The above Roll Plan can be downloaded here.

Socio-Economic Features



The above Roll Plan can be downloaded here.

Cultural Heritage Features



The above Roll Plan can be downloaded here.

Traffic Evaluation Measures

Level of Service (LOS) is a qualitative measure that describes the operational conditions on roadway segments or at intersections, generally reflecting the road user's driving experience. The LOS is categorized ranging from A to F, with LOS A representing free-flow conditions and LOS F representing highly-congested conditions.

LOS A

LOS F

Source: Highway Capacity Manual (2010) and Metroland file photo accessed through InsideHalton.com

Existing Traffic Conditions on Highway 401

- The target Level of Service (LOS) for the studied section of Highway 401 is LOS D or better.
- The section between Guelph Line and Regional Road 25 does not meet the target LOS, as it currently operates at LOS E in both directions.

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Existing Traffic Conditions at Interchanges

Legend					
Level of Service A	Level of Service B	Level of Service C	Level of Service D	Level of Service E	Level of Service F
Free flow	Stable flow (slight delays)	Stable flow (acceptable delays)	Approaching unstable flow (tolerable delay)	Unstable flow (intolerable delay)	Forced flow (congested and queues fail to clear)

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Future (2041) Do-Nothing Traffic Conditions Highway 401

- The forecasted demand on the studied section of Highway 401 for the horizon year of 2041 is estimated based on projected population, employment growth, and planned future road and transit improvements in the GTA and other nearby municipalities.
- Without highway improvements, the future traffic demand is anticipated to further exceed the highway capacity throughout the Study Area resulting in increases in travel time, congestion, potential for collisions, and fuel consumption.

Future (2041) Do-Nothing Traffic Conditions at Interchanges

Legend					
Level of Service A	Level of Service B	Level of Service C	Level of Service D	Level of Service E	Level of Service F
Free flow	Stable flow (slight delays)	Stable flow (acceptable delays)	Approaching unstable flow (tolerable delay)	Unstable flow (intolerable delay)	Forced flow (congested and queues fail to clear)

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Highway 401 Traffic Capacity Review

- The existing 6-lane section of Highway 401 within the Project limits does not meet the current or future traffic demand. Improvements to this section of Highway 401 (including additional lanes) are needed to support the projected population and employment growth in the Greater Golden Horseshoe.
- **Traffic projections indicate the need for eight General Purpose Lanes (GPL) and two High-Occupancy Vehicle (HOV) lanes within the Study Area to accommodate the demand and align with Ontario's plan for a connected network of managed lanes.**

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Alternatives to the Undertaking

To address the key objectives of the Project, the Project Team considered the following alternatives to the undertaking:

- Do nothing.
- Implementation of Transportation Demand Management (TDM) and/or Transportation Systems Management (TSM) initiatives.
- Adjacent road system improvements.
- Highway 401 improvements.
- Construction of a new transportation corridor.

We want to hear from you: Comment Form

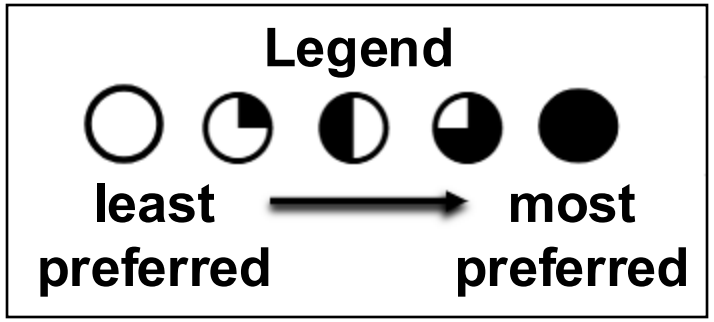
Alternatives to the Undertaking

Do Nothing

Summary of Assessment

The “Do Nothing” alternative does not address the current operations or address the future capacity needs of this section of Highway 401. The “Do Nothing” alternative results in further deterioration of level of service, resulting in an increase in travel time, congestion, potential for collisions, and fuel consumption. This also results in negative impacts to the socio-economic environment within the corridor. This alternative is not desirable and will not be carried forward.

Key Objectives		
Ability to address existing operational issues	Ability to address future capacity needs	Minimize impacts to the natural, socio-economic and cultural environments
		



Alternative will not be Carried Forward

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Alternatives to the Undertaking

Transportation Demand Management (TDM) and Transportation Systems Management (TSM)

Summary of Assessment

TDM initiatives (e.g., carpooling, transit, walking, cycling, Smart Commute, etc.) alone are not anticipated to sufficiently reduce the demand to address the operational needs in this corridor.

While transit expansion and improvements are currently being planned by others to increase the capacity of transit networks, the effect on the capacity of the overall transportation network is not anticipated to be sufficient to replace the need for Highway 401 improvements in this section. MTO will continue to work with Metrolinx and regional/local transit providers and complete Highway 401 improvements to meet overall regional transportation network needs. It is noted that transit expansion and improvements would have impacts to natural, socio-economic, and cultural environments.

TSM initiatives (e.g., carpool parking lots, managed lanes such as HOV lanes, improved signage, etc.) alone are also not anticipated to address the issues and needs of this section of Highway 401. The implementation of HOV lanes and improvements to existing carpool lots will be carried forward in this Study in combination with other alternatives.

Key Objectives		
Ability to address existing operational issues	Ability to address future capacity needs	Minimize impacts to the natural, socio-economic and cultural environments
		

Legend

least preferred → **most preferred**

Alternative is Carried Forward

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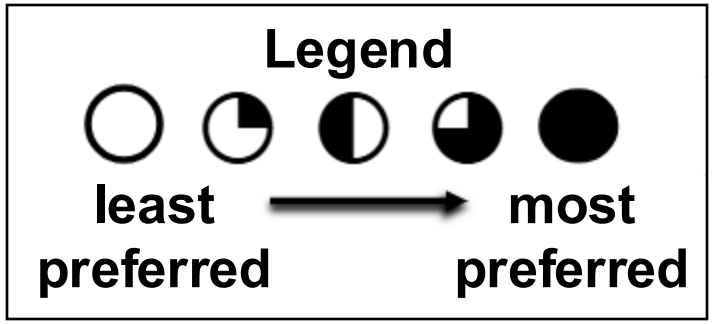
Alternatives to the Undertaking

Adjacent Road Systems Improvement

Summary of Assessment

Improvements to regional and municipal roads in the adjacent road system are insufficient to meet the long-distance or inter-regional traffic demand for people and goods or to sufficiently address current operations affecting Highway 401. These roads, managed by regional and municipal authorities, are designed primarily for local access and are not suited for accommodating long-distance traffic or consistently diverting vehicles from Highway 401. Additionally, such improvements (e.g., arterial road widening) have varying impacts on natural, socio-economic, and cultural environments. Since adapting the adjacent road system for long-distance traffic is not a viable or desirable solution, this alternative will not be carried forward.

Key Objectives		
Ability to address existing operational issues	Ability to address future capacity needs	Minimize impacts to the natural, socio-economic and cultural environments
		



Alternative will not be Carried Forward

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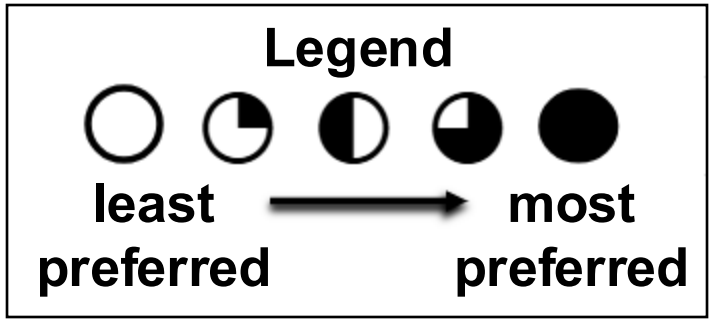
Alternatives to the Undertaking

Highway 401 Improvements

Summary of Assessment

The Project's traffic study has confirmed that additional capacity is required through this section of Highway 401. The Project Team has considered other planned and ongoing transportation (including transit) network improvements and has concluded that providing additional capacity, by widening Highway 401 with additional lanes, would sufficiently address existing operations and future capacity needs. Although these improvements may have some impact on natural, socio-economic, and cultural environments, they are expected to be less significant than the impacts associated with constructing a new transportation corridor. The Highway 401 improvements alternative, in combination with TDM and TSM improvements, is anticipated to best address the key objectives of the Project.

Key Objectives		
Ability to address existing operational issues	Ability to address future capacity needs	Minimize impacts to the natural, socio-economic and cultural environments
		



Alternative is Carried Forward

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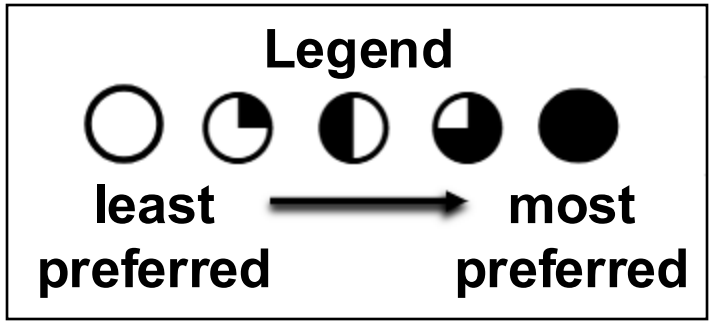
Alternatives to the Undertaking

Construction of a New Transportation Corridor

Summary of Assessment

A new long-distance (or inter-regional) transportation corridor could be developed to address future traffic demand and the needs of the overall transportation network. However, considering the required approvals and timelines for planning, design, and construction, a new transportation corridor does not address the mid-term and future capacity needs or the existing operations of this section of Highway 401. Lastly, a new corridor through undeveloped lands would result in significant new impacts to natural, socio-economic, and cultural environments. This alternative will not be carried forward.

Key Objectives		
Ability to address existing operational issues	Ability to address future capacity needs	Minimize impacts to the natural, socio-economic and cultural environments
		



Alternative will not be Carried Forward

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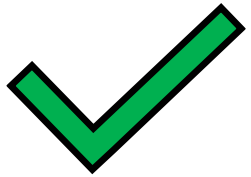
Alternatives to the Undertaking

Alternatives Carried Forward in this Study

The alternatives to the undertaking that best address the key objectives of the Project include the implementation of TDM and TSM initiatives and Highway 401 improvements. The alternatives to carry forward in the study include:

- Accommodating transit and active transportation plans.
- Providing managed lanes (i.e., HOV lanes).
- Improvements to the existing carpool lot at Guelph Line interchange.
- Improvements to the Guelph Line Interchange.
- Expanding capacity of Highway 401 by widening from three lanes in each direction to four general purpose lanes (plus one HOV lane) in each direction.

Carried Forward



Alternatives

To address the Project's key objectives, the Project Team has developed alternatives for the below components:

- Highway 401 mainline widening from six to ten lanes including HOV lanes.
- First Line Nassagaweya bridge replacement (to accommodate Highway 401 widening).
- Guelph Line interchange improvements.

Reminder: *The Project's key objectives are to address existing operations on Highway 401 throughout the Project limits, address future capacity needs in the corridor, and minimize the impacts of the Project on the natural, socio-economic, and cultural environments.*

We want to hear from you: Comment Form

Mainline Widening – Key Features for Consideration

The mainline widening assessment will consider several key features within the Study Area, including, but not limited to:

- Provincial and municipal infrastructure (including existing and recently reconstructed/widened roads, highways, structures, water crossings, interchanges, and intersections).
- Watercourses, lakes, and other waterbodies.
- Floodplains, wetlands, etc.
- Potential species-at-risk habitat.
- Niagara Escarpment Protection Area.
- Conservation Lands and Areas.
- Trails and parks.
- Cultural heritage (e.g., cemeteries).
- Fire / EMS / Police Services.
- Commercial, agricultural, and residential properties.
- Rail crossings.
- Utilities.
- Other transportation and development plans.
- And other natural, socio-economic, and cultural heritage environment features.

Mainline Widening – Alternatives

Existing

Alt. A: Widen About Existing Centre-Line*

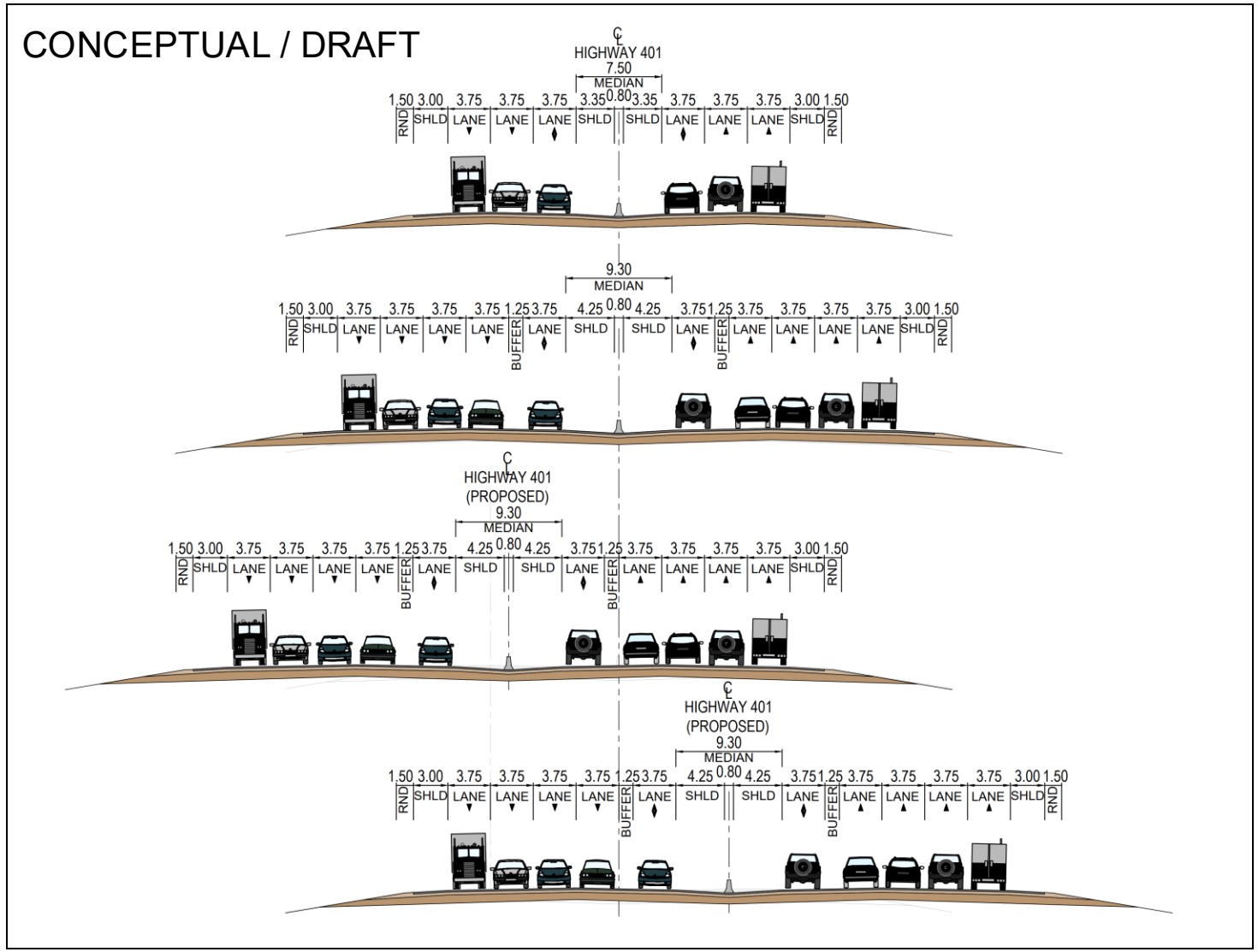
- Generally expands the highway footprint equally on both sides.

Alt. B: Widen to North*

- Generally expands the highway footprint to the north.

Alt. C: Widen to South*

- Generally expands the highway footprint to the south.



Mainline Widening Typical Sections

**Note: Generalized approach. Localized adjustments may be required during design.*

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Mainline Widening – Evaluation Sections

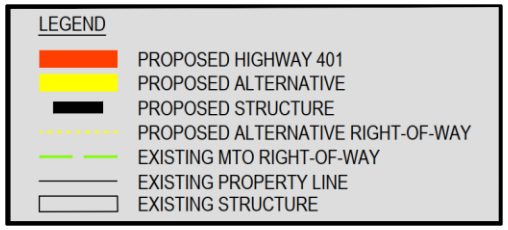
Notes: The new Tremaine Road bridge and interchange is currently in construction. Property requirements subject to further design.

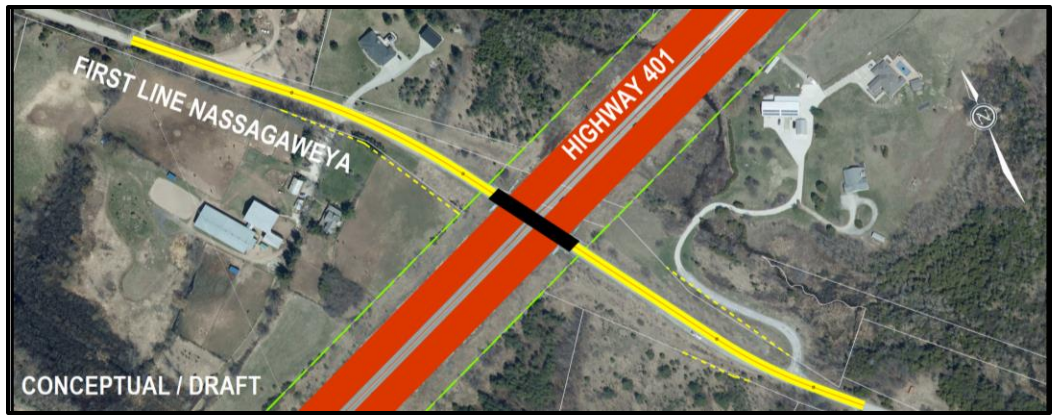
First Line Nassagaweya Bridge Replacement – Key Features for Consideration

The First Line Nassagaweya bridge replacement assessment will consider several key features within the Study Area, including, but not limited to:

- Highway 401 widened cross section.
- Kilbride Creek.
- Floodplains, wetlands, etc.
- Residential properties and driveway entrances.
- Utilities.
- And other natural, socio-economic, and cultural heritage environment features.

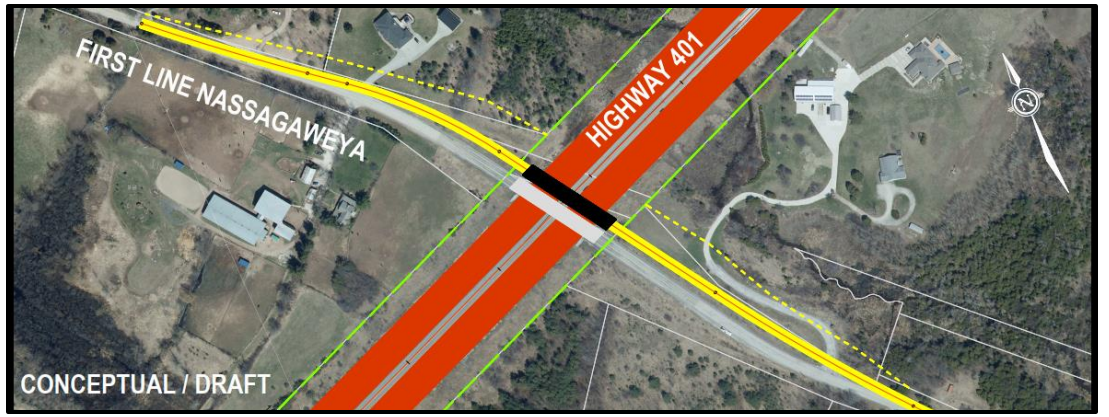
First Line Nassagaweya Bridge Replacement – Alternatives





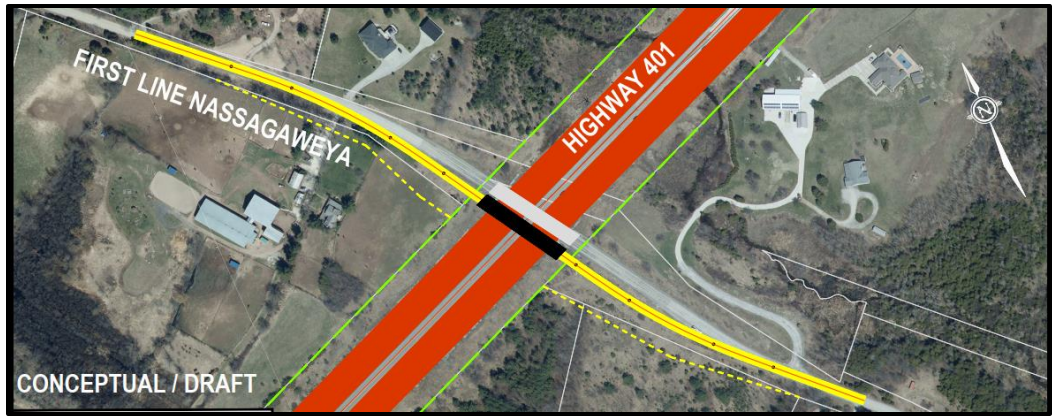
Alt. A – Replace on Existing Alignment

- Minimizes expansion of roadway footprint, requires full closure of traffic on First Line during construction.



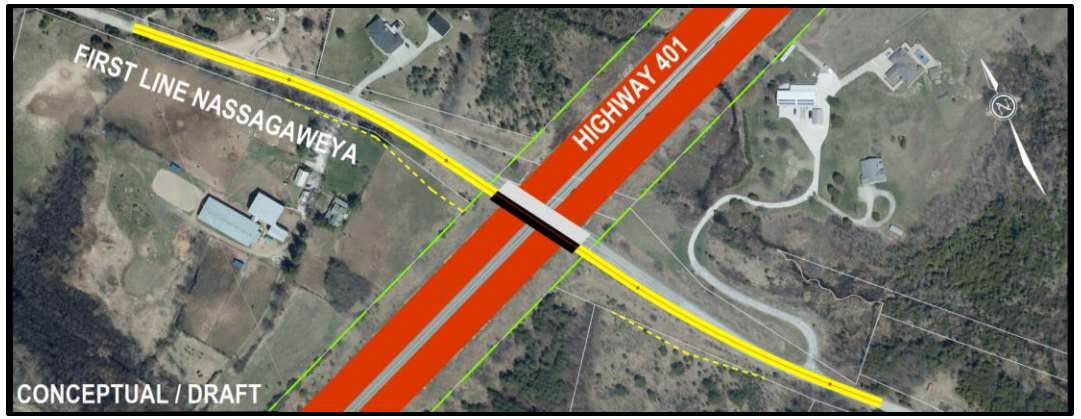
Alt. B – Realignment to the East

- Expands roadway footprint to east, opportunity to maintain two-way traffic on First Line during majority of construction.



Alt. C – Realignment to the West

- Expands roadway footprint to west, opportunity to maintain two-way traffic on First Line during majority of construction.



Alt. D – Minor Realignment to the West

- Limits expansion of roadway footprint, traffic reduced to a single lane (alternating direction controlled by signal) to allow for staged bridge replacement.

Note: Property requirements subject to further design.

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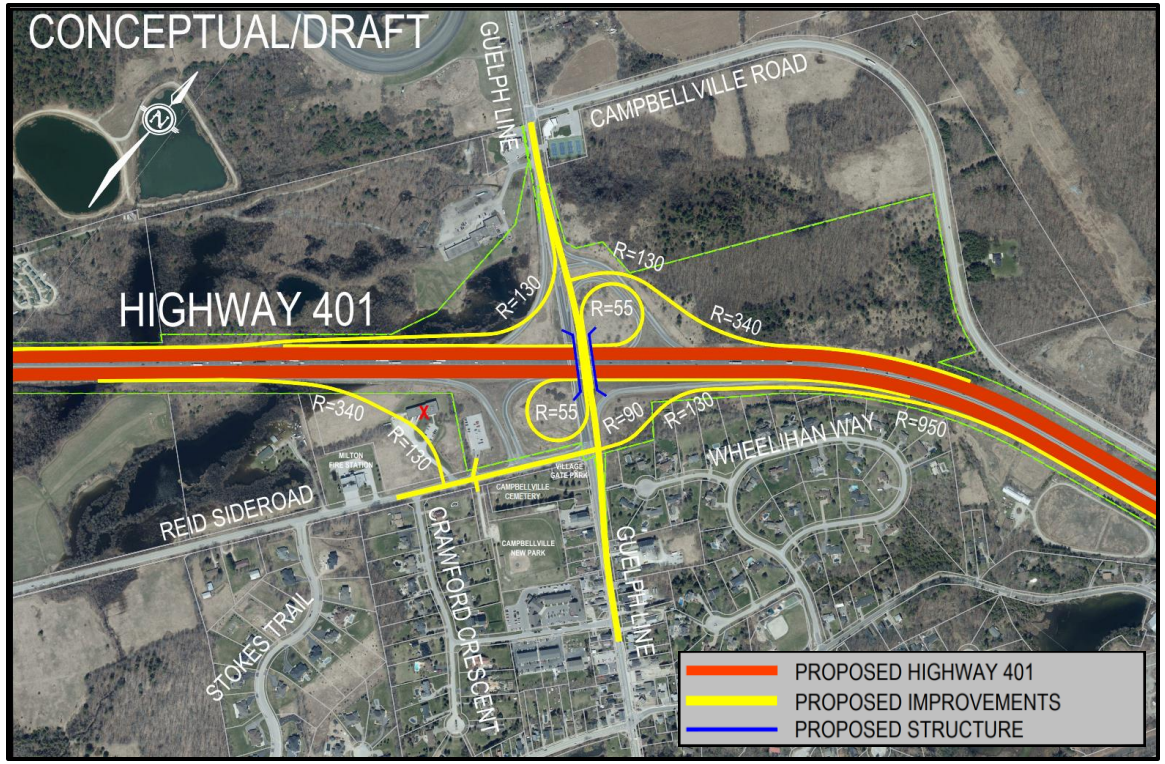
Guelph Line Interchange Improvements – Key Features for Consideration

The Guelph Line interchange improvements assessment will consider several key features within the Study Area, including, but not limited to:

- Provincial and municipal infrastructure (including MTO carpool lot, roads, highways, structures, water crossings, interchanges, and intersections).
- Reid Sideroad.
- Watercourses and other waterbodies.
- Regulatory hazards (e.g., floodplains and wetlands).
- Potential species-at-risk habitat.
- Niagara Escarpment Protection Area.
- Parks.
- Cultural heritage (e.g., cemeteries).
- Fire / EMS / Police services.
- Commercial and residential properties.
- Active transportation.
- Accommodation of major traffic movements.
- Utilities.
- Other transportation and development plans.
- And other natural, socio-economic, and cultural heritage environment features.

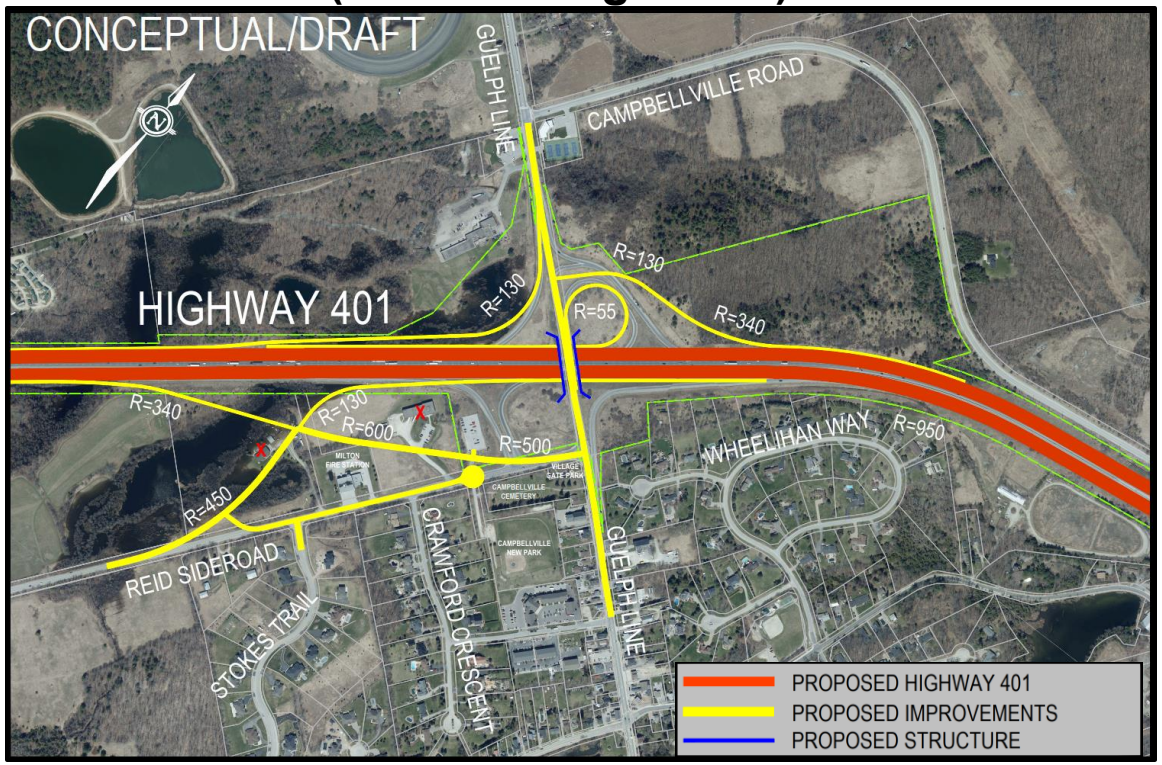
Guelph Line Interchange Improvements – Alternatives

Alt. A – Parclo A4 Modified with Buttonhook (Minor Realignment)



- Similar ramp configuration to existing interchange, limits footprint expansion.
- Indirect access from eastbound off-ramp to Guelph Line.
- Direct access from Reid Sideroad to Guelph Line.

Alt. B – Parclo A4 / Modified Diamond (Minor Realignment)

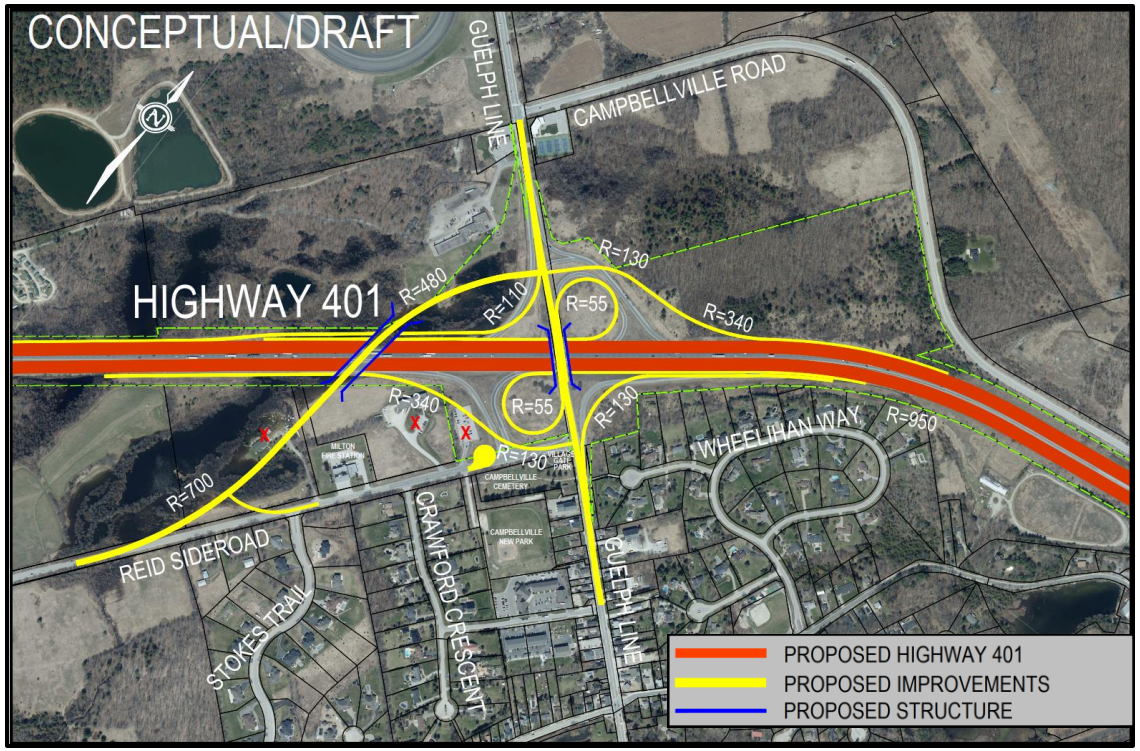


- Non-typical ramp configuration provides access from Reid Sideroad to eastbound Highway 401 west of developed area.
- Expands footprint of interchange predominantly to the southwest.

Note: Property requirements subject to further design.

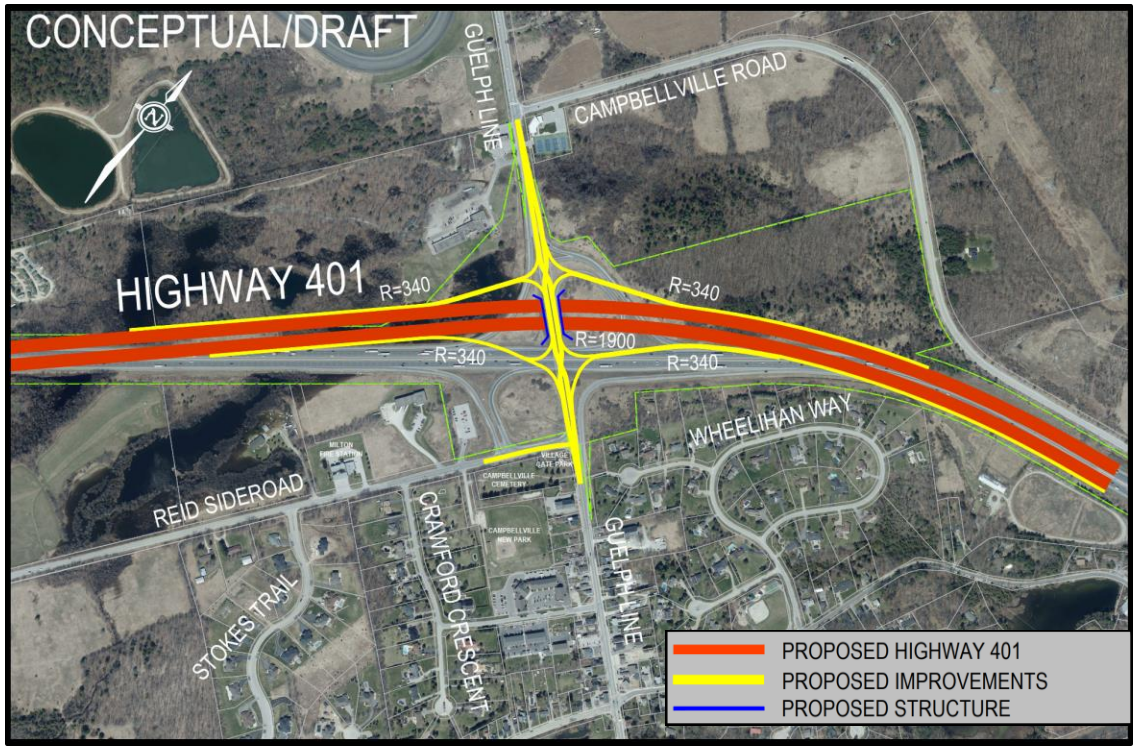
Guelph Line Interchange Improvements – Alternatives

Alt. C – Parclo A4 with Reid Sideroad North Realignment (Minor Realignment)



- Provides common ramp configuration.
- Provides direct access from Reid Sideroad to Guelph Line north of Highway 401 on a new alignment and bridge.
- Expands footprint of interchange predominantly to the northwest and southwest.

Alt. D – Diverging Diamond Interchange (Major Realignment)



- Provides direct access from Reid Sideroad to Guelph Line in existing location and provides direct access to/from Guelph Line for all ramps.
- Requires new alignment of Highway 401.
- Expands footprint of interchange and highway predominantly to the northwest and northeast.

Note: Property requirements subject to further design.

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Evaluation Criteria and Process

The evaluation criteria shared on the next slide will be used to assess the design alternatives. The evaluation criteria will be split into four components:

- Transportation and cost considerations.
- Impacts to natural environment.
- Impacts to socio-economic environment.
- Impacts to cultural environment.

We want to hear from you: Comment Form

Evaluation Criteria and Process

The Project Team will use the evaluation criteria to the right to assess the design alternatives for:

- Highway 401 mainline widening from six to ten lanes including HOV lanes.
- First Line Nassagaweya bridge replacement (to accommodate Highway 401 widening).
- Guelph Line interchange improvements.

Evaluation Component	Evaluation Criteria
Transportation and Cost Considerations	• Traffic Operations and Safety • Geometrics • Constructability • Cost • Utility Impacts
Natural Environments	Impacts To: • Terrestrial Environment (i.e., wildlife habitat, woodlots, and wetlands) • Species at Risk • Fish and Fish Habitat • Groundwater • Surface Water
Socio-Economic Environments	Impacts To: • Land Use • Traffic Noise • Air Quality • Aesthetics • Property Impacts • Agricultural Operations • Soils Management
Cultural Environments	Impacts to: • Archeological Resources • Built Heritage and Cultural Heritage Landscapes

Next Steps

Following PIC 1 we will:

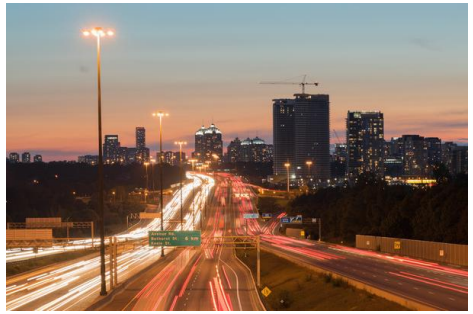
- Respond to comments received (comment period ends on June 25, 2025).
- Use the evaluation criteria to assess and evaluate the alternatives in order to select the preferred alternative.
- Identify preliminary property requirements and environmental impacts of the preferred alternative.
- Present the preferred alternative at PIC 2 (tentatively scheduled for Winter 2026).

Consultation with Indigenous Communities, the public, stakeholders, municipalities, and government agencies will continue throughout the Study.

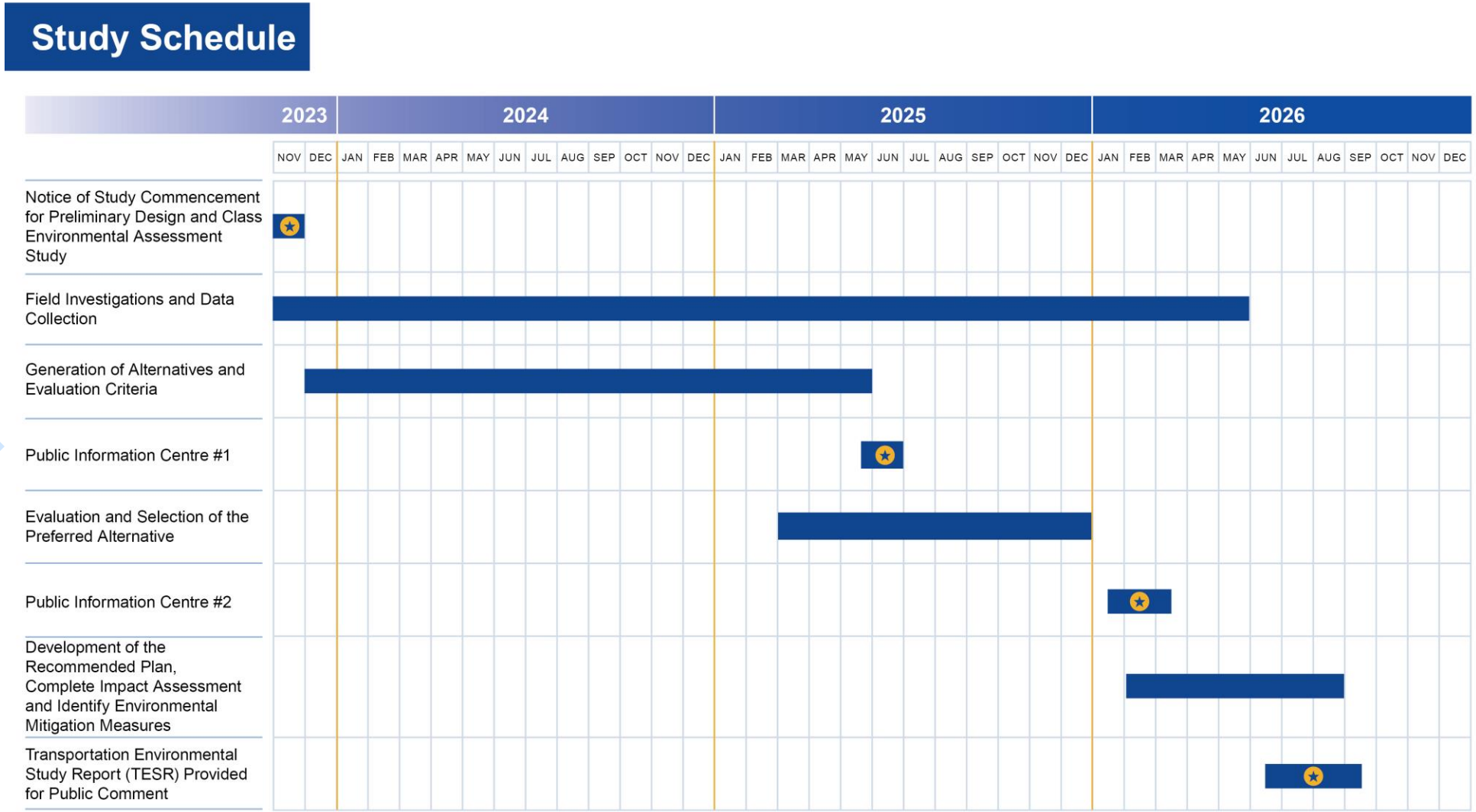
Next Steps – Continued

Once the preferred alternatives for the main components of highway improvements (mainline widening, First Line Nassagaweya bridge replacement, and Guelph Line interchange improvements) are identified, ancillary highway improvements will be considered. These include, but are not limited to:

- New structures or structure modifications.
- Active transportation.
- Drainage improvements including stormwater management ponds and culverts.
- Illumination (e.g., high mast lights and/or conventional lights)
- Intelligent transportation systems such as CCTV and variable message signs.
- Landscaping.
- Utility relocations.
- Carpool lot improvements.
- Overhead signage.
- Roundabouts.
- Construction staging and detours.

Study Schedule



We Are Here

** Schedule subject to change and pending results of field work.*

Ontario AECOM

Freedom of Information & Protection of Privacy Act

- Comments and information regarding this Project are being collected to assist MTO and AECOM in meeting the requirements of the Ontario *Environmental Assessment Act*. This material will be maintained on file for the use of the Project and may be included in Project documentation.

- Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

Thank You for Participating in PIC 1!

On behalf of the Project Team, thank you for your interest and for participating in this Public Information Centre. We encourage you to contact us if you have any questions or concerns.

Comment Form

Alternatively, you can contact the Project Team at: ProjectTeam@highway401milton.ca
Toll Free: 1-877-417-3924

Please provide any comments on the PIC by **June 25, 2025**.