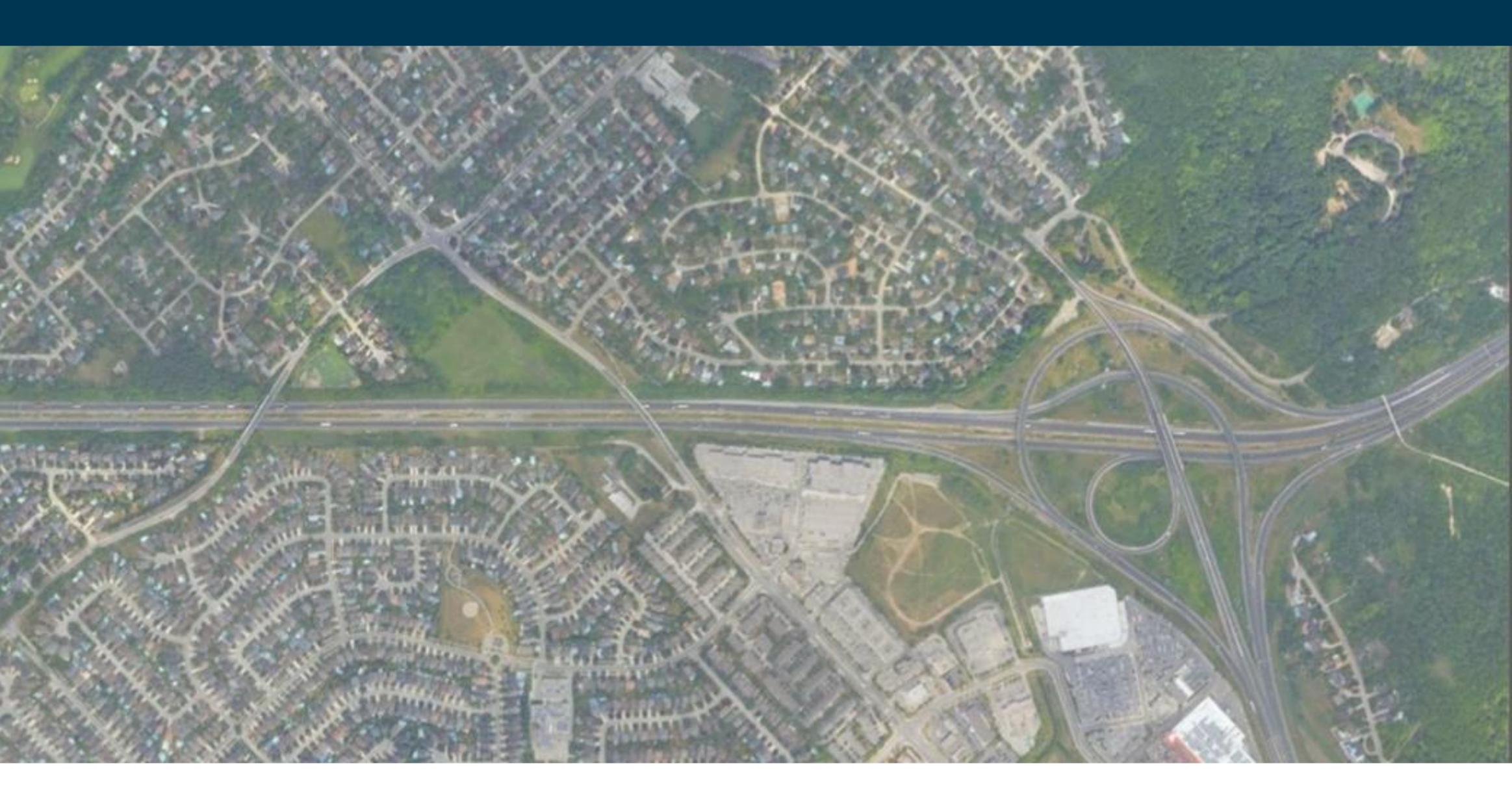


## Mohawk Road Ramp Municipal Class Environmental Assessment









# What is This Study About?

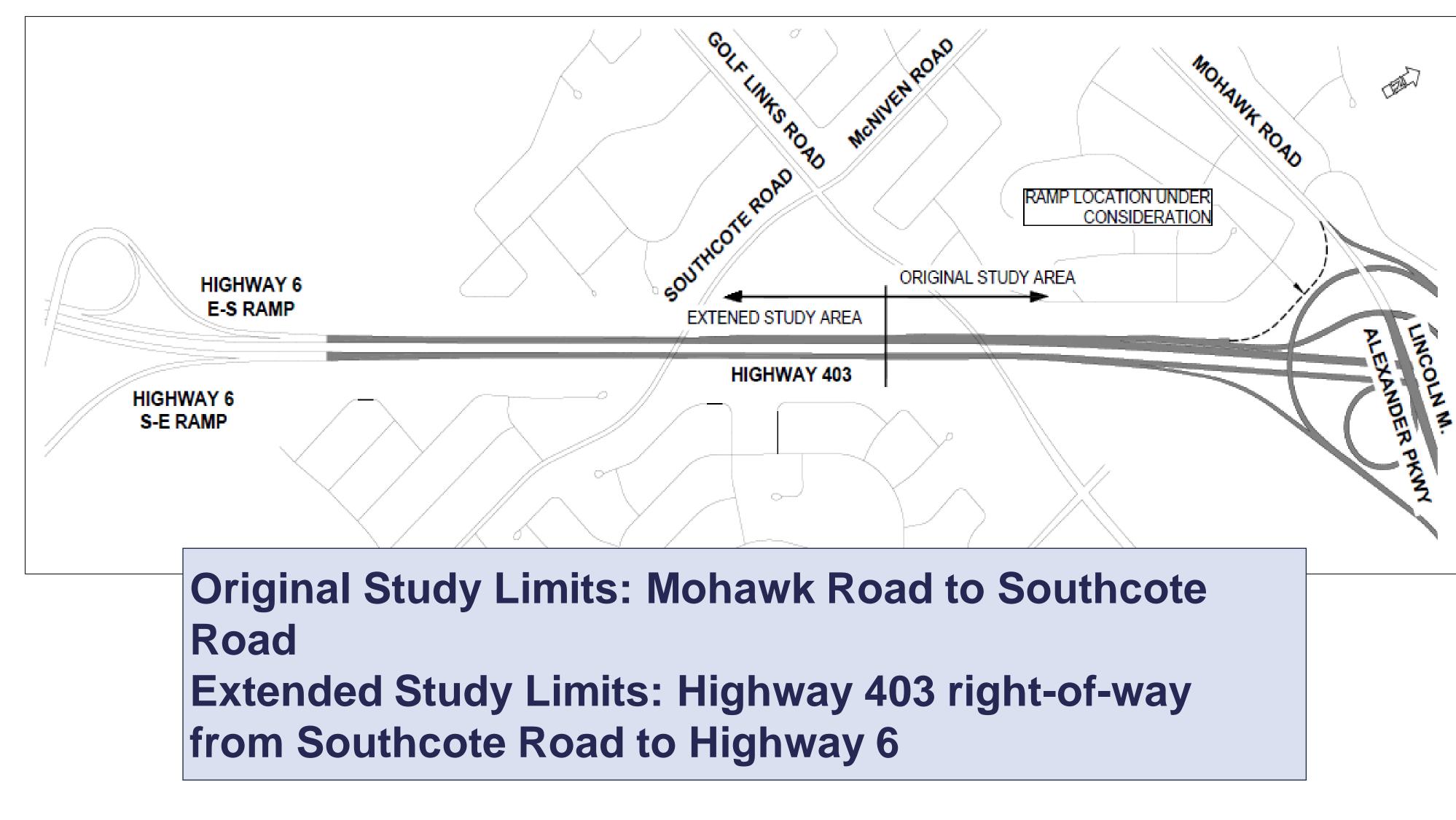
## **Study Objectives**

The City of Hamilton (the City) initiated the Additional Access to Brantford-bound Highway 403 Class Environmental Assessment (Class EA) study in 2013 to determine the feasibility of a westbound access ramp to Highway 403 in Ancaster. Since that time, an extension of the third westbound lane from Southcote Road to Highway 6 has been considered in the extended study area shown in the figure below.

The goals and objectives of the study are to:

- Determine the operational and geometric feasibility of a westbound on-ramp to Highway 403;
- Assess the limitations and impact of the proposed ramp on Highway 403 operations and future plans
- Consider and assess extending a third lane (truck climbing lane) from Southcote Road to Highway 6

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

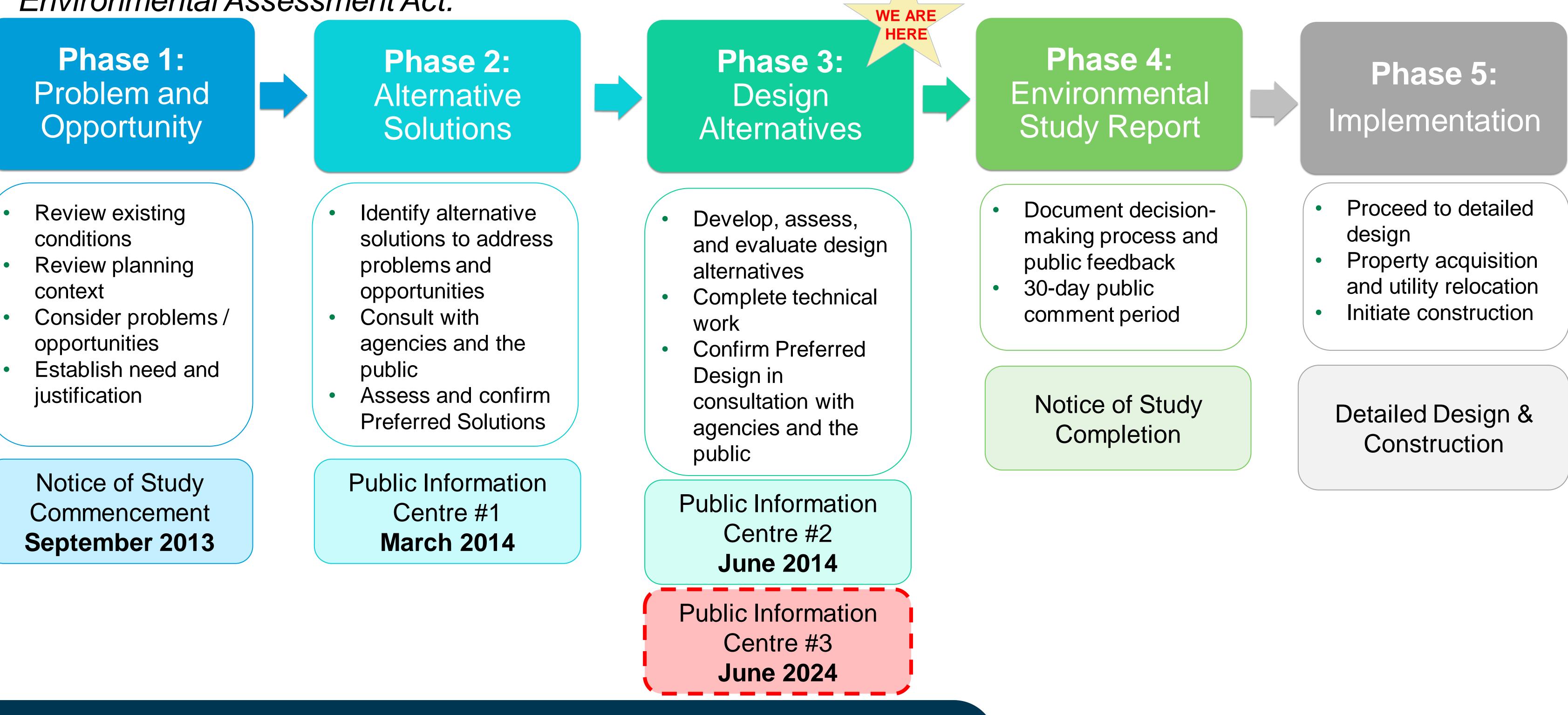






# Study Process and Background

This study is being carried out in accordance with Schedule C of the Municipal Class Environmental Assessment (MCEA), (October 2000, as amended 2023), which is an approved process under the Ontario Environmental Assessment Act.



Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 







## **Purpose of This Public Information Centre** (PIC)

- Review key aspects of PIC #1 (March 2014) and PIC #2 (June 2014)
- Present the evaluation of design alternatives for the proposed Mohawk Road Ramp and truck climbing lane
- Present the preliminary preferred plan for the proposed Mohawk Road Ramp and truck climbing lane
- Present the results of technical studies
- Discuss potential impacts and mitigation measures
- Collect public input about the proposed ramp design

We encourage you submit your comments to the Project Team by **July 31, 2024**.

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

## About This PIC



## How to Get Involved

### **Review this information** package

Provide comments and feedback on this package

Join the study mailing list or contact the Project Team







## Summary of PIC 1 and 2

The first Public Information Centre (PIC #1) was held in March 2014 followed by a second PIC in June 2014. The purpose of PIC #1 and #2 was to:

- Introduce the study
- Outline the Class EA process and study schedule
- Review background information and existing conditions
- Present the problems and opportunities, and alternative solutions
- Discuss the design process, and preliminary design considerations and constraints
- Present design alternatives and preliminary preferred design concept
- Obtain community feedback

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

## Recap of PIC 1 and 2 (EA Phases 1&2)

## Key themes that emerged from PICs comments:

- Ramp to Highway 403 Westbound off Mohawk Road is needed; Should not have been removed
- Inadequate room for ramp at Mohawk Road
- Brantford-bound access at Golf Links Road should be the solution carried forward
- Garner Road needs to be widened and could be used to access Highway 403 Westbound
- North Ancaster has easy access via McNiven to Golf Links and the Linc westbound
- Southcote to Garner West would allow access to Highway 403 westbound







## **Problems and Opportunities**

- constructed
- and from Ancaster

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## Recap of PIC 1 and 2 (EA Phases 1&2)

 A Brantford-bound ramp from Mohawk Road to Highway 403 was removed when the Highway 403/Lincoln Alexander Parkway interchange was

Removal of the Brantford-bound ramp has left a missing link in access to

 Residents have requested that the Brantford-bound ramp be placed due to increasing traffic demands on Wilson Street in the Ancaster core

• Therefore, there is a need to provide an additional Brantford-bound ramp to improve access to Highway 403 and relieve traffic on Wilson Street







## **Alternative Solutions**

Alternative solutions represent reasonable means of addressing the problems and opportunities. The following alternative solutions were considered for the study:

**Alternative 1: Do Nothing –** No additional Brantford-bound access to Highway 403

Alternative 2: Brantford-bound Access at Mohawk Road - Improve access to Highway 403 by adding a Brantford-bound ramp from Mohawk Road to Highway 403

Alternative 3: Brantford-bound Access at Main Street - Improve access to Highway 403 by adding a Brantford-bound ramp from Main Street to Highway 403

Alternative 4: Brantford-bound Access at Golf Links Road - Improve access to Highway 403 by adding a Brantford-bound ramp from Golf Links Road to Highway 403

Alternative 5: Other Modes of Transportation - Introduce or enhance programs and facilities that promote the use of other modes of transportation, such as transit and active transportation

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## Recap of PIC 1 and 2 (EA Phases 1&2)







## **Evaluation of Alternative Solutions**

Alternatives/ Criteria	Alternative 1: Do Nothing	Alternative 2: Brantford-bound Access at Mohawk Road	Alternative 3: Brantford-bound Access at Main Street	Alternative 4: Brantford-bound Access at Golf Links Road	Alternative 5: Other Modes of Transportation
Technical	Poor	Good	Poor	Poor	Poor
Natural	Neutral	Neutral	Poor	Poor	Neutral
Cultural	Neutral	Poor	Poor	Poor	Neutral
Social	Neutral	Neutral	Poor	Poor	Neutral
Economic	Neutral	Poor	Poor	Poor	Neutral
Summary	<ul> <li>Does not resolve problem</li> <li>Carried forward for comparison</li> </ul>	<ul> <li>Resolves problem</li> <li>Carried forward as part of solution</li> </ul>	<ul> <li>Partially resolves problem</li> <li>Not carried forward due to environmental impacts, design and construction issues, and high costs</li> </ul>	<ul> <li>Resolves problem</li> <li>Not carried forward due to heritage impacts, operational issues, design and construction issues, and cost</li> </ul>	<ul> <li>Partially resolves problem</li> <li>Does not add access to Highway 403</li> <li>Does not significantly reduce traffic impacts to downtown core</li> <li>Carried forward as part of solution</li> </ul>

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

## Recap of PIC 1 and 2 (EA Phases 1&2)







## **Recommended Solution**

which design alternatives were developed.

solution:

from Mohawk Road to Highway 403

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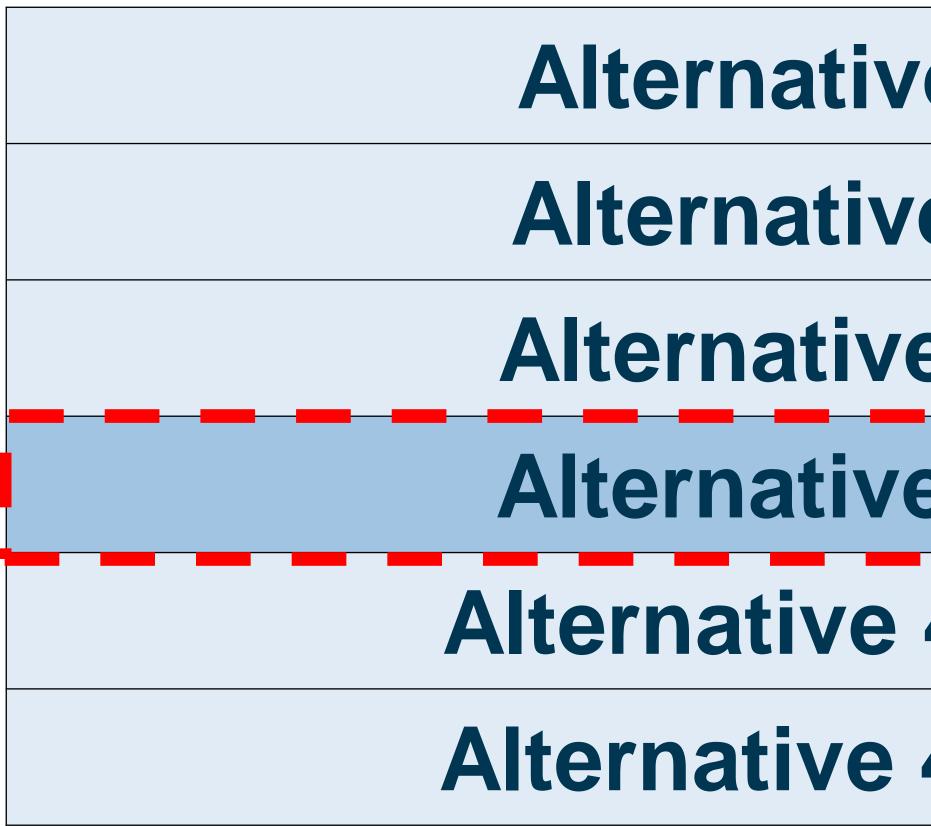
## Recap of PIC 1 and 2 (EA Phases 1&2)

- The alternative solutions were assessed in how they would address the problems and opportunities, and the constraints identified in the early stages of the study. The assessment was used to identify the preferred alternative solution(s) for
- A combination of the following alternatives is recommended as the preferred
- Alternative 2: Improve access to Highway 403 by adding a Brantford-bound ramp
- Alternative 5: Introduce or enhance programs and facilities that promote the use of other modes of transportation, such as transit and active transportation

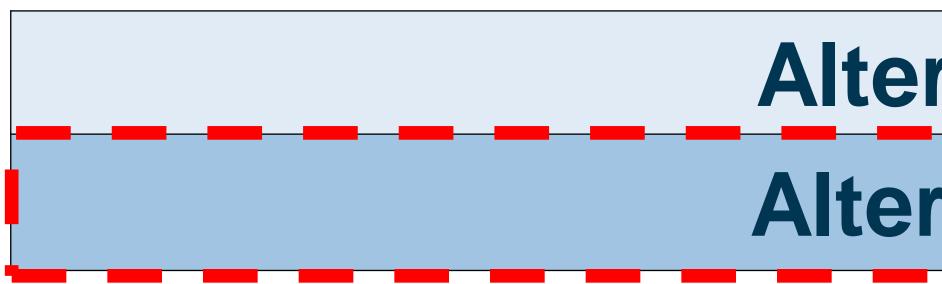








# **Brantford-bound Ramp:**

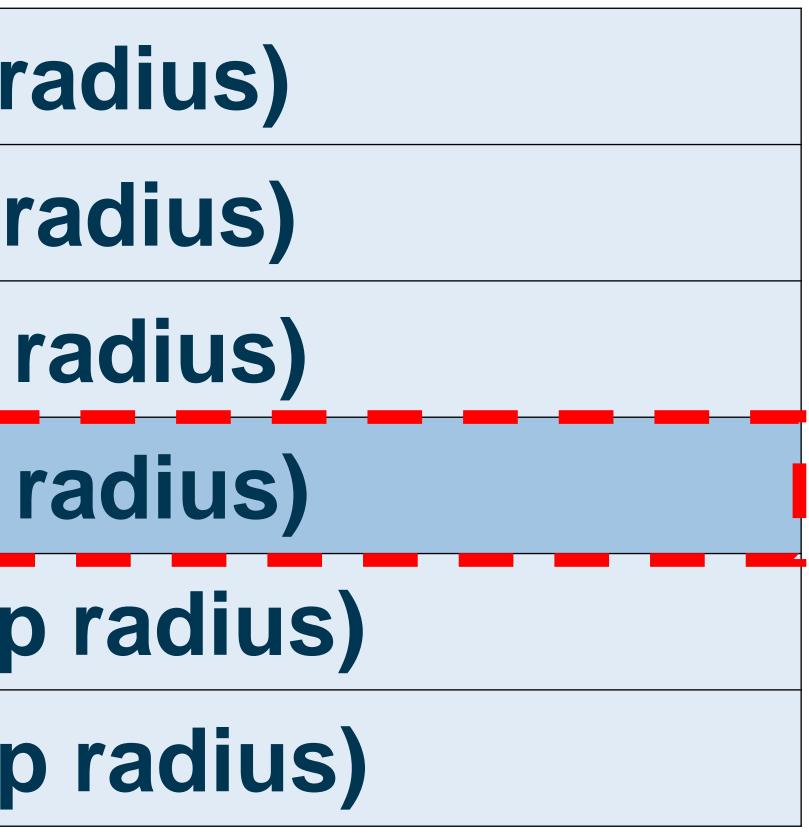


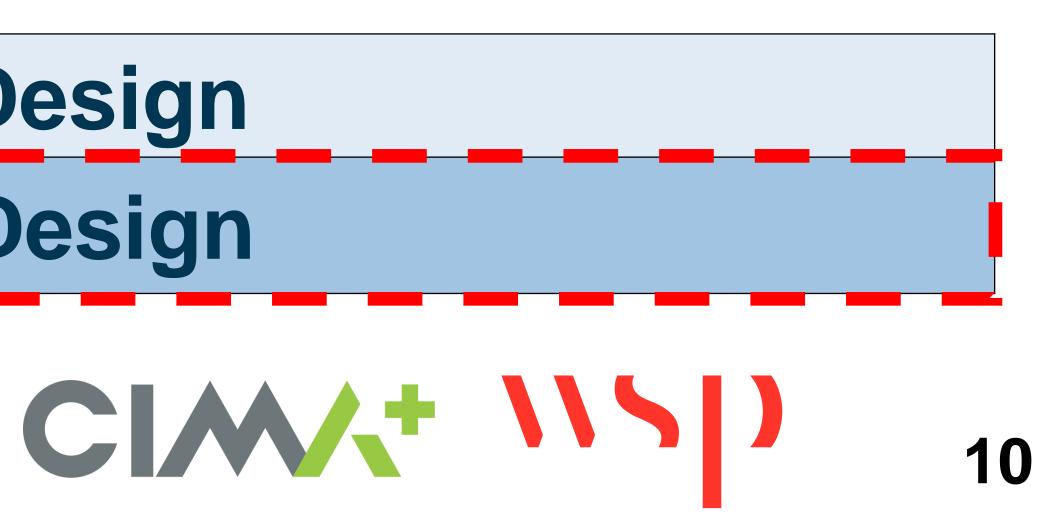
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## Recap of PIC 1 and 2 (EA Phases 1&2)

- **Design Alternatives for Exit Ramp from Mohawk Road:** 
  - **Alternative 1: Direct Taper (55m ramp radius)**
  - **Alternative 2: Parallel Lane (55m ramp radius)**
  - Alternative 3a: Direct Spiral (55m ramp radius)
  - Alternative 3b: Direct Spiral (90m ramp radius) **Alternative 4a: Modified Spiral (55m ramp radius)**
  - **Alternative 4b: Modified Spiral (90m ramp radius)**
- **Design Alternatives for Mohawk Entrance Ramp to Link Highway 403**

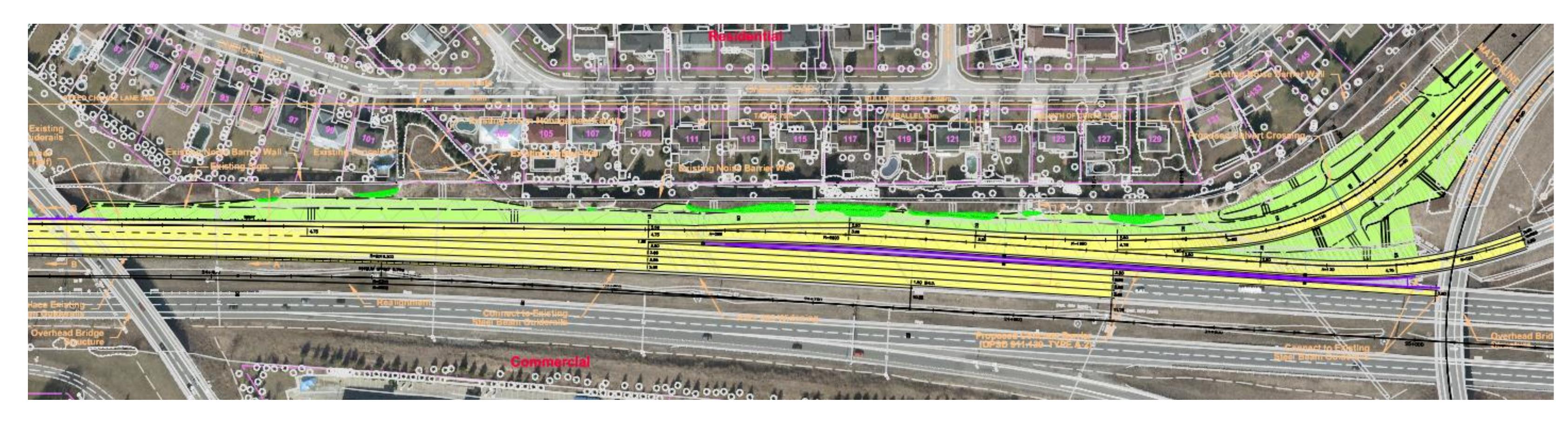
## **Alternative 1: Direct Taper Design Alternative 2: Parallel Lane Design**







## **Preferred Direct Spiral Ramp Design**



### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**







### **Presented at PIC #1 and 2**

Identify Design Consideratio ns and Constraints

**Design for** Exit Ramp from Mohawk Road:

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## Where We Are in The Design Process

**Design for** Mohawk Entrance **Ramp to Link** Highway 403 **Brantfordbound Ramp**:

**Technical Studies to** support the design for truck climbing lane

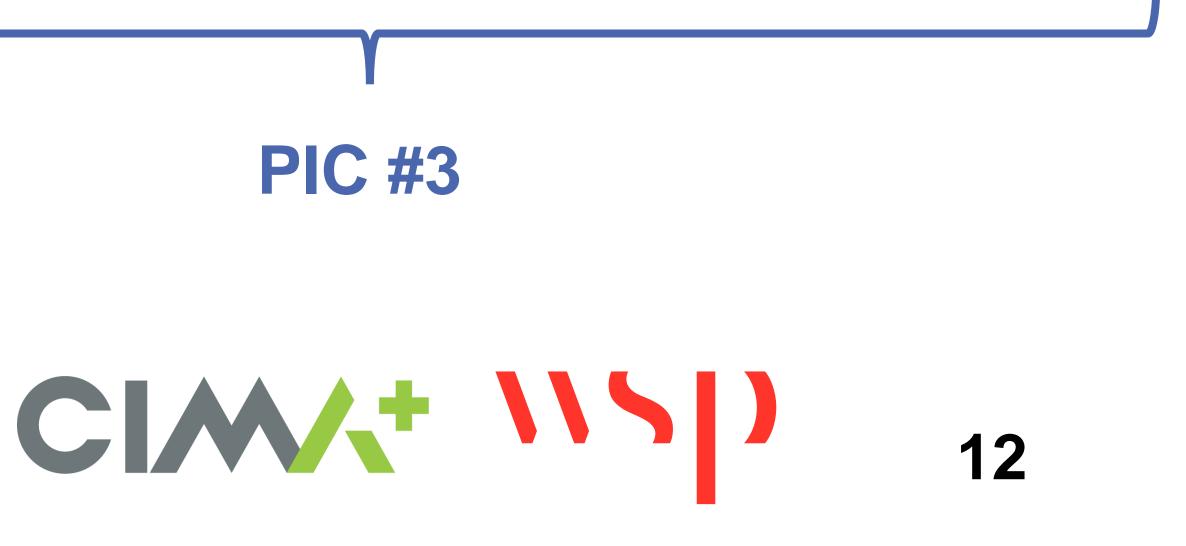




**Design for** Truck Climbing Lane **Extension** 

### Preliminary **Design:**

A combination of all design components in developing a preliminary plan for Mohawk Road Ramp





- A Stage 1 Archaeological Assessment (AA) Report was completed for the original project study area (from Mohawk Road to Southcote Road). The Stage 1 AA indicated that portions of the original study area retain archaeological potential
- A Stage 2 AA will be completed in the **detailed design phase** prior to disturbance to any areas that retain archaeological potential
- The extended study area (Highway 403 right-of-way from Southcote) Road to Highway 6) was extensively altered during the initial highway construction; and does not retain archaeological potential
- No further archaeological assessment is required

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## Stage 1 Archaeological Assessment





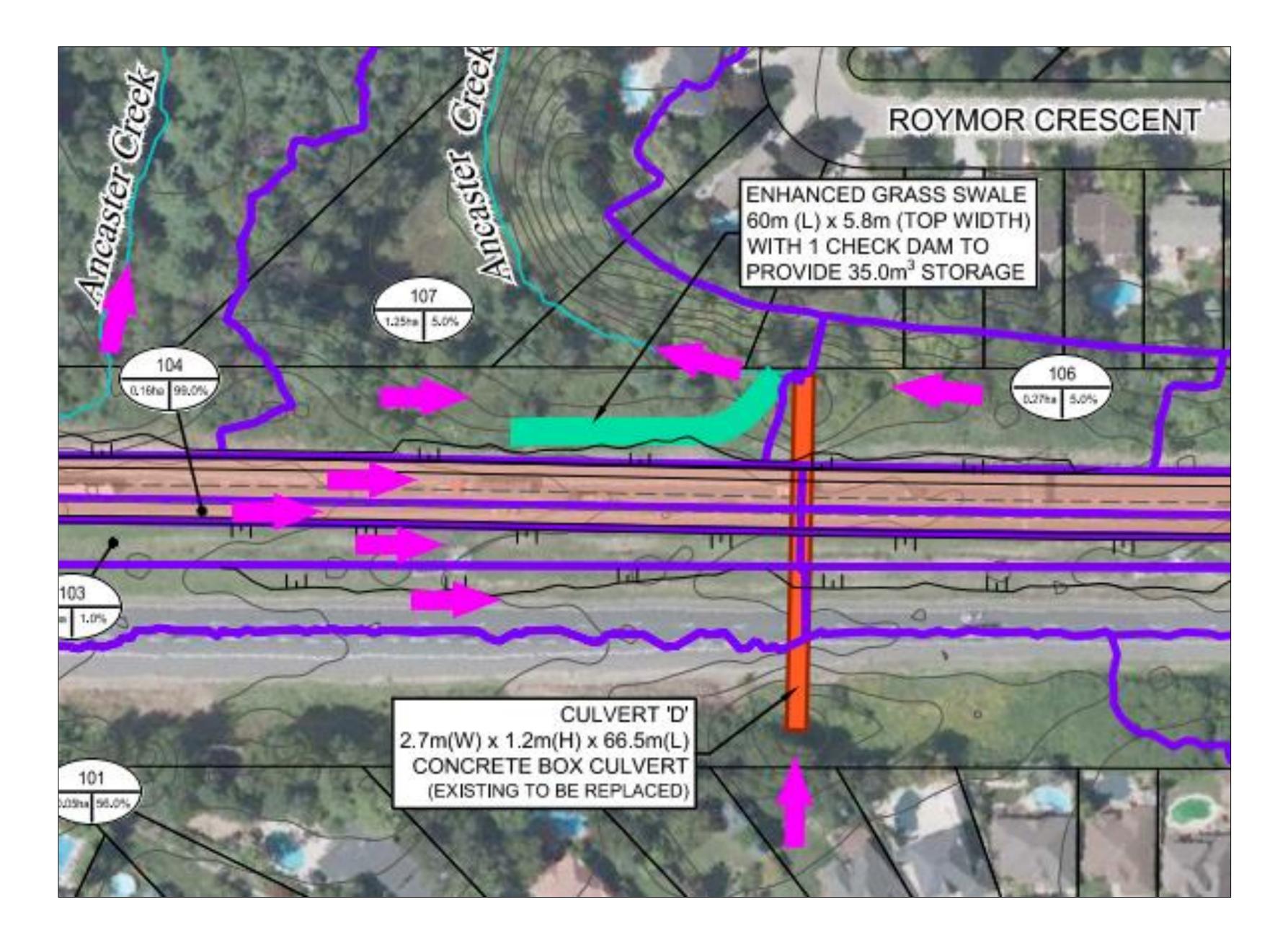


## **A Drainage and Stormwater** Management Assessment has been completed. Key recommendations based on the assessment include:

- For the post-development condition, four culverts are required: new Culverts A and B, existing Culvert C, and replacement Culvert D
- Implementation of enhanced grass swales with check dams to fulfill required stormwater management controls

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## Stormwater Management









# Natural Environment

## A Natural Environment Assessment has been completed. Key findings include:

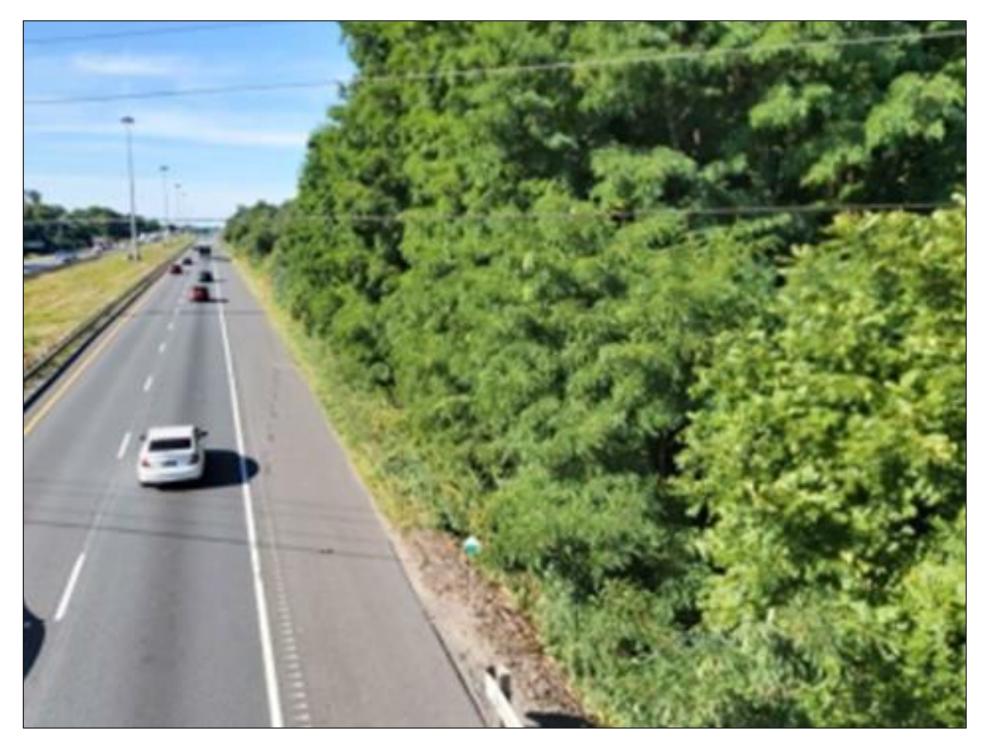
- downstream (northwest) of Highway 403. However, habitat.
- Tiffany Creek contributes to direct fish habitat downstream.
- There are three woodlots within the study area; with a fourth woodlot at the intersection of Southcote/Golf Links which has been cleared for a private development.
- Areas (such as woodlot at Hamilton Golf and Country) Club) within the study area serve as significant wildlife habitat.

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

 Ancaster Creek east tributary serves as direct fish habitat Ancaster Creek west tributary does not provide direct fish



Culvert D, Ancaster Creek East Tributary, Downstream of Highway 403 (northwest)

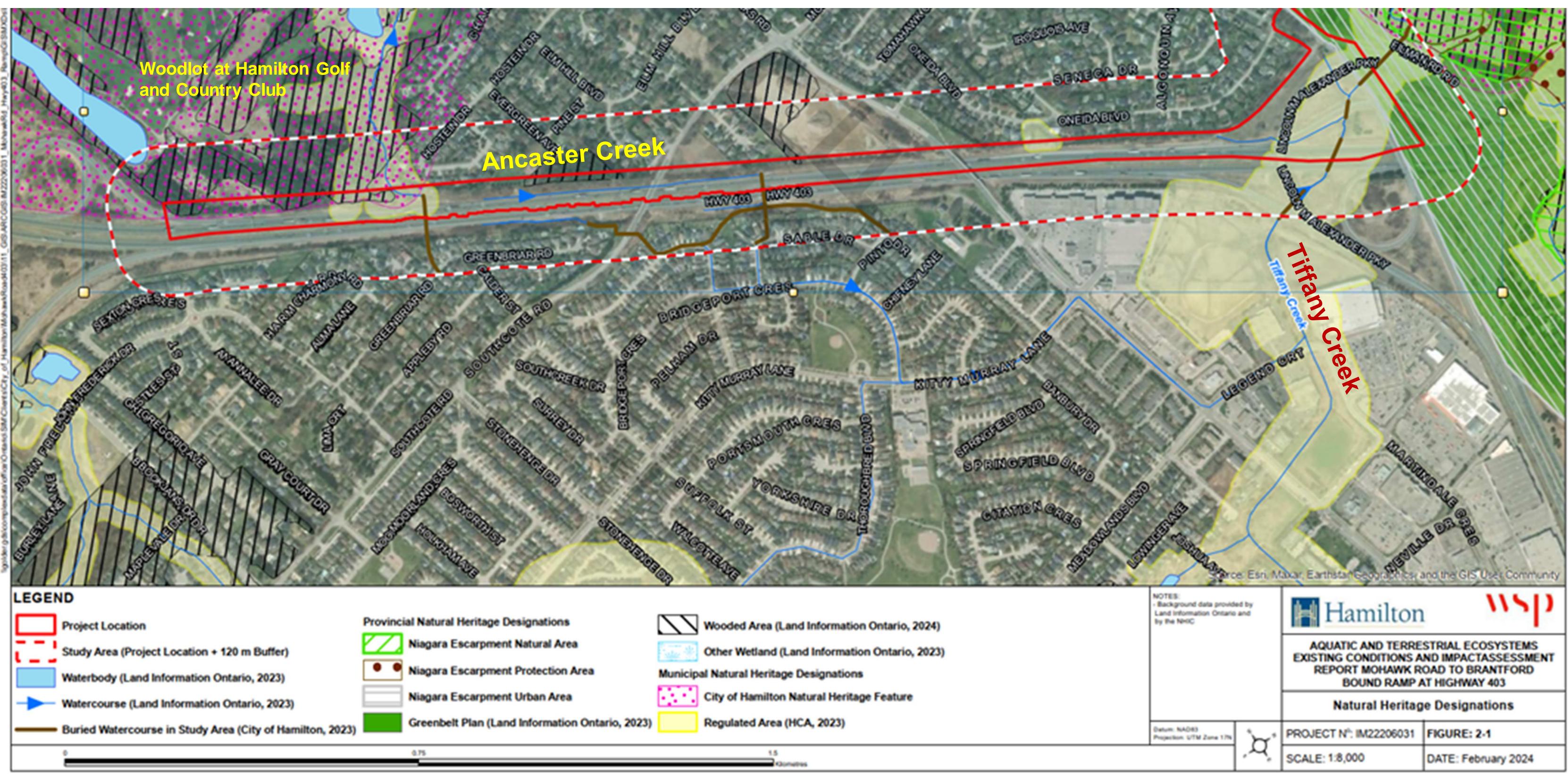


Highway 403: Facing south from Southcote June 2022





## Natural Environment



### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**





# Climate Change

The City of Hamilton's Climate Change Impact Adaptation Plan was reviewed to ensure that the project is planned and designed in a way to help reduce impacts of climate change. The table below outlines the relevant plan objectives as well as project-based supporting actions to achieve these objectives and more resilient future.

**Climate Change Impact Adaptation Pla** 

Incorporate climate change into future land use construction.

Reduce transportation disruption due to extrem and improve the safety of travel on roads, sidew (i.e. including washouts)

Proactively conserve and protect surface water resources.

Monitor, maintain and improve the diversity and trees and forests.

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

an Objectives	Project-Based
e, development and	<ul> <li>Construction best practices MTO and City specification</li> </ul>
ne weather events walks, and trails	<ul> <li>New storm drainage infrast increased intensity storm ex- criteria to minimize the incre associated possible damag washouts, due to climate ch</li> </ul>
r and groundwater	<ul> <li>Stormwater management s intensity storm events due t change criteria.</li> </ul>
d resiliency of urban	<ul> <li>Vegetation removal will be a</li> <li>A tree preservation plan will phase and implemented in</li> </ul>

**Supporting Actions** 

s will be followed in accordance with ۱S.

structure will be designed considering events per MTO climate change reased risk of flooding and ge to roadway infrastructure including hange.

strategy will consider increased to climate change per MTO climate

minimized to the degree possible. ill be prepared in the detailed design construction.







# **Truck Climbing Lane Extension Alternatives**

# Highway 6 On-Ramp

terminates/merges before Highway 6 On-Ramp

# Highway 6 On-Ramp

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

## Design Alternatives - Truck Climbing Lane

The following three alternative were considered for the truck climbing lane extension:

Alternative 1: Widening on west side south of Southcote Road, must exit at

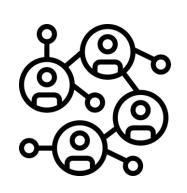
## Alternative 2: Widening on west side south of Southcote Road, TCL

Alternative 3: Widening towards median south of Southcote Road, must exit at









### **Socio-Economic Environment:**

- Avoid or minimize impacts to private property
- Community effects (Noise, Air Quality, Lighting) Impacts)
- Compatibility with existing and future land use
- Consistency with planning policies and directions



- Potential to impact fish and fish habitat
- Potential to impact significant natural features / areas
- Potential to impact wildlife species, wildlife habitats and species at risk (SAR)

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

## Factors for Assessment and Evaluation



- Potential to impact archaeological resources
- Potential to impact cultural heritage resources



- Traffic Safety and Operations
- Road Geometry
- Utilities
- **Emergency Services**
- Constructability
- **Construction Costs**

### **Cultural Environment**

### **Technical Considerations:**









## **Assessment and Evaluation of Truck Climbing Lane Extension Alternatives**

The evaluation of alternatives was completed in consultation with key stakeholders including MTO.

Factors for Assessment / Evaluation	Alternative 1: Widening on west side south of Southcote Road, must exit at Highway 6 On- Ramp	Alternative 2: Widening on west side south of Southcote Road, TCL terminates/merges before Highway 6 On-Ramp
Technical	Low Impact	High Impact
Natural Environment	High Impact	Low Impact
Cultural Environment	No Impact	No Impact
Socio-Economic Environment	Low Impact	Low Impact

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

# **Evaluation of Design Alternatives**

**Alternative 3: Widening** towards median south of Southcote Road, must exit at Highway 6 On-Ramp

Low Impact

Low Impact

No Impact

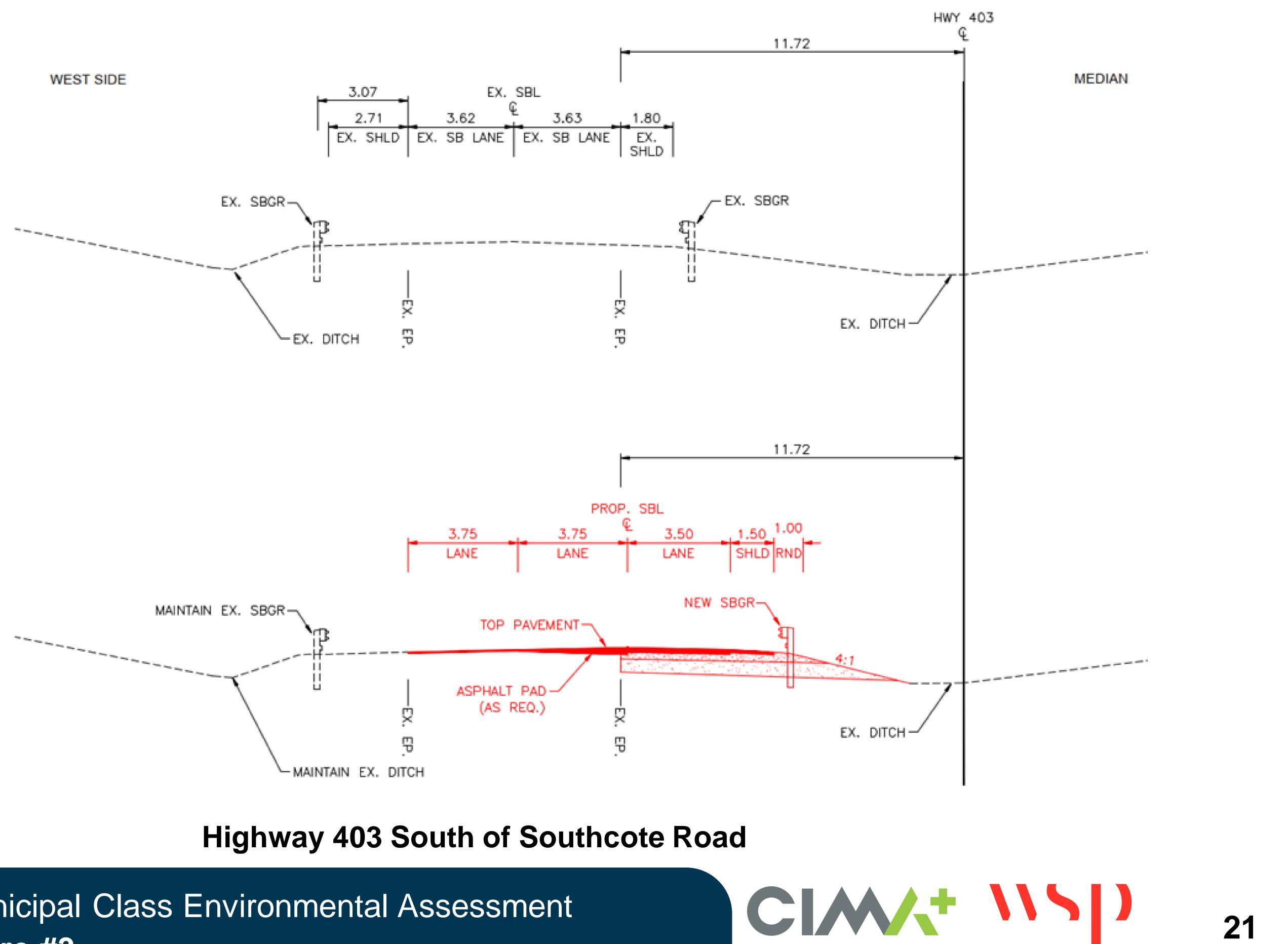
Low Impact



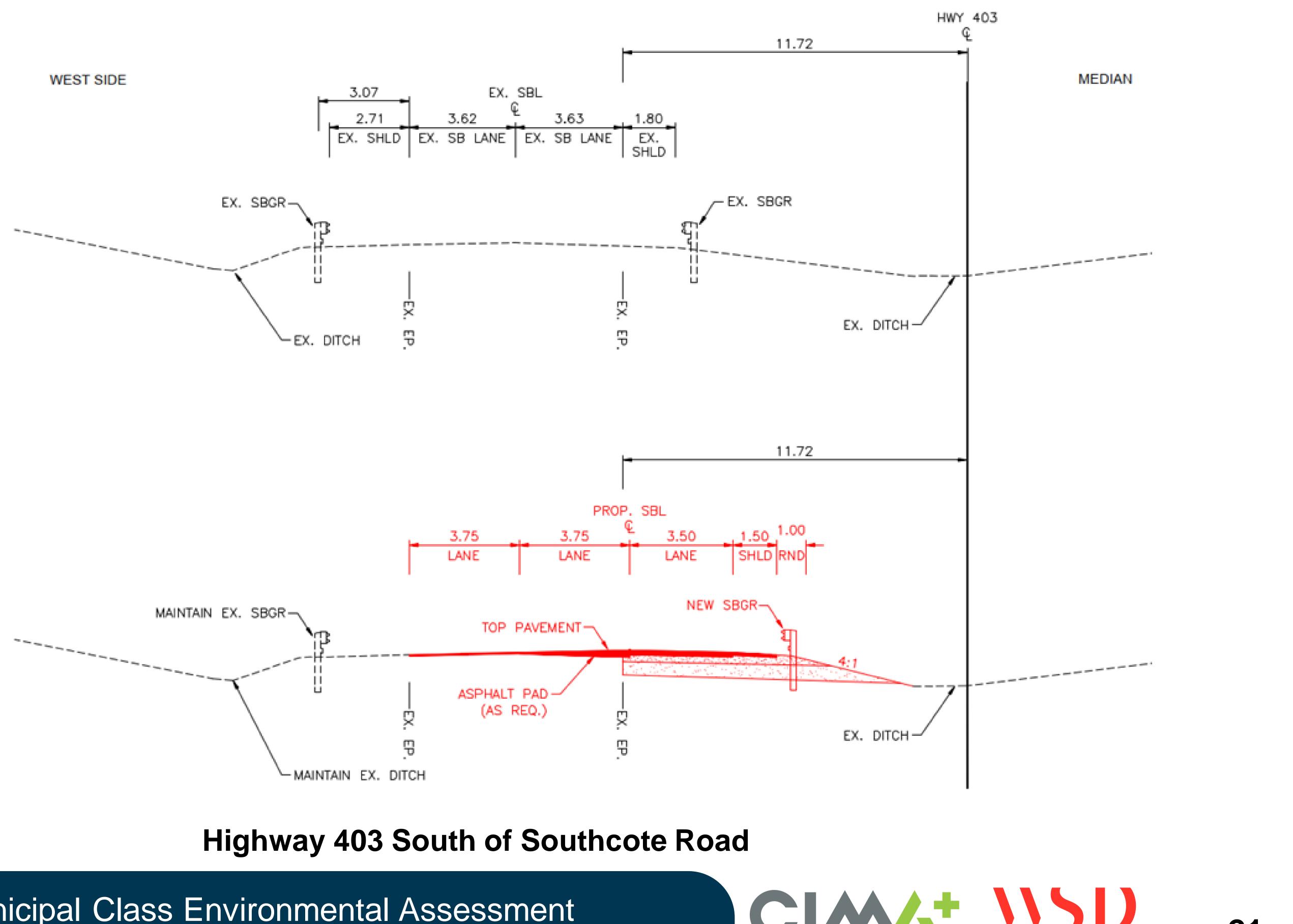




### **Existing Conditions**



**Proposed Conditions** 

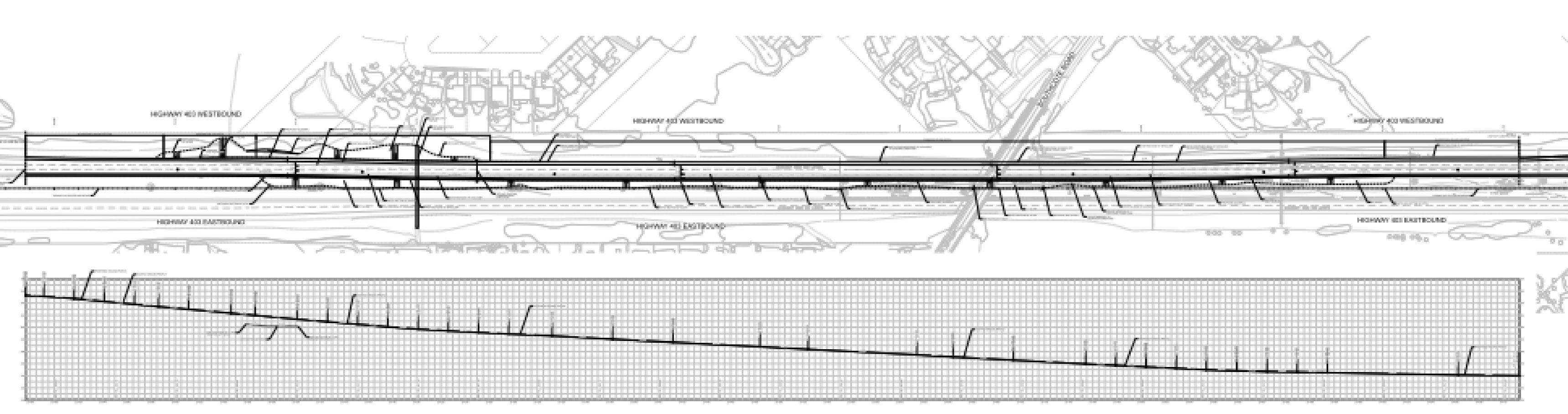


### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

## **Preliminary Typical Cross Section**

## Preliminary Preferred Plan





### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**





## Potential Impacts & Mitigation Measures

Following this Public Information Centre, an impact assessment will be completed on the preliminary preferred plan to consider potential negative and positive effects to socio-economic, cultural heritage, natural, and technical environments. Mitigation measures and commitments to future work will be recommended to ensure that all regulatory requirements are met, and future permits / approvals are clearly identified. The following table provides a general outline of the proposed mitigation measures.

### Summary of Preliminary Mitigation Measures and Commitments to Future Work

Socio-Economic Environment	
Property	<ul> <li>No property i</li> </ul>
Noise	A noise study
Air Quality	Further study
<b>Design and Construction</b>	
Utilities	SUE to be co
Materials Management	Material Man
Construction Monitoring	Full time mon
Cultural Environment	
Archaeology	Stage 2 Archa
Cultural Heritage	No cultural here
Indigenous Community Rights	<ul> <li>Subject to furt</li> </ul>
Natural Environment	
General	Typical provision
Aquatic	Abide by MNR
Vegetation	Tree protection
Wildlife	Clearing outsid

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

impacts.

ly will be completed for the preferred alternative. Standard construction operational constraints. y not warranted. Standard construction operational constraints.

ompleted at detailed design phase. Final conflicts to be identified at detailed design phase. nagement in accordance with O.Reg. 406/19 and standard MTO specifications. nitoring of construction including environmental inspection and reporting.

aeological Investigation to be completed for original scope area (Mohawk Road to Southcote Road). eritage impacts.

ther consultation with First Nations.

ions including ESC, Spill Prevention and Response, Work Zone Delineation, Dust Control Plan

RF in-water timing window, isolate in-water work, temporary flow passage, fish salvage, on fencing, follow Hamilton Trees By-Law, clearing outside bird nesting and bat roosting windows. ide bird nesting and bat roosting windows, wildlife exclusion fencing.

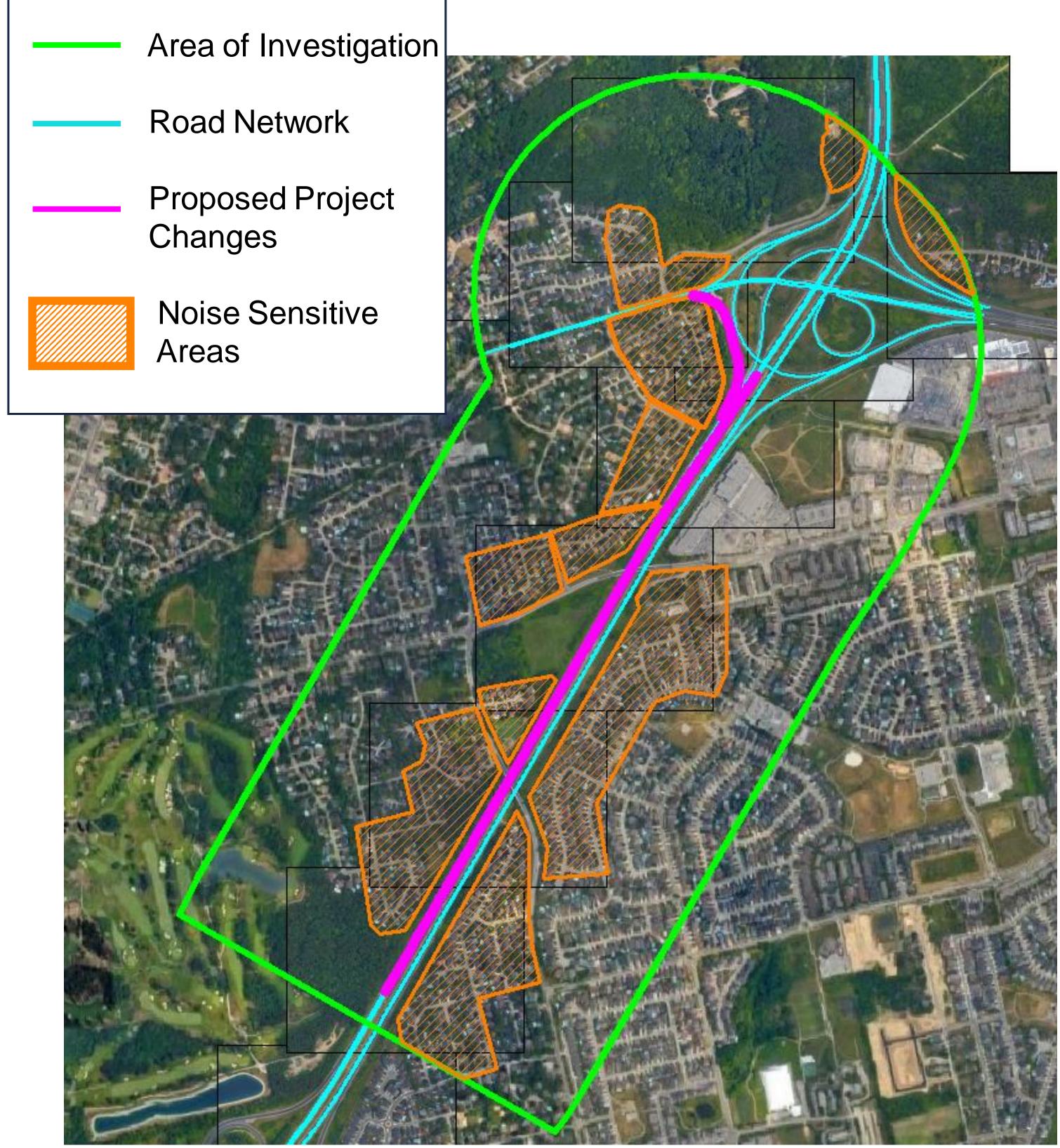


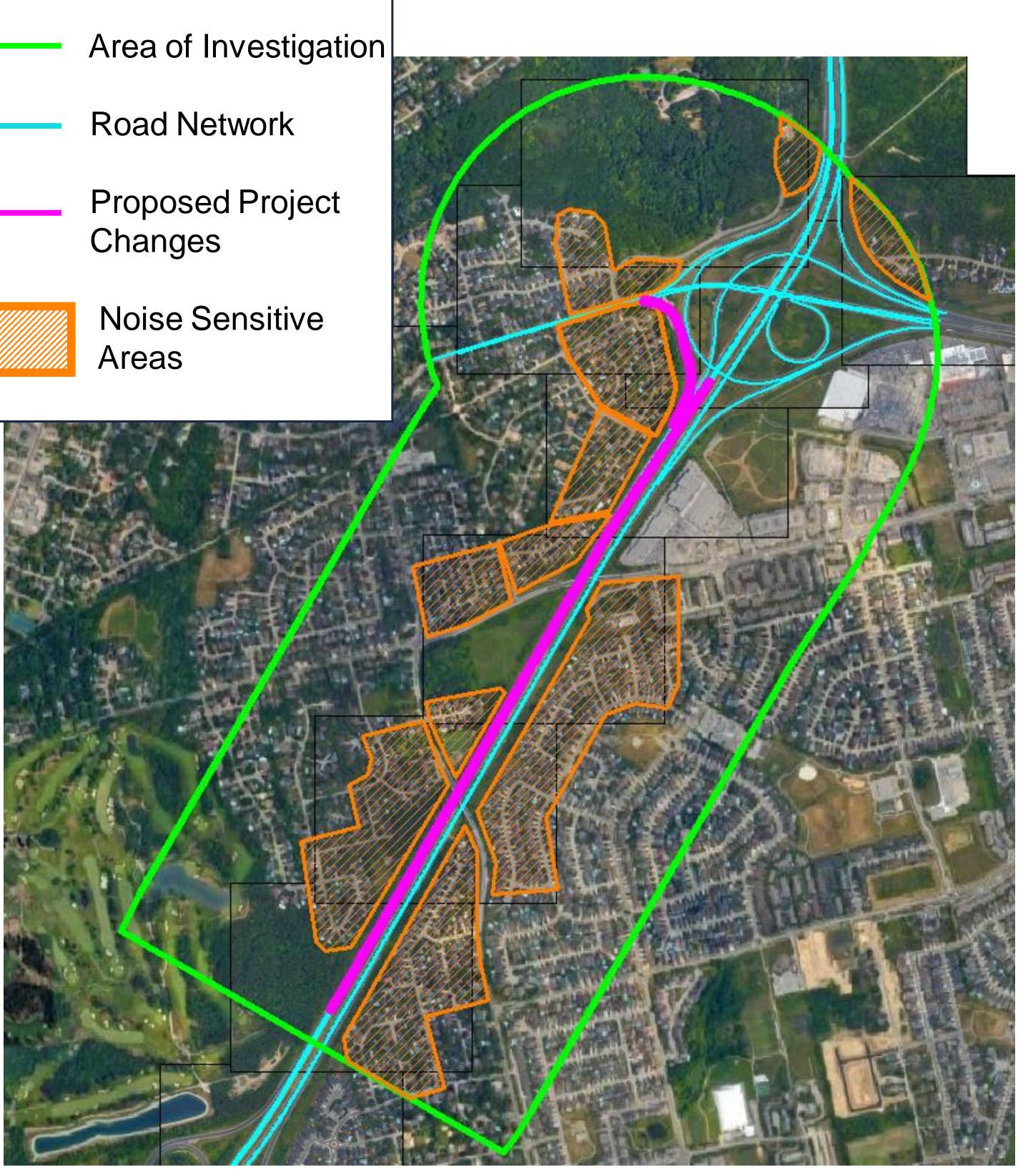


# Noise Study

- A Noise Study (NS) is in progress, following guidance from the MTO's "Environmental Guide for Noise", February 2022 (MTO Guide).
- The MTO Guide gives the following criteria for mitigation investigation:
  - Projected Sound Level of "Future Build" scenario is greater than or equal to 65 dBA; AND/OR,
  - Change in Sound Level above the "Future No-Build" scenario is greater than or equal to 5 dB

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**













- The NS includes noise prediction modelling inputs such as:
  - Terrain
  - Road Traffic (speed, volume, etc.)
  - Existing Shielding (i.e. terrain, noise walls)
  - Outdoor Living Areas (OLAs) within an NSA (i.e. area associated with a noise sensitive land use with the intended use of enjoyment of the outdoor environment)
- The NS considers the potential noise effects resulting from the proposed changes at adjacent Noise Sensitive Areas (NSAs)
- The NS evaluates the difference in sound levels between "Future No-Build" and "Future Build" as well as overall sound level for the "Future Build"

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 









### Operations

- A noise study was previously carried out for the original proposed Mohawk Road ramp in September 2014, and is summarised as follows:
  - The study was limited to the original Project limits (Mohawk Road to north of Golf Links Road) and noise mitigation was recommended near Mohawk Road
  - The findings are generally consistent with the current NS, which includes the extended Project Limits, and updated modelling inputs and noise criteria guidance from the MTO
- The current NS completed a preliminary investigation and found:
  - "Future Build" sound levels are predicted to be in the range of 65 dBA in some areas, and;
  - The change in sound level due to the Project are expected to be less than 5 dB

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**







### Construction

avoid excessive use of backup alarms, etc.

## **Next Steps**

- The NS will confirm whether noise mitigation measures are required to be considered, and if so, their feasibility will be investigated per the MTO Guide
- If noise mitigation measures are being considered, they will be developed in consultation with the MTO
- Once completed, the results of the NS can be made available upon request
- The City of Hamilton is available for comments and discussion on the topic

Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3** 

 Construction activities are temporary and are considered as a necessary part of the Project. With adequate controls, impacts can be minimized. Good acoustic engineering practices should be incorporated as part of the construction management plan such as maintaining construction equipment in good condition,







### After this Public Information Centre, the following will be carried out:

- Review comments received and respond to any questions.
- impact assessment.
- recommendations of the Class EA study.

Please provide your input by mail or email to either of the following Project Team members:

### **Steve Molloy**

Project Manager City of Hamilton Phone: 905-546-2424 ext. 2975 Email tplanning@hamilton.ca

### Mohawk Road Ramp Municipal Class Environmental Assessment **Public Information Centre #3**

Incorporate any revisions and finalize the preliminary plan for the Mohawk Road Ramp and complete the

Prepare the Environmental Study Report, which documents the decision-making process and

• File the Environmental Study Report for public review (30-day review period).

### Visit the study website at:

https://www.hamilton.ca/mohawk-road-ramp

**David Sinke** Consultant Project Manager WSP Canada Phone: 905-630-5842 Email: david.sinke@wsp.com

