



Steeles Avenue (Regional Road 8) Transportation Corridor Improvements Municipal Class Environmental Assessment Study

**Tremaine Road (Regional Road 22) to Industrial Drive
Town of Milton**

Public Information Centre 2 – Online

April 15 to May 17, 2021



Purpose of Public Information Centre (PIC) 2

- Review the study area and study process
- Provide an overview of the existing conditions
- Summarize key materials presented at the first PIC and public feedback received
- Review the design components and evaluation process
- Present the preliminary preferred design
- Identify next steps in the study
- Obtain community feedback

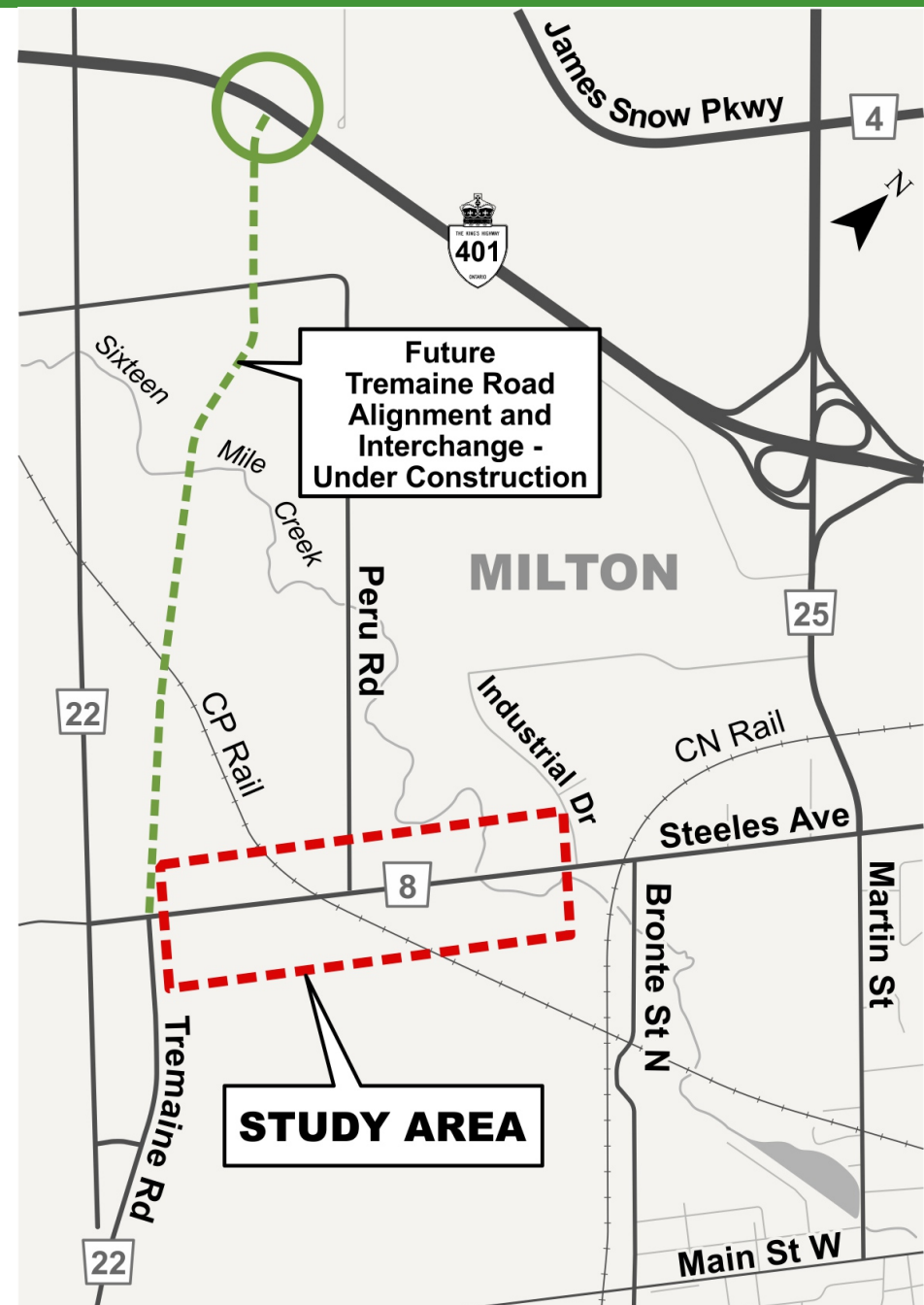


**Go to the Municipal Class
Environmental Assessment
Studies page on halton.ca
to learn more about the**

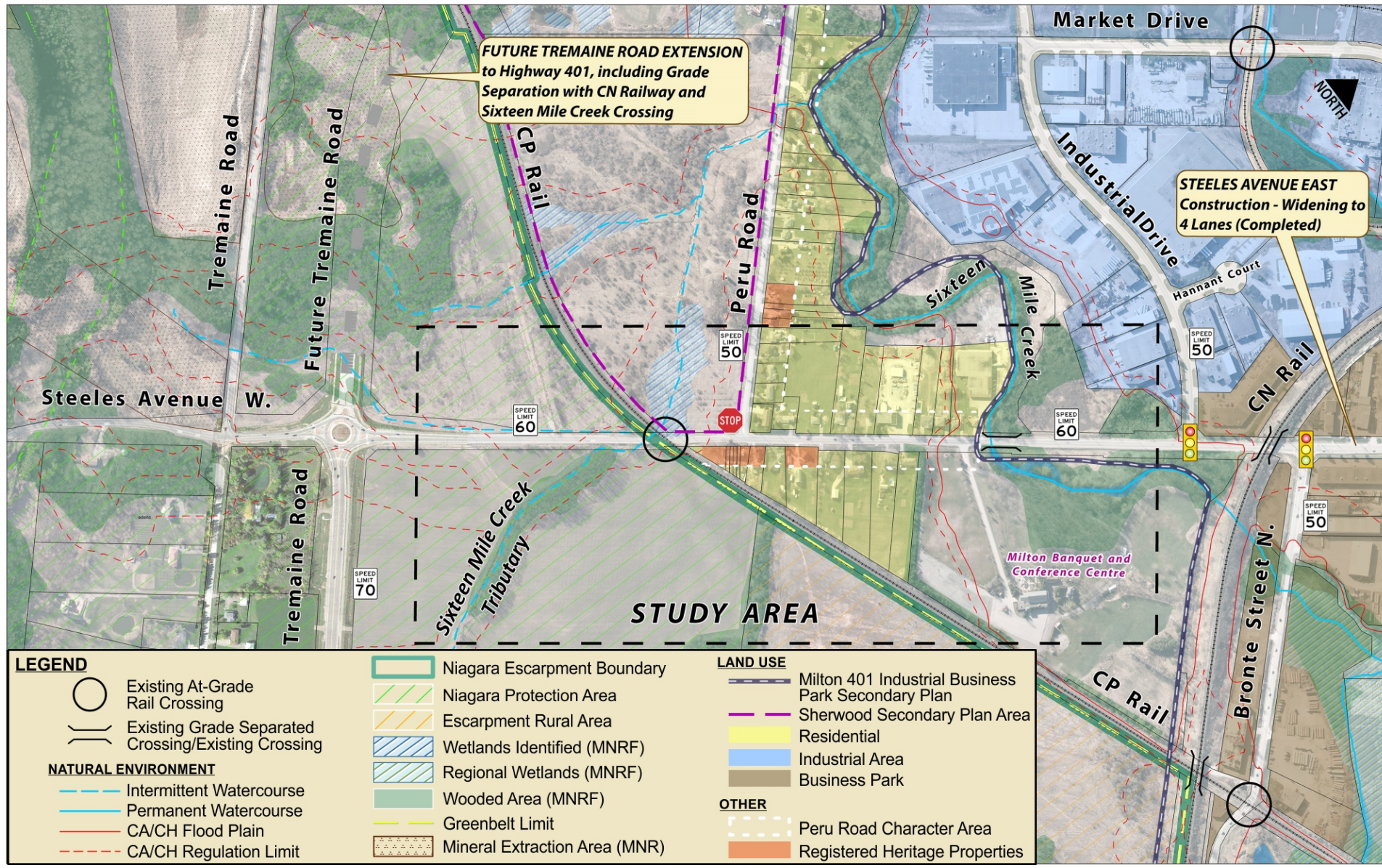
[Steeles Avenue Corridor Study](#)

Study Area

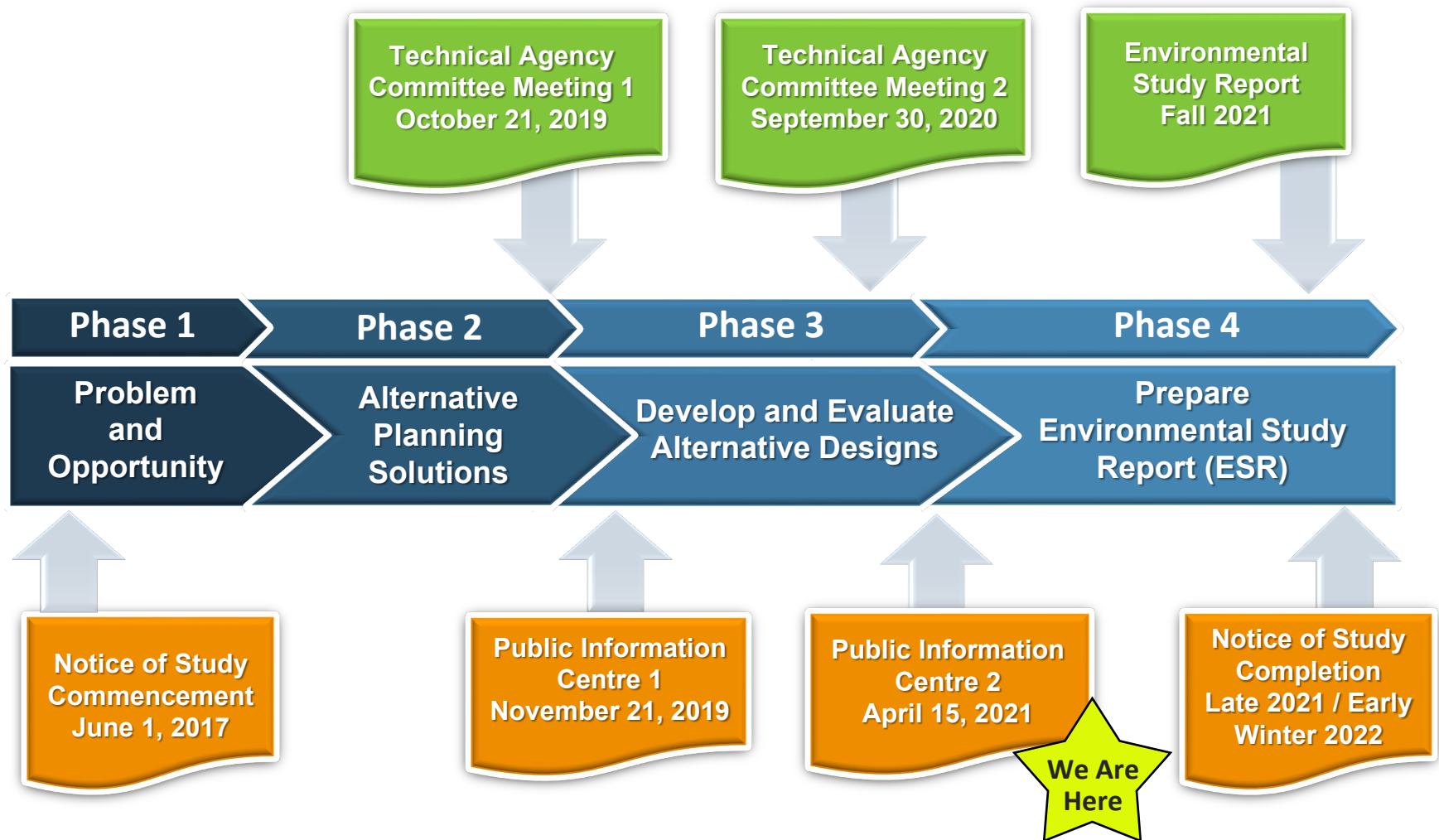
- Steeles Avenue is a Halton Region Major Arterial serving both local and regional trips
- It is a key east-west road connection with future access to Highway 401 via the future Tremaine Road extension and interchange
- The study area extends from Tremaine Road to Industrial Drive
- Steeles Avenue is adjacent to the Sherwood Survey Secondary Plan area (future development)



Existing Conditions



Study Process and Schedule



Steeles Avenue Municipal Class Environmental Assessment Study PIC 2

Video 2 – Background

Public Information Centre 1 Summary

PIC 1 was held on November 21, 2019 to present information and obtain public feedback on:

- Existing conditions including land use, cultural heritage, natural environment, transportation and drainage conditions
- Transportation problems and opportunities and the need for improvements on Steeles Avenue
- The preferred planning solution to widen Steeles Avenue
- Design components including the proposed typical road cross-section and alternative corridor concepts

Roadway Design Components

Road Cross-Section

Arrangement of roadway elements including travel lanes and active transportation

Road Corridor Concept

Options for where the roadway corridor may be located

Road Alignment

Options for the alignment of the roadway within the corridor

CP Rail Grade Separation

Overpass (road over rail) or Underpass (road under rail) options will be considered

Preliminary Design

Represents a combination of all components in addition to streetscape design to create a seamless plan

Presented at PIC 1

Typical Road Cross-Section

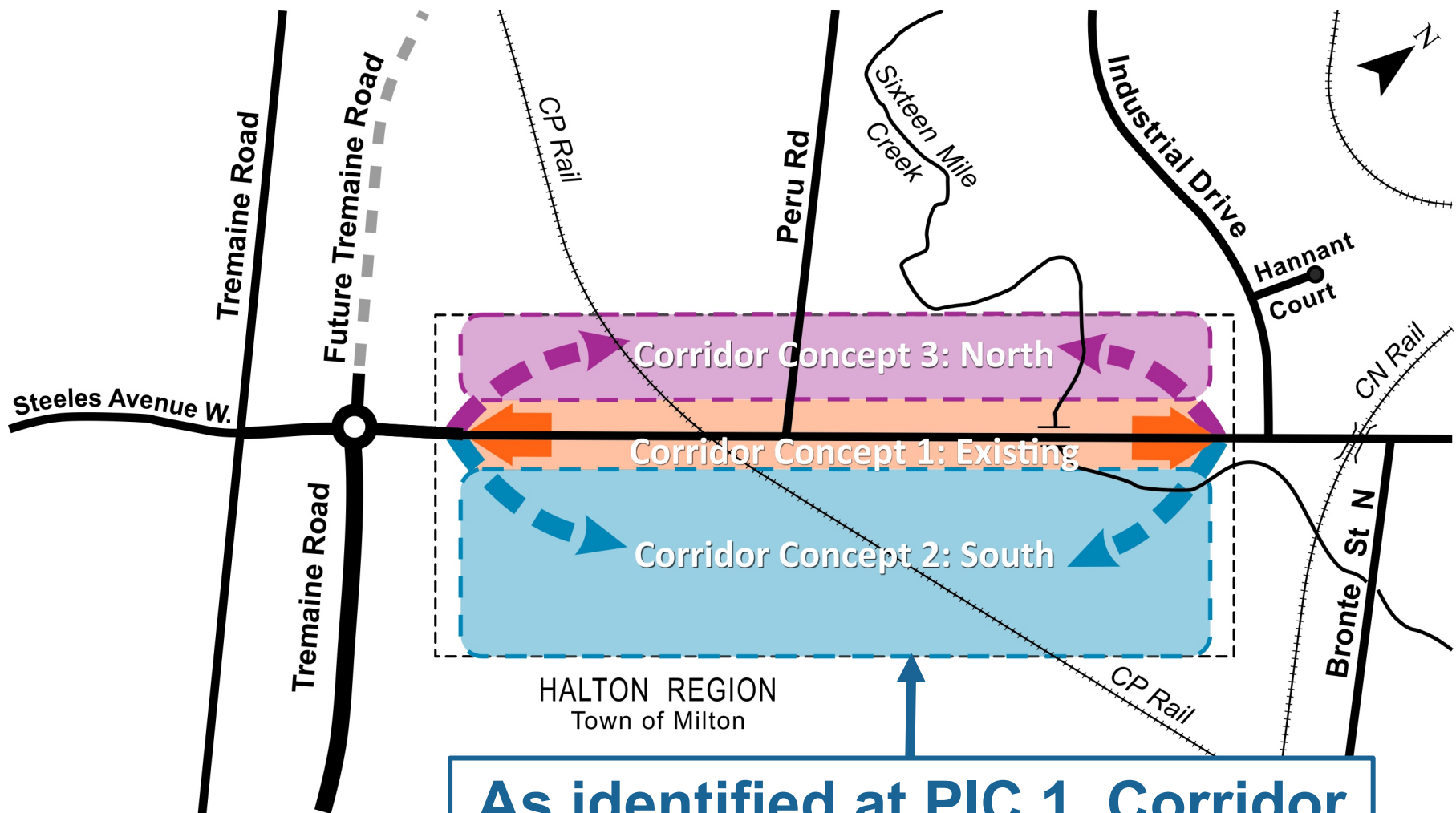
The typical road cross-section for the proposed 4-lane Steeles Avenue has been developed based on:

- Planned overall road right-of-way width of 35 m, consistent with the Halton Region Transportation Master Plan, Active Transportation Master Plan and Official Plan
- Provision of two 3.5 m vehicle travel lanes in each direction
- Provision of 1.8 m on-road bike lanes and 3.0 m multi-use paths on both sides of the road to accommodate cyclists, pedestrians and users of mobility devices

Some adjustments to the road cross-section may be made as part of future detailed design to reduce localized impacts, where feasible.



Road Corridor Concepts



As identified at PIC 1, Corridor Concept 2 – South is Preferred

What We Heard at PIC 1

- Support for a new corridor south of existing Steeles Avenue and for the proposed grade separation at the Canadian Pacific (CP) Rail line.
- Questions about:
 - specific property impacts to residents
 - future land use and access for development
 - timing of Tremaine Road connection to Highway 401
 - potential traffic impacts through neighbourhood of Peru and improvement timing

Steeles Avenue Municipal Class Environmental Assessment Study PIC 2

Video 3 – Road Alignment Alternatives

Roadway Design Components

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Focus of PIC 2

Factors for Analysis and Evaluation



Socio-Economic Environment

- Property and access
- Community fabric / character
- Noise and air quality
- Parks and recreational facilities
- Government plans and policies
- Land use
- Agriculture and operations



Cultural Environment

- Archeological resources
- Cultural heritage resources (including Peru Road Character Area)



Natural Environment

- Niagara Escarpment Plan area and associated policies
- Designated natural features and environmentally-sensitive areas
- Fish and aquatic habitat
- Wetlands
- Woodlands and other upland vegetation
- Wildlife habitats and linkages
- Species at Risk



Surface Water and Groundwater

- Fluvial geomorphology
- Drainage and stormwater management
- Groundwater



Transportation & Technical

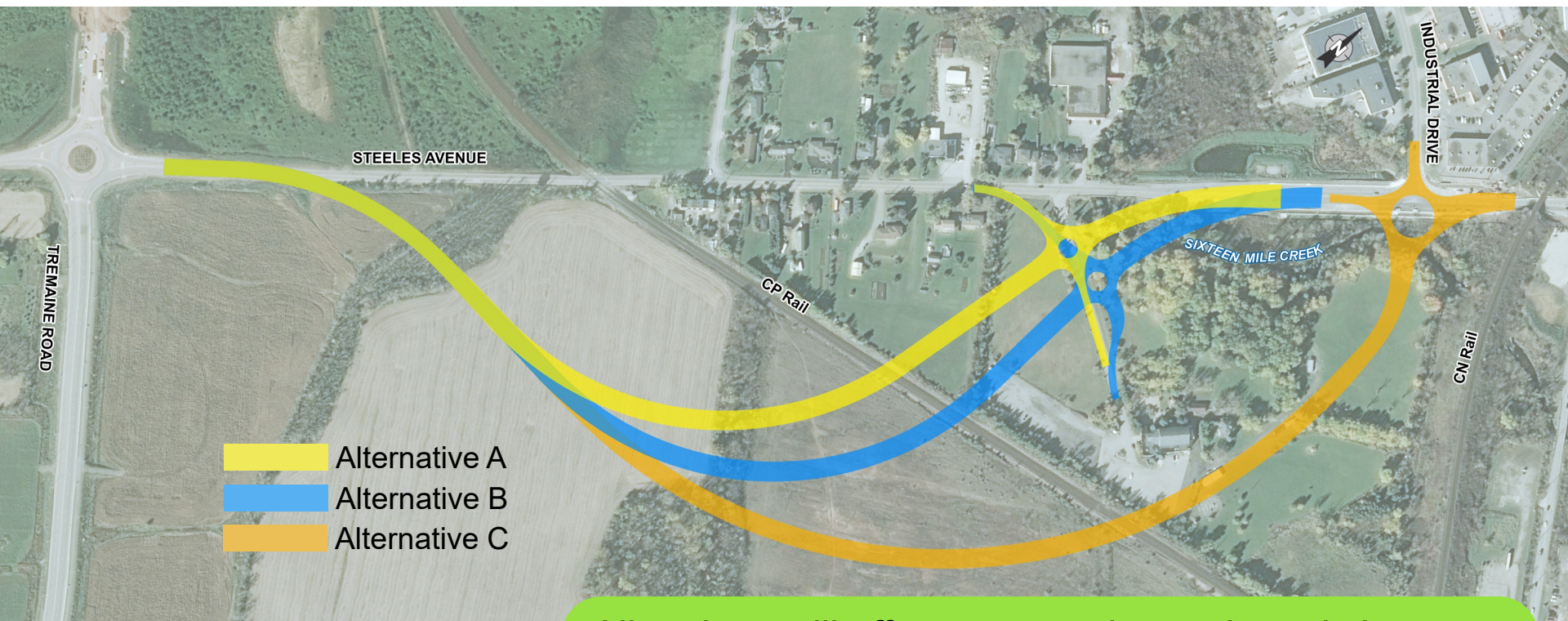
- Transportation network
- Emergency services
- Multi-modal transportation
- Geometric design standards
- Constructability issues
- Utilities



Preliminary Cost Estimate

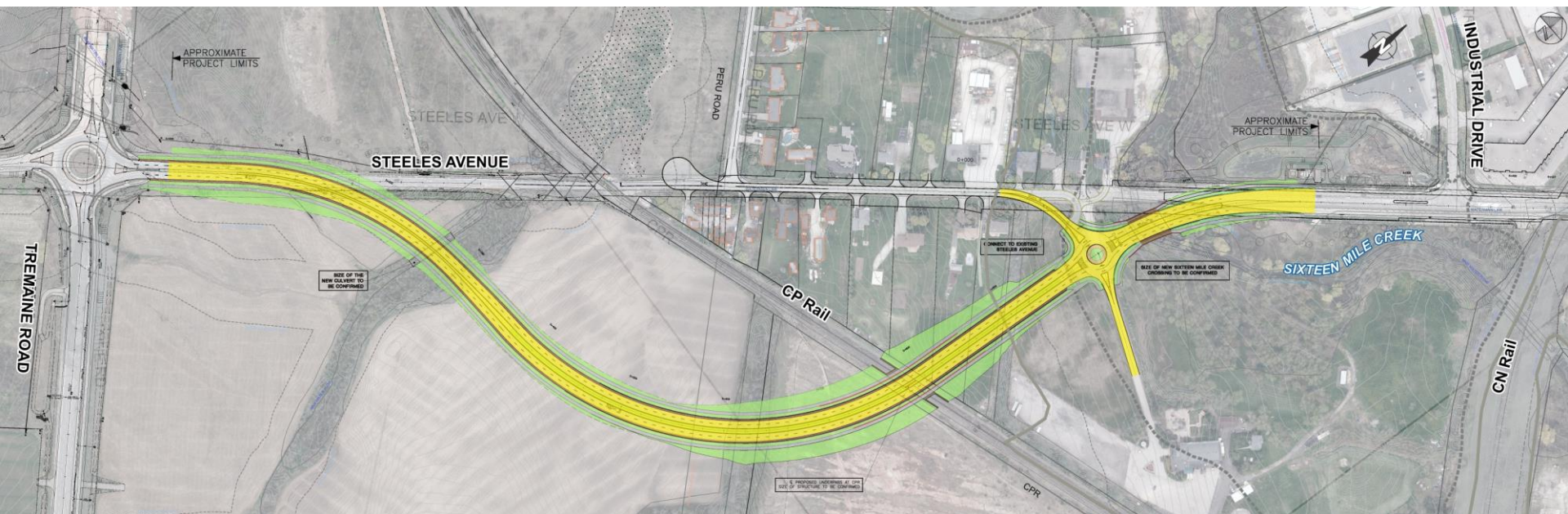
- High-level cost estimate for comparative purposes only

Road Alignment Alternatives



All options will offer a connection to the existing Steeles Avenue and Peru Road. While the connection is depicted as a roundabout on this schematic, a signalized intersection is also being considered. The roundabout is shown here, since it has a larger footprint compared to the signalized intersection.

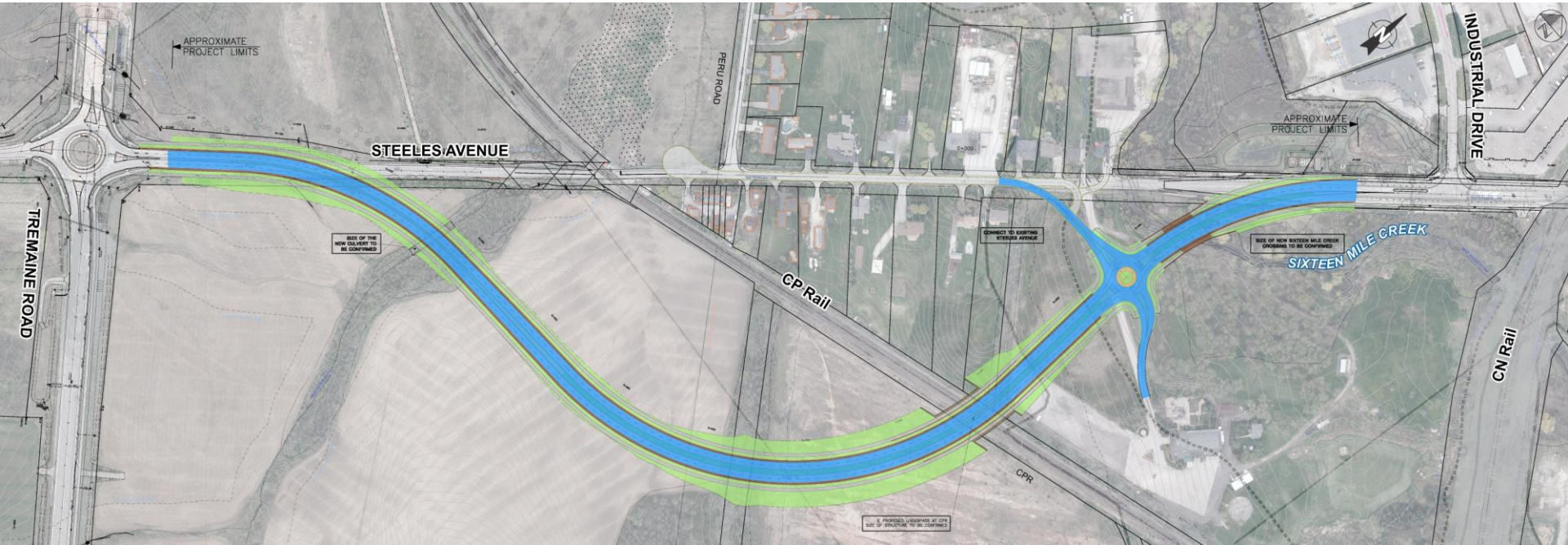
Road Alignment - Alternative A



- Shortest length
- Greatest impacts to residential backyards
- Crossing location at Sixteen Mile Creek is not ideal

All options will offer a connection to the existing Steeles Avenue and Peru Road. While the connection is depicted as a roundabout on this schematic, a signalized intersection is also being considered.

Road Alignment - Alternative B



- Best crossing angle at CP Rail line
- Best crossing location at Sixteen Mile Creek
- Fewer impacts to residential backyards compared to Alternative A

All options will offer a connection to the existing Steeles Avenue and Peru Road. While the connection is depicted as a roundabout on this schematic, a signalized intersection is also being considered.

Road Alignment - Alternative C



- Does not meet flood protection design criteria
- Greatest impact to Sixteen Mile Creek and other natural features
- Greatest impact to local business

All options will offer a connection to the existing Steeles Avenue and Peru Road. While the connection is depicted as a roundabout on this schematic, a signalized intersection is also being considered.

Road Alignment Alternatives - Evaluation

Factors	Alternative A	Alternative B	Alternative C
Socio-Economic	Less Preferred	More Preferred	Less Preferred
Natural Environment	More Preferred	Moderately Preferred	Less Preferred
Surface Water and Groundwater	Moderately Preferred	More Preferred	Less Preferred
Cultural Environment	More Preferred	More Preferred	Moderately Preferred
Transportation	More Preferred	More Preferred	Moderately Preferred
Technical Considerations	More Preferred	More Preferred	Less Preferred
Estimated Capital Costs	More Preferred	More Preferred	Less Preferred
Overall Summary	Moderately Preferred <ul style="list-style-type: none"> Alternative A is slightly less preferred than Alternative B, although these are ranked similar under Cultural Environment, Transportation Considerations and Costs. Results in greater impacts to residential backyards compared to Alternative B. Slightly more preferred under natural environment; however, this is offset by the poor crossing location of Sixteen Mile Creek and greater valley impacts. Achieves flood protection design criteria. 	Most Preferred <ul style="list-style-type: none"> Alternative B is most preferred because it achieves flood protection design criteria and has a much better Sixteen Mile Creek crossing location than Alternatives A and C. Has fewer impacts to residential backyards than Alternative B. Ranked similar to Alternative A under Cultural Environment, Transportation Considerations and Costs. 	Least Preferred <ul style="list-style-type: none"> Alternative C is least preferred because it does not achieve flood protection design criteria. Involves much greater impact to Sixteen Mile Creek valley and other natural features. Greater impact to local business. Less efficient transportation network given the tie-in to existing Steeles Avenue and the longer route. Poor crossing angle at CP Rail. Higher cost.

CP Rail Grade Separation Alternatives

Underpass (road under rail) and overpass (road over rail) alternatives were evaluated. The underpass is preferred because it:

- has less property impact;
- is more consistent with Niagara Escarpment Plan policies that help protect escarpment views;
- has less visual intrusion and reduced traffic noise to the nearby neighbourhood; and
- is more attractive to pedestrians, cyclists and users of mobility devices since the multi-use path is raised above the roadway, under the bridge.



Example of Underpass

Steeles Avenue Municipal Class Environmental Assessment Study PIC 2

Video 4 – Preliminary Preferred Design and Next Steps

Preliminary Preferred Design Summary

Existing Steeles Avenue to end in cul-de-sac just east of CP Rail line

Steeles Avenue to go under CP Railway

New structural culvert

Roundabout or signalized intersection to connect to existing Steeles Avenue and Peru Road

Photo Renderings



This visual depicts a potential roundabout intersection at Steeles Avenue. You can see the underpass shown in the top left of the rendering.

The connection to existing Steeles Avenue will either be a roundabout or a signalized intersection. The intersection type will be confirmed in the future detailed design stage.

Photo Renderings



Photo Rendering

A connection to the existing Steeles Avenue will be provided. While the connection is depicted as a roundabout here, a signalized intersection is also being considered.



Photo Rendering



Photo Rendering



Photo Rendering

Preliminary Mitigation Measures

- The preliminary preferred design will be subject to a final assessment of impacts, considering community, cultural, natural environment and socio-economic factors
- Based on the impacts, preliminary mitigation measures will be recommended in the Environmental Study Report along with commitments for future work
- These measures will be based on Halton Region policies, standards and best practices as well as regulatory agency requirements and conditions of approval
- Preliminary measures will be refined during the future detailed design phase and then implemented during and following construction, with appropriate monitoring programs in place



Example of Underpass
Tremaine Road Extension Construction Activities

Next Steps

- Review and respond to questions and comments from this PIC
- Make refinements to the preliminary preferred design in light of feedback received
- Undertake additional design review with regulatory agencies and directly affected stakeholders
- Prepare the Environmental Study Report (ESR) documenting the decision-making process and final recommendations of the study

**Please submit your comments by
May 17, 2021
Thank you for your participation!**

