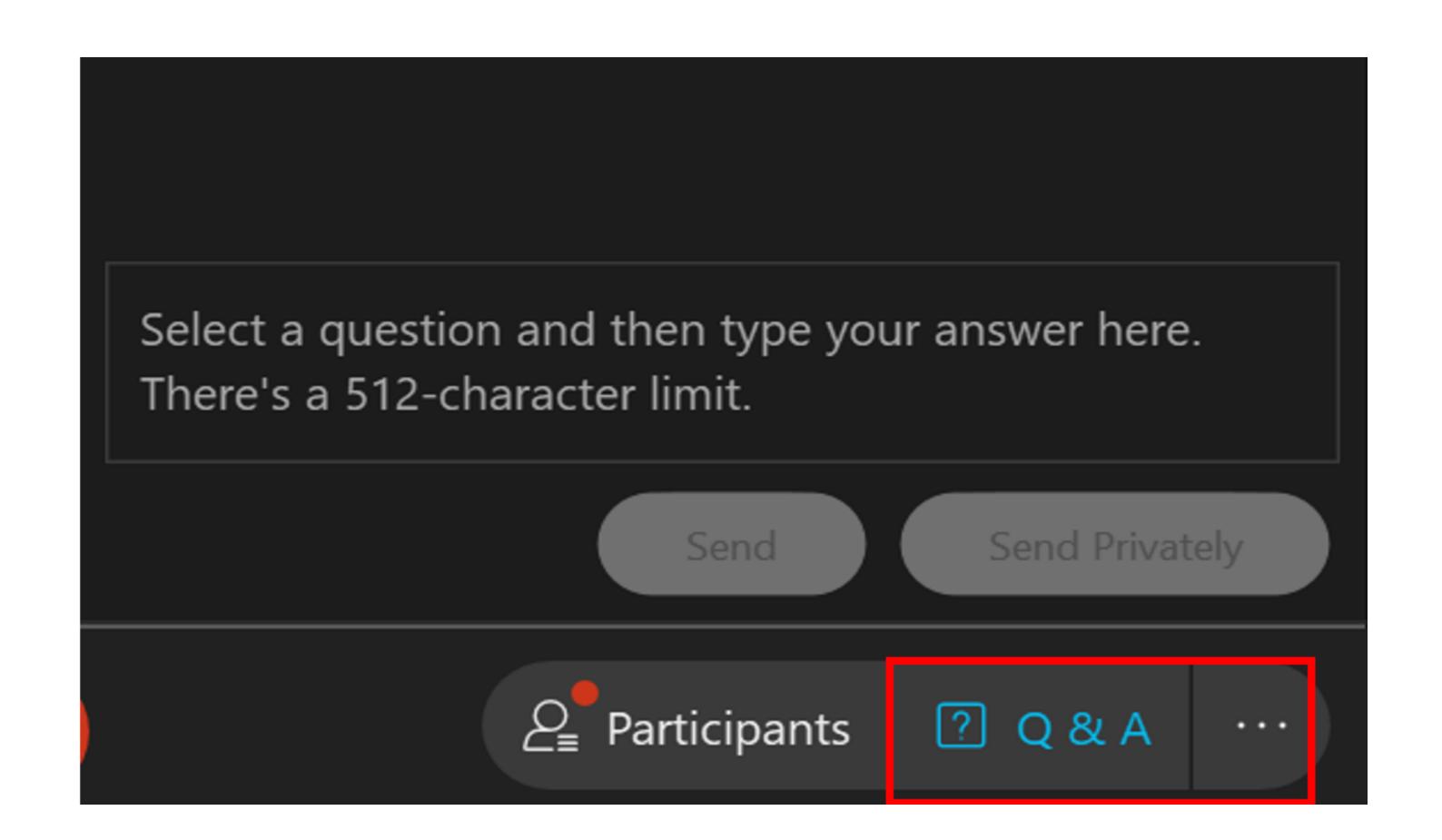
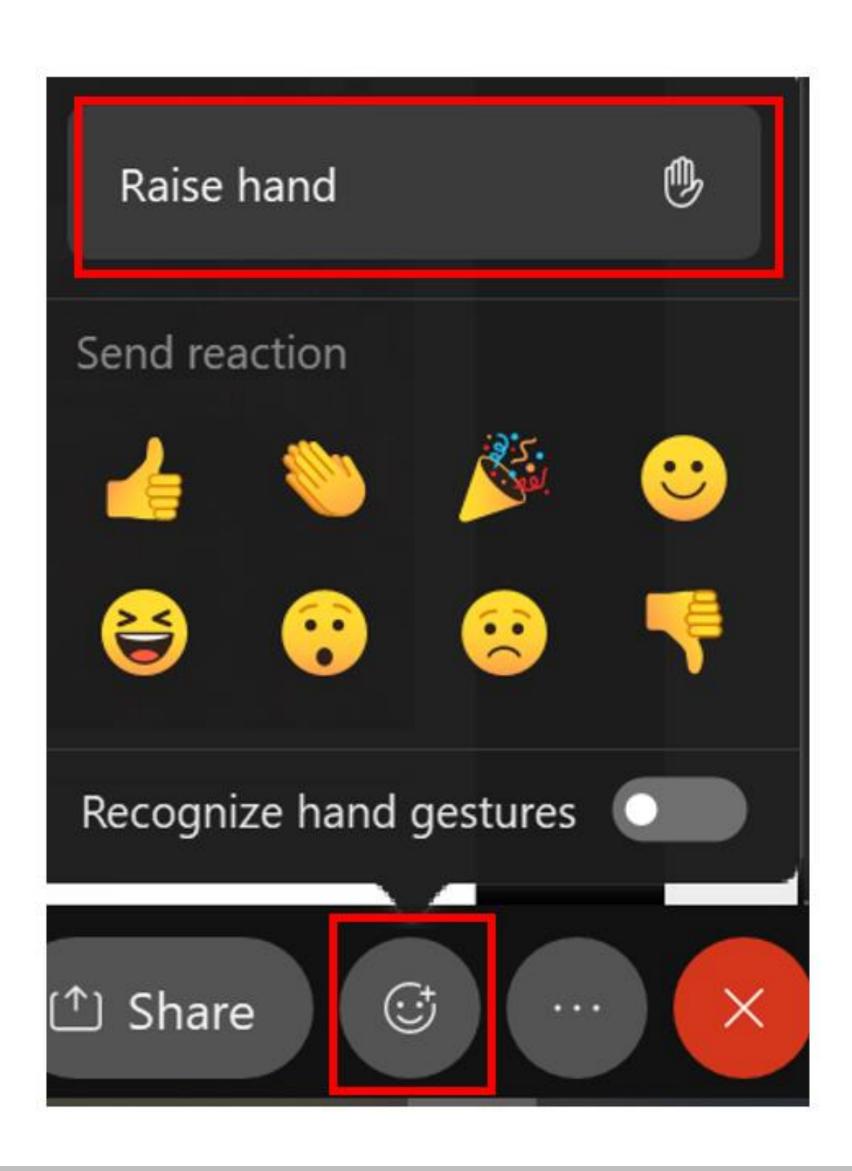
# HOW TO PARTICIPATE – Q & A



Following the presentation, a Question-and-Answer Period will be held, concluding at 7 P.M.

- Please submit any questions you may have using the Q & A feature
- If you would like to speak, raise your hand using the "raise hand" button under the "Reactions" window and you will be unmuted by a member of the project team
- Phone-in participants must dial \*3 to raise your hand





# MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT



# MILL STREET (MISSISSAUGA ROAD TO CREDITVIEW ROAD)

## ONLINE PUBLIC INFORMATION CENTRE

October 5, 2021 6:00pm to 7:00pm

Please submit any questions you may have using the Q & A function.

Presentation materials, including a recording of the presentation will be available following the presentation for review and comment on the project website at

https://www.caledon.ca/en/news/mill-street-ea.aspx



## PRESENTATION AGENDA



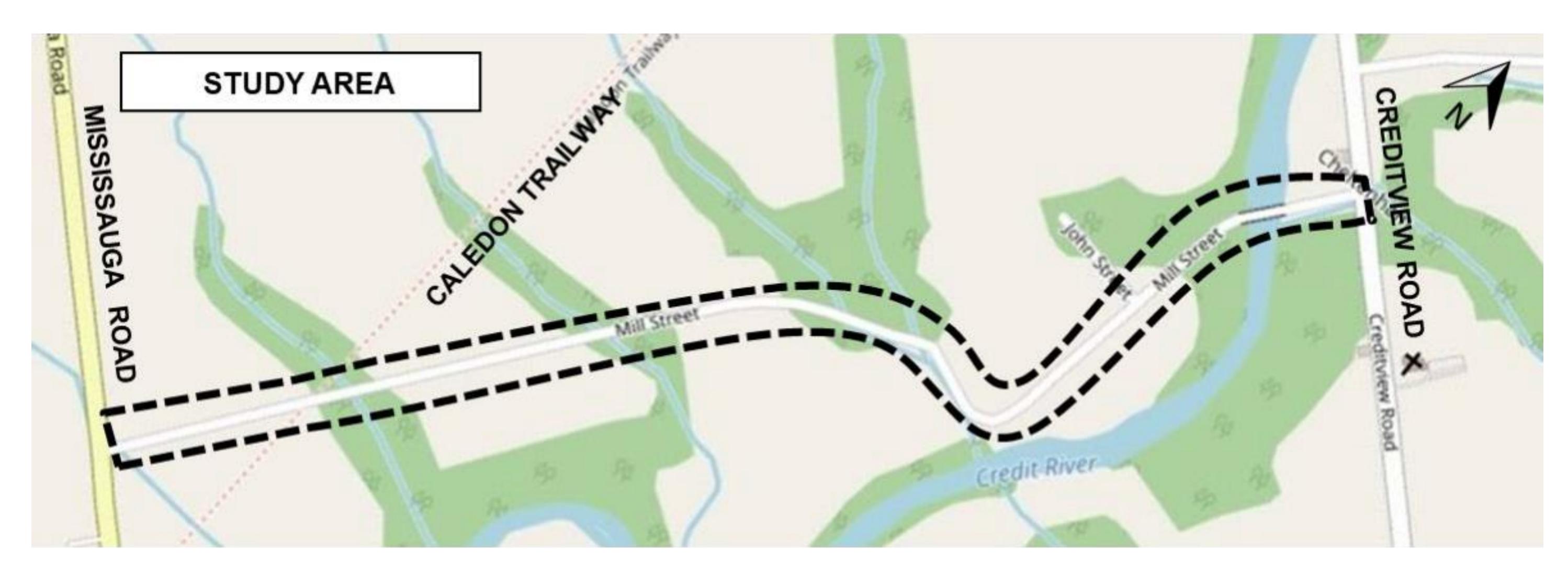


- Study Area & Project Background
- Municipal Class EA Process
- Problem or Opportunity Statement
- Incorporating Your Comments
- Evaluation of Alternative Solutions
- Preliminary Study
   Recommendations
- Next Steps in the Project
- Question and Answer Period

# STUDY AREA



The Mill Street EA study area consists of Mill Street from Mississauga Road to Creditview Road.



Two-lane local road under the jurisdiction of the Town of Caledon.

Town is responsible for maintaining safety and traffic operations for all users within and outside of Cheltenham Community.



## MUNICIPAL CLASS EA PROCESS

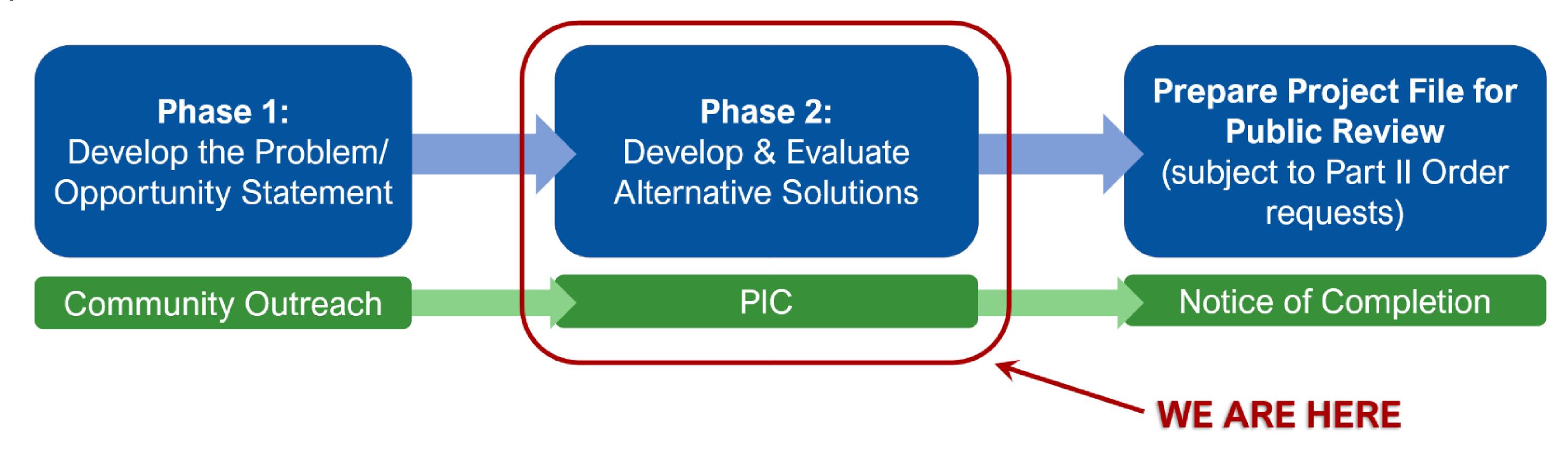


Undertaken prior to municipal road, water, wastewater and other municipal construction projects.

Requires consideration of all reasonable alternatives.

Aims to minimize impact on the natural, cultural, social and economic environment.

Input from the public, stakeholders and technical agencies is essential.



This Mill Street Class EA is classified as a **Schedule 'B' Municipal Class EA** and is subject to **Phases 1 and 2** of the **Municipal Class Environmental Assessment**.



## PROBLEM OR OPPORTUNITY STATEMENT



The Mill Street Class EA was initiated to review opportunities within the study area to address:

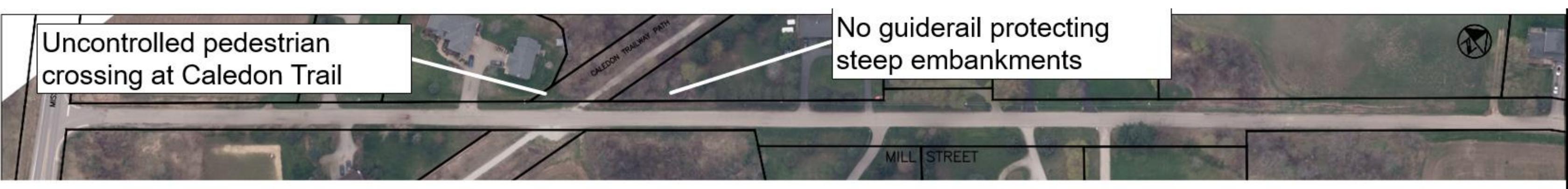
- Roadway surface issues (increased wear and tear)
- Traffic operations and road design considerations
- Accessibility and safety for vulnerable road users (pedestrians and cyclists)
- Roadway drainage and stormwater management

The Problem/Opportunity Statement outlines the need and justification for the overall project and establishes the general parameters, or scope, of the study



## EXISTING CONDITIONS- SUMMARY



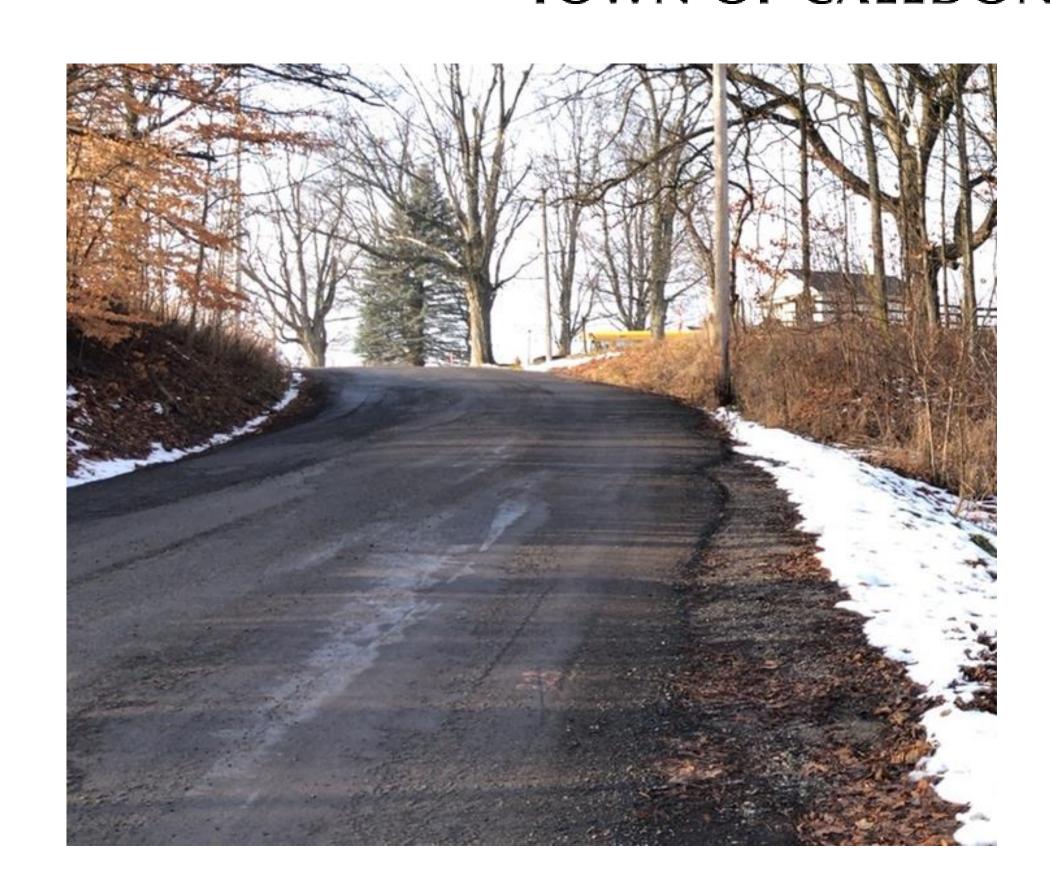




# TRAFFIC OPERATIONS & SAFETY

TOWN OF CALEDON

- A Traffic Study to assess speed patterns and driver behaviour identified operating speeds on Mill Street to be above the 40 km/h Posted Speed, with the following vehicle operation speed:
  - Approximately 50-55 km/h on tangent (straight) sections;
     and
  - Approximately 40-50 km/h near the sharp curves.
- Sharp curves can lead to vehicles crossing the centreline or encroaching into the shoulder, especially on wet pavement.
- Sightlines reduced due to roadside vegetation/ topography and horizontal and vertical curvature of the roadway.
- No separation between vulnerable road users (pedestrians and cyclists) and vehicles through the curves.
- Space between traffic lane and obstructions i.e. trees and hydro poles, do not meet minimum separation requirements i.e. Clear Zone





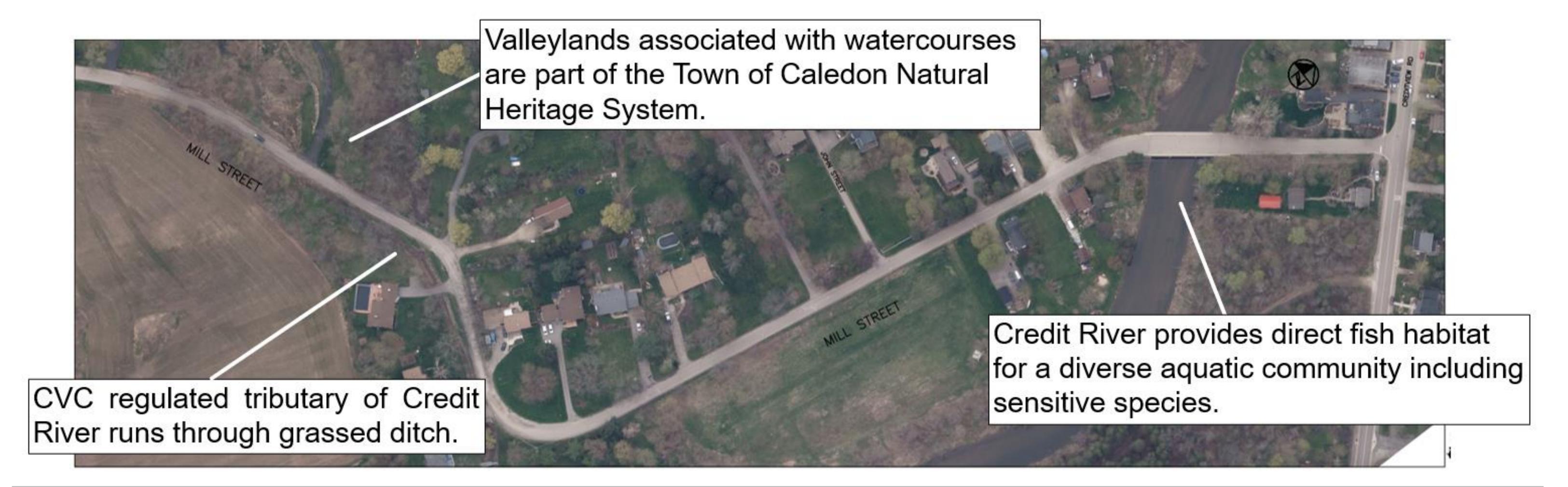


## NATURAL ENVIRONMENT



Located within the Credit River subwatershed, the study area includes Credit Valley Conservation Authority (CVC) Regulated Watercourses, lands designated as Natural Heritage System by the Town of Caledon, as well as lands designated under The Greenbelt Plan Area and the Niagara Escarpment Plan.





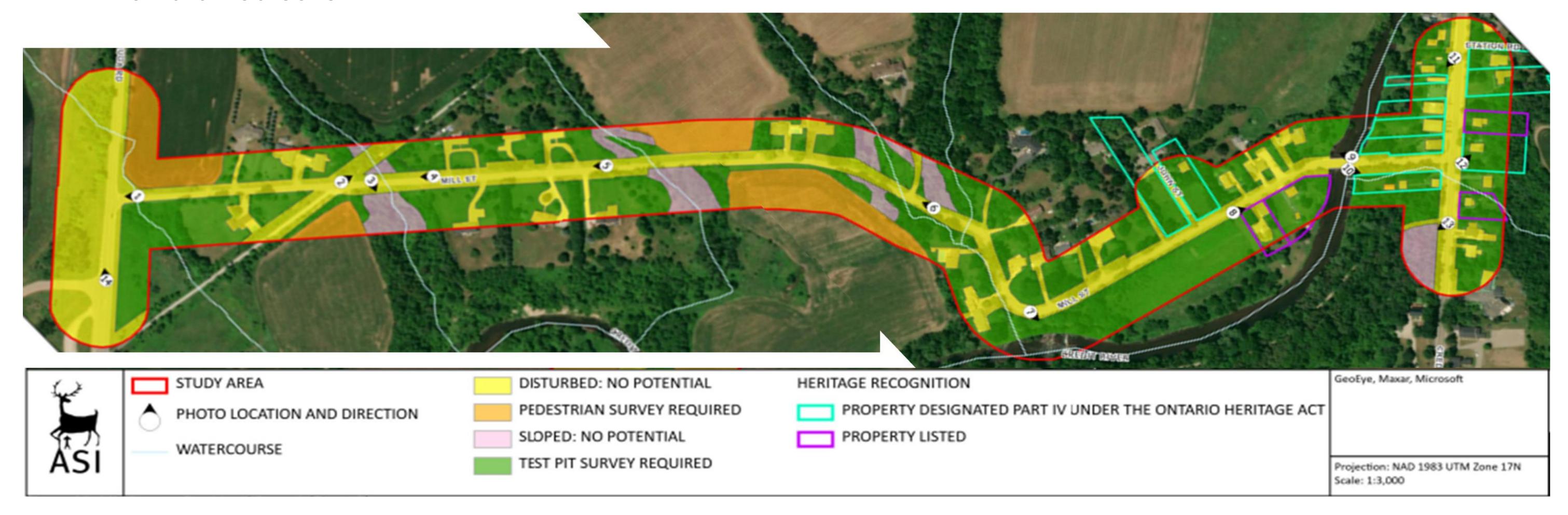


## ARCHAEOLOGICAL ENVIRONMENT



Some of the undisturbed lands adjacent to Mill Street exhibit archaeological potential due to proximity to:

- Water Sources (Credit River),
- Historic transportation routes,
- Early settlements (Cheltenham); and
- Well-drained soils.



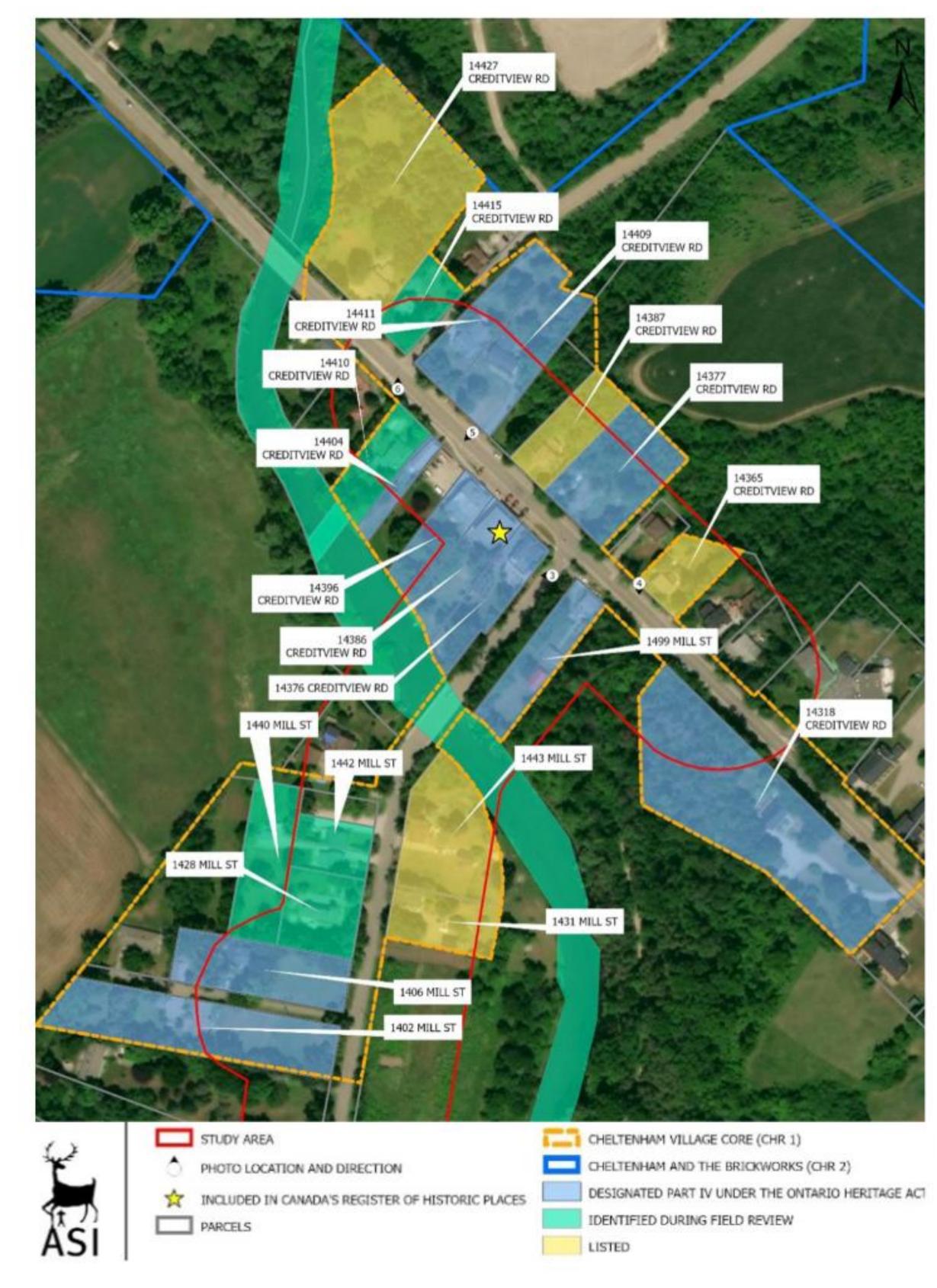
Lands that exhibit archeological potential will require a Stage 2 Archaeological Assessment, if impacted, prior to any proposed construction.

## CULTURAL HERITAGE ENVIRONMENT



- 12 properties designated under the Ontario Heritage
   Act
- 1 property on Canada's Register of Historic Places (Cheltenham Store)
- 5 properties on the Town's Heritage Register
- 2 properties on the Town's Cultural Heritage Landscapes Inventory (Cheltenham and the Brickworks)
- 5 properties identified as potential built heritage resources

Construction activities should avoid impacts to identified cultural heritage resources.



## DRAINAGE & STORMWATER



- Drainage features in the study area include:
  - Grass lined ditches and culverts
  - Curb and gutter east of the bridge connecting to a storm sewer on Creditview Road
- Flooding along Credit River tributary impacting adjacent residents
- Flood plain from Credit River heavily impacts capacity of the tributary and causes flooding of the tributary
- Between Credit River bridge and creek tributary drainage outlets overland with no defined path.









## EVALUATION OF ALTERNATIVE SOLUTIONS



Alternative Solutions to address the Problem / Opportunity Statement were comparatively evaluated based on criteria that represent the broad definition of the environment, as described in the EA Act.

CRITERIA	DESCRIPTION					
Traffic Operations and Safety	How will the alternative serve the existing and future vehicular, pedestrian and cycling traffic needs? (Safety, Road Condition, Intersection improvements, Active Transportation, Sightlines)					
Socio- Economic Environment	What impacts will the alternative have on the local community (e.g., compatibility with area land use, impacts on local businesses, property requirements, access restrictions, etc.)?					
Natural Environment	How does the alternative affect existing vegetation, water quality, fisheries/wildlife and habitat? Does the alternative address climate change?					
Cultural Heritage	Will the alternative affect archaeological, cultural heritage resources or First Nations communities?					
Costs	What is the capital cost of the alternative? What is the cost for utility relocations and property acquisitions (if required)? What are the operation and maintenance cost impacts?					

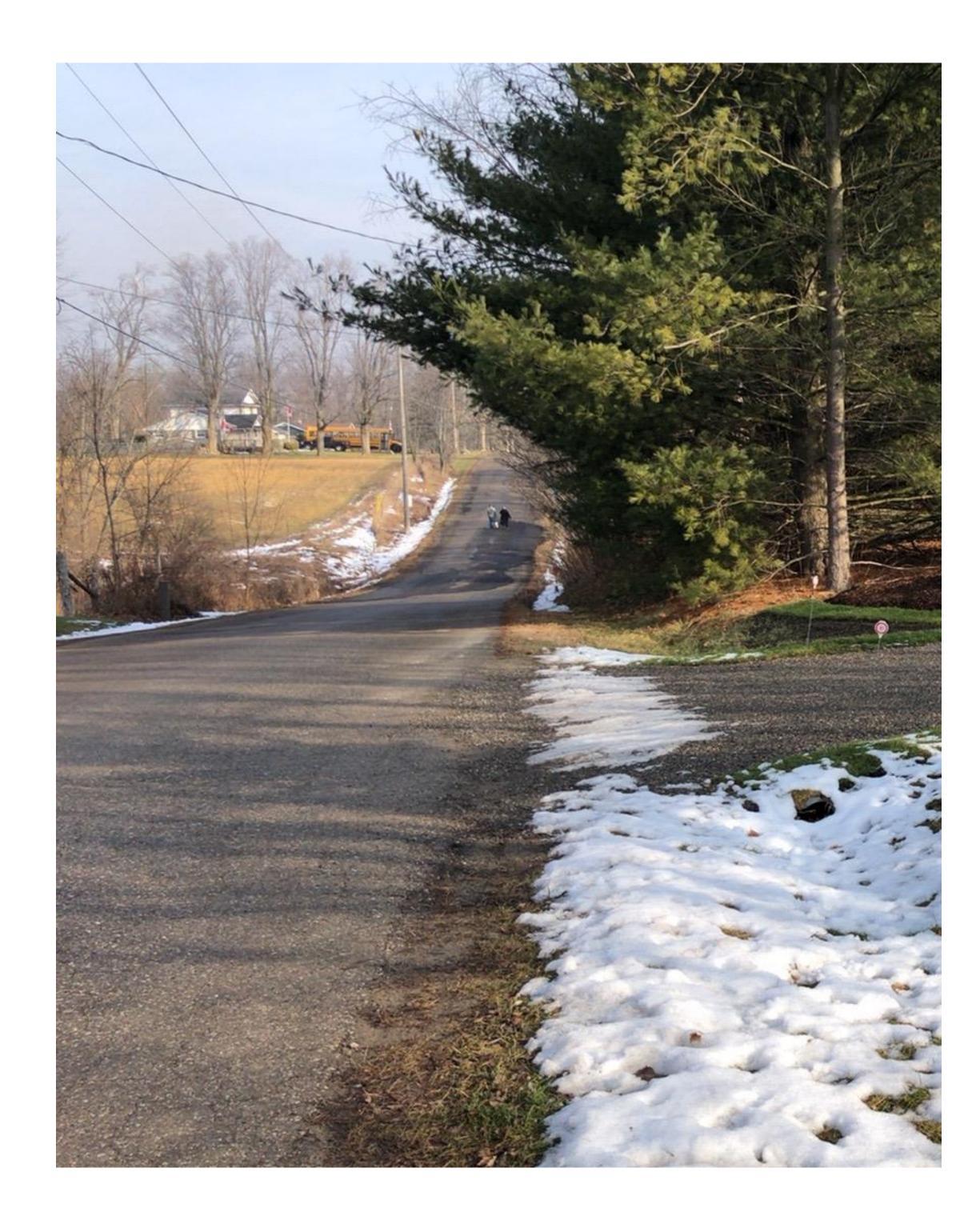


## INCORPORATING YOUR COMMENTS



- Deteriorated roadway needs to be addressed.
- Improvements should not negatively disrupt the character of the Village.
- Support for traffic calming measures.
- Support for improvements in problem areas.
- Concern over property impacts and tree removals.
- Concern over increased traffic volumes from the road improvements.
- Formal pedestrian and cyclist facilities such as sidewalks and cyclist facilities are not desired

Alternative solutions were developed and evaluated in consideration of all comments provided through individual meetings with residents and the Community Outreach Meeting held on May 27, 2021.



## **ALTERNATIVE SOLUTIONS – S-CURVE ALIGNMENT**





#### Alternative 1 – Do Nothing

- No improvements to existing conditions
- Road will continue to encroach on private property
- Safety concerns of pedestrians, cyclists, and vehicles are not addressed



#### **Alternative 2 – Adjust Alignment Slightly**

- Adjust turning radii to improve sight lines with operational improvements
  (pavement widening / shoulder to accommodate pedestrian, cyclist, and
  vehicular traffic; additional signage & pavement markings, vegetation pruning)
- Minor encroachment towards properties & natural environmental impacts



#### Alternative 3 – Adjust Alignment to Meet Design Standards

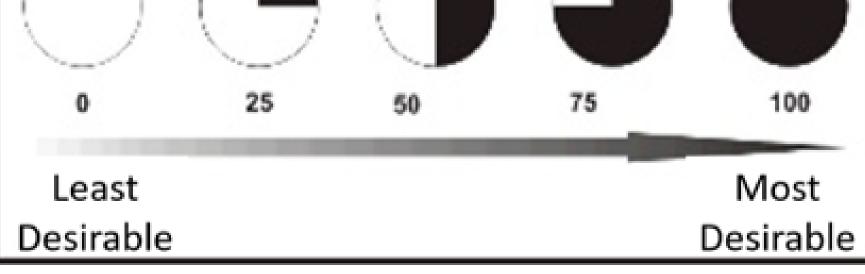
- Turning radii is realigned to meet Transportation Association of Canada (TAC)
   Standards.
- Significant property & natural environmental impacts
- High capital costs

# **EVALUATION OF ALTERNATIVE SOLUTIONS – S-CURVE ALIGNMENT**



Alternative Solutions	Traffic Operations & Safety	Social Environment	Natural Environment	Cultural Heritage / Archaeological	Cost	Evaluation Summary
Alternative 1 - Do Nothing	0					Not Recommended
Alternative 2 - Adjust Alignment Slightly						Recommended to be Carried Forward
Alternative 3 -Adjust Alignment to Meet  Design Standards						Not Recommended

**Alternative 2 –** Adjust Alignment Slightly is the recommended solution to be carried forward.



## **ALTERNATIVE SOLUTIONS – CROSS-SECTION**

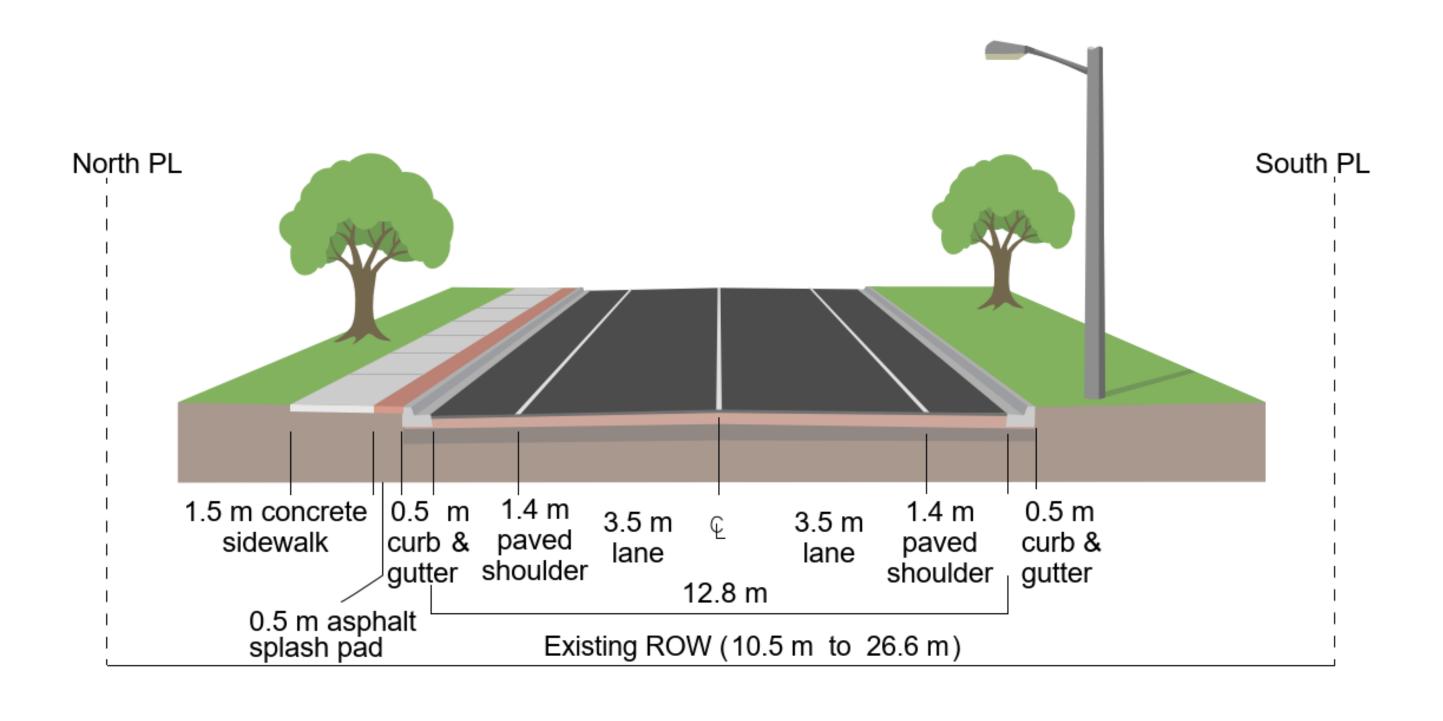


#### **Alternative 1 – Do Nothing**



- No improvements to existing conditions
- Does not meet road design standards nor align with the Town's planning studies
- Deteriorated pavement condition remains
- No accommodation for pedestrians or cyclists

#### **Alternative 2 – Curb and Gutter with Sidewalks**

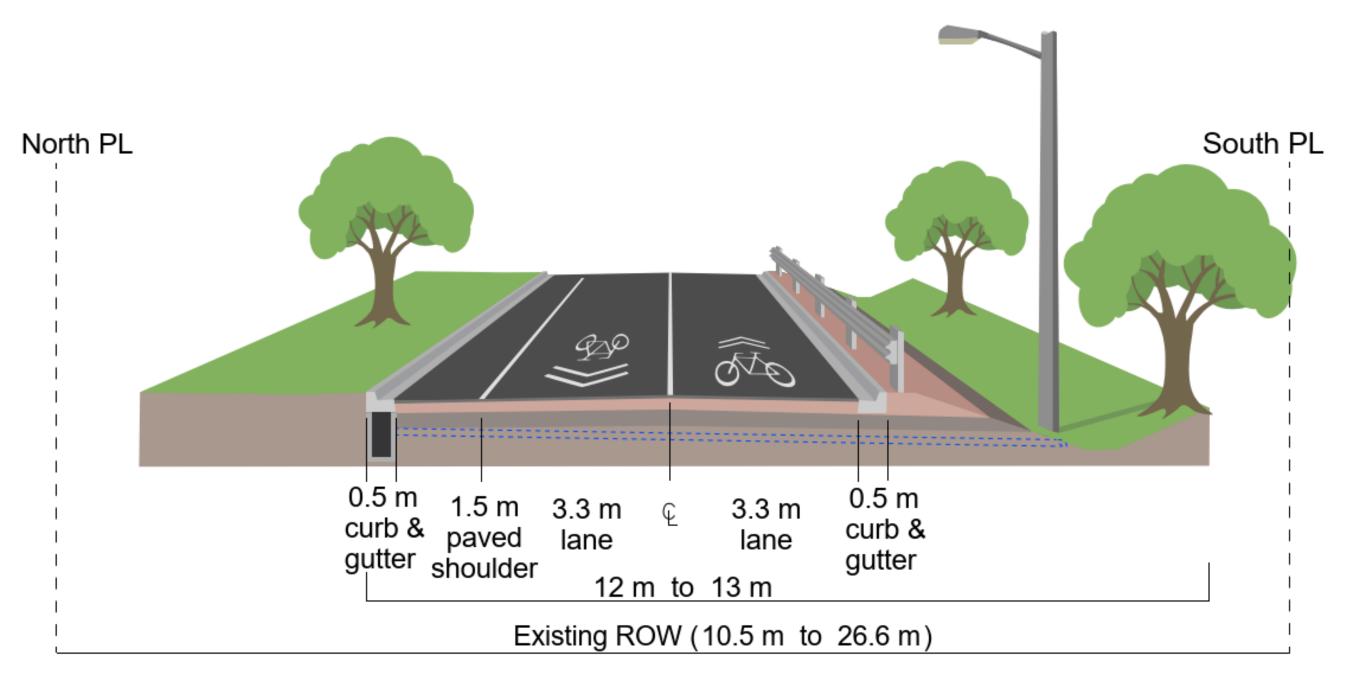


- Two 3.5m lanes with paved shoulder, curb and gutter on both sides; sidewalk on north side
- Cyclist separated from the travel lane via paved shoulders
- Significant property & natural environmental impacts
- Recommended in Town's 2019 Development Charge Study

## **ALTERNATIVE SOLUTIONS – CROSS-SECTION**

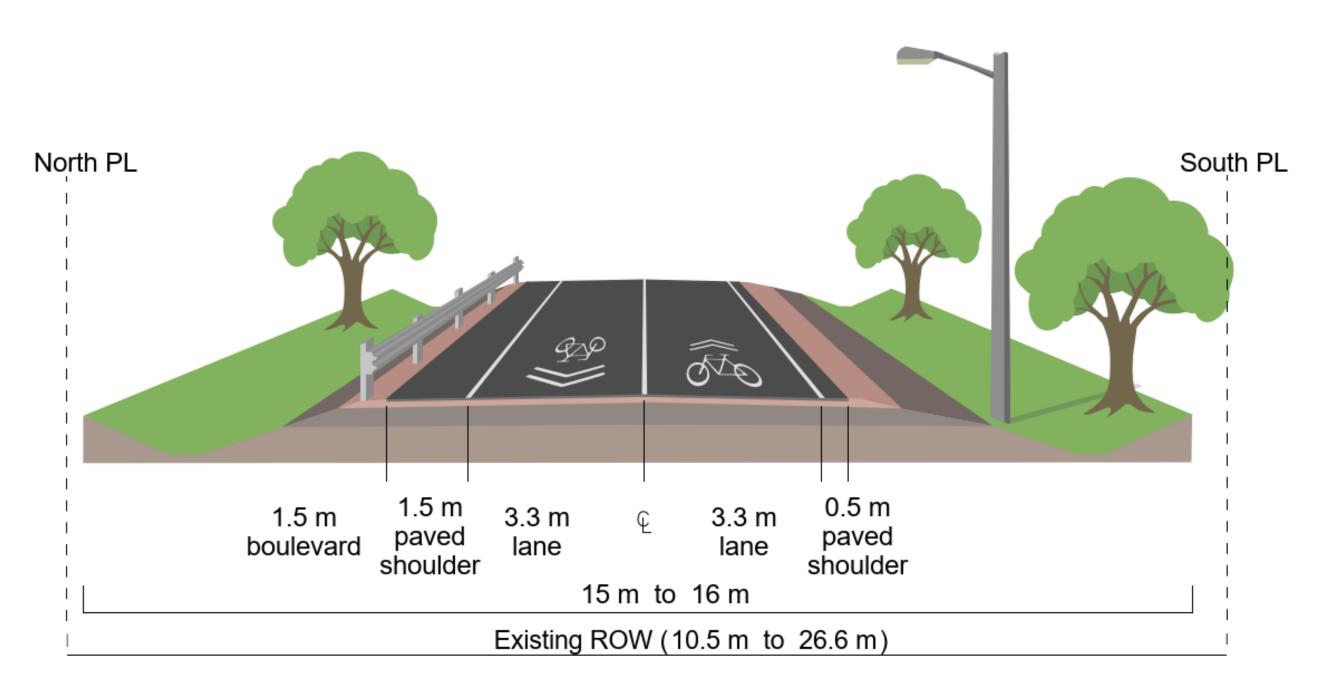


#### **Alternative 3 – Curb and Gutter with Paved Shoulder**



- Two 3.3m lanes with curb and gutter, paved shoulder on the north side, and grassed ditch on the south side
- Pavement markings for vehicles and cyclists to share the road
- Pedestrians separated from the travel lane via paved shoulder
- Narrowed pavement width and curb and gutter (traffic calming feature)
- Reduced property impacts (in comparison to roadside ditches with no curbs)
- Guiderail where required

#### **Alternative 4 – Paved Shoulders and Re-instate Ditches**



- Two 3.3m lanes with paved shoulders and grassed ditches on both sides
- Pavement markings for vehicles and cyclists to share the road
- Pedestrians separated from the travel lane via paved shoulder
- Widened pavement width can contribute to increased vehicle speeds
- Additional property required to accommodate grassed ditches
- Guiderail where required



# EVALUATION OF ALTERNATIVE SOLUTIONS – CROSS SECTION 138



Alternative Solutions	Traffic Operations & Safety	Social Environment	Natural Environment	Cultural Heritage / Archaeological	Cost	Evaluation Summary
Alternative 1 - Do Nothing					•	Not Recommended
North PL  1.5 m concrete 0.5 m 1.4 m 3.5 m 2 3.5 m 1.4 m paved curb & paved lane sidewalk splash pad Existing ROW (10.5 m to 26.6 m)  Alternative 2 - Curb and Gutter with Sidewalk					0	Recommended to be Carried Forward
North PL  O.5 m 1.5 m 3.3 m 3.3 m curb & gutter shoulder 12 m to 13 m curb & gutter  Alternative 3 - Curb and Gutter with Paved Shoulder						Recommended to be Carried Forward
North PL  1.5 m boulevard shoulder 15 m to 16 m  Alternative 4 - Paved Shoulder and Reinsate Ditches						Not Recommended

**Alternative 3** –Curb and Gutter with Paved Shoulder is the recommended cross-section to be carried forward for Mill Street.



Most

Desirable

Least

Desirable

## PRELIMINARY RECOMMENDATIONS - SUMMARY



Key elements of the study recommendations are shown below. Following this PIC, the recommended solution for the corridor will be confirmed in consideration of the comments received.

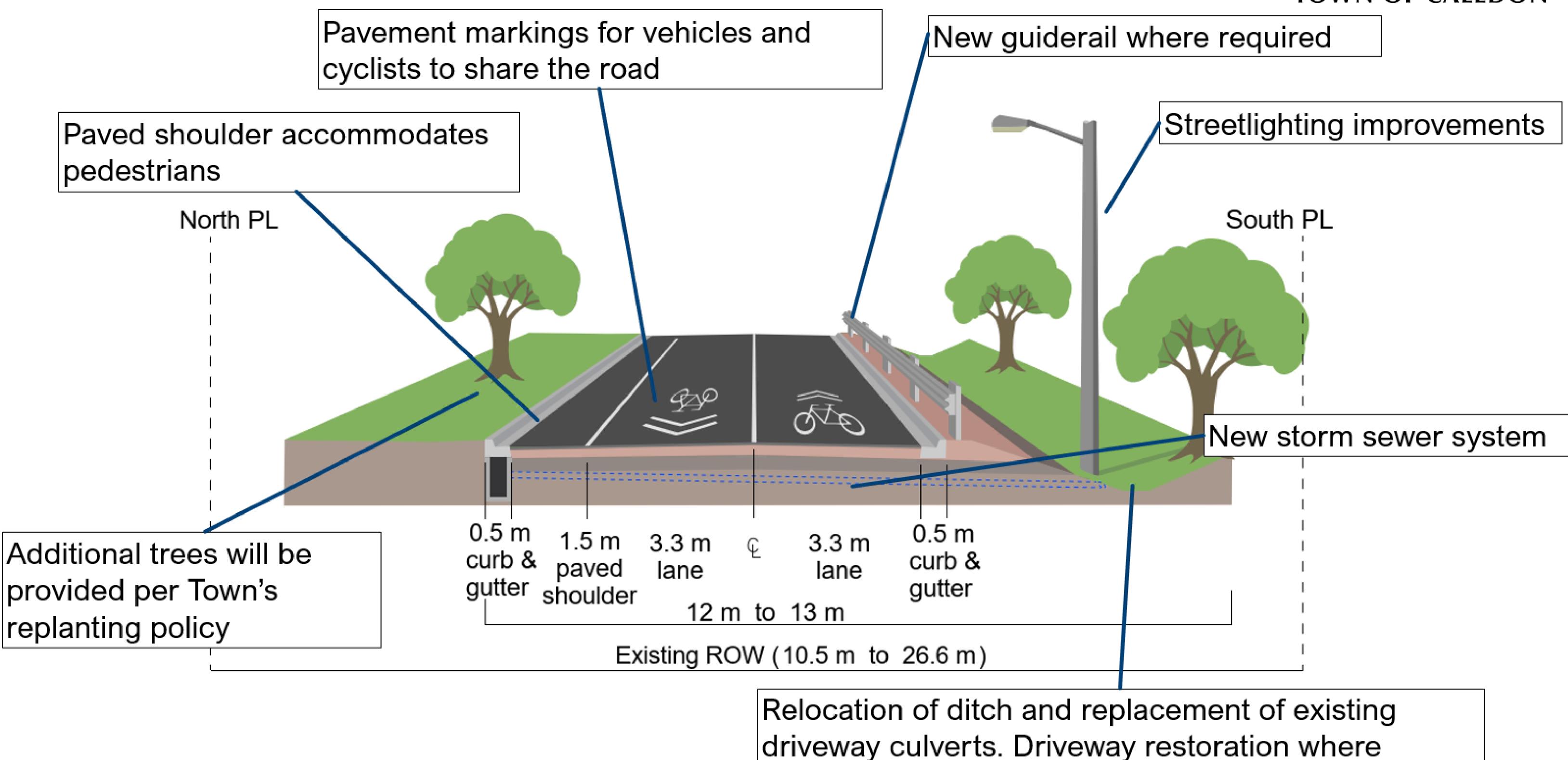






### PRELIMINARY RECOMMENDATION – CROSS-SECTION



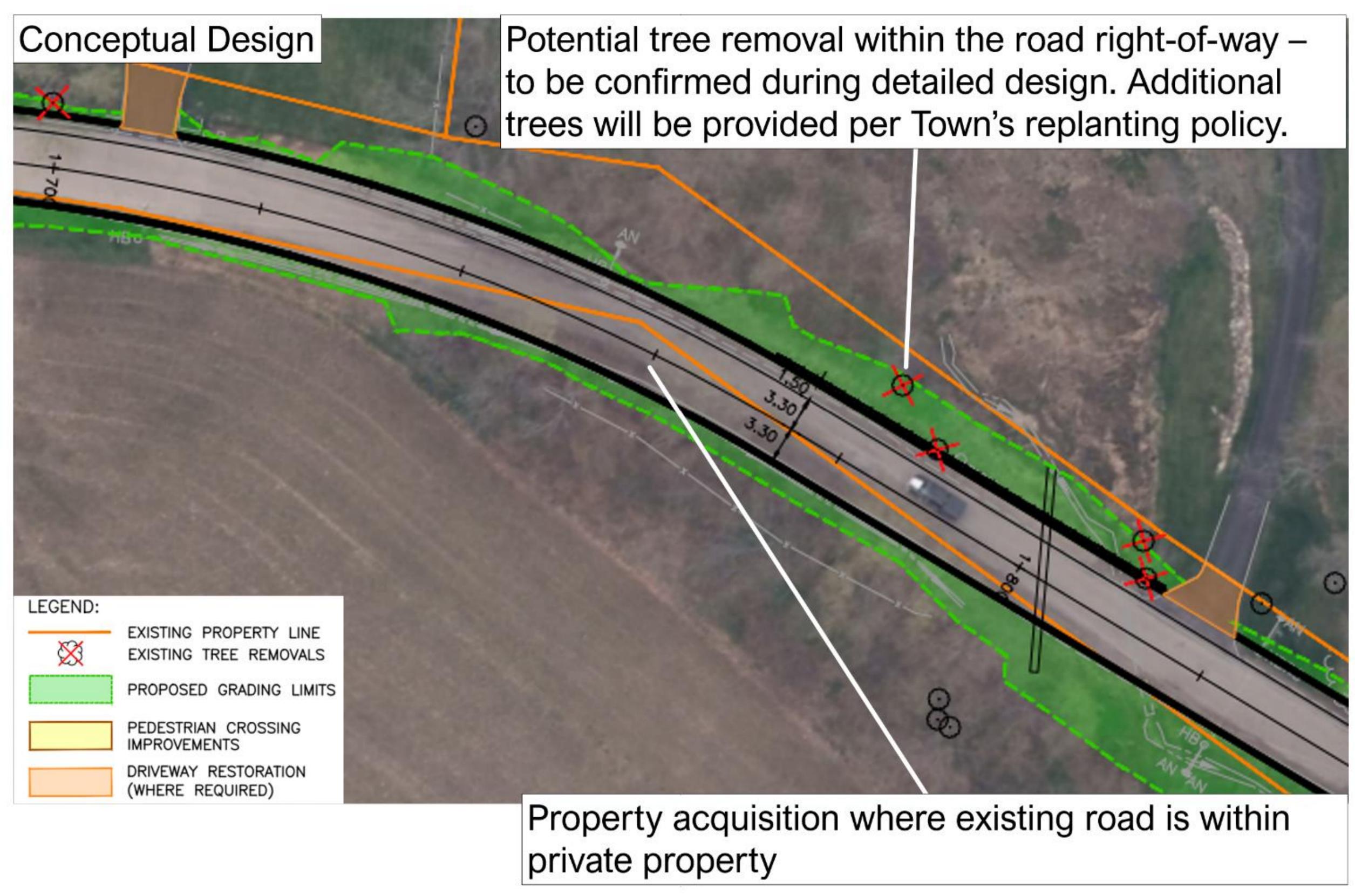


required, limits to be confirmed in detailed design



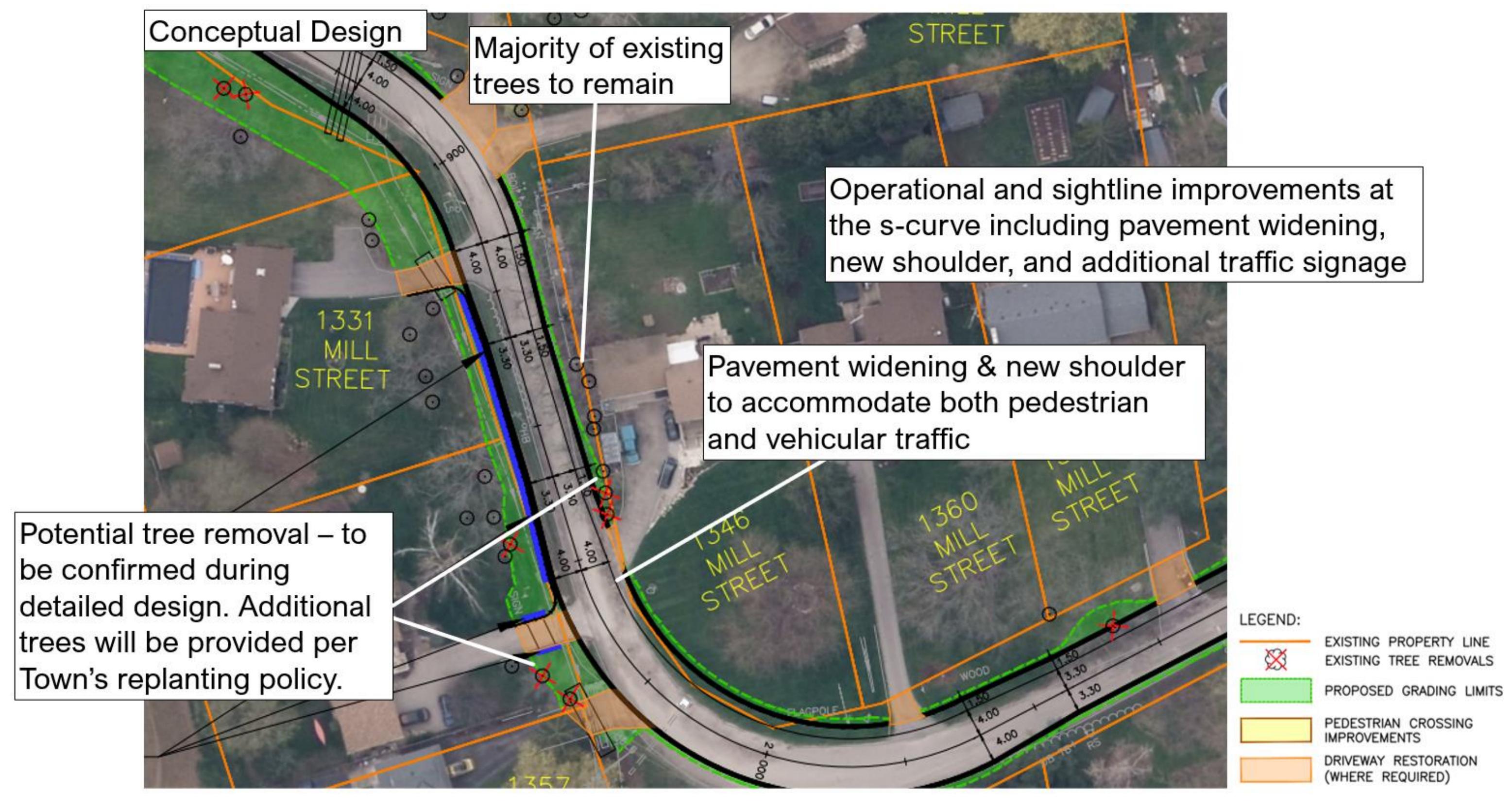
## PRELIMINARY RECOMMENDATIONS





## PRELIMINARY RECOMMENDATIONS

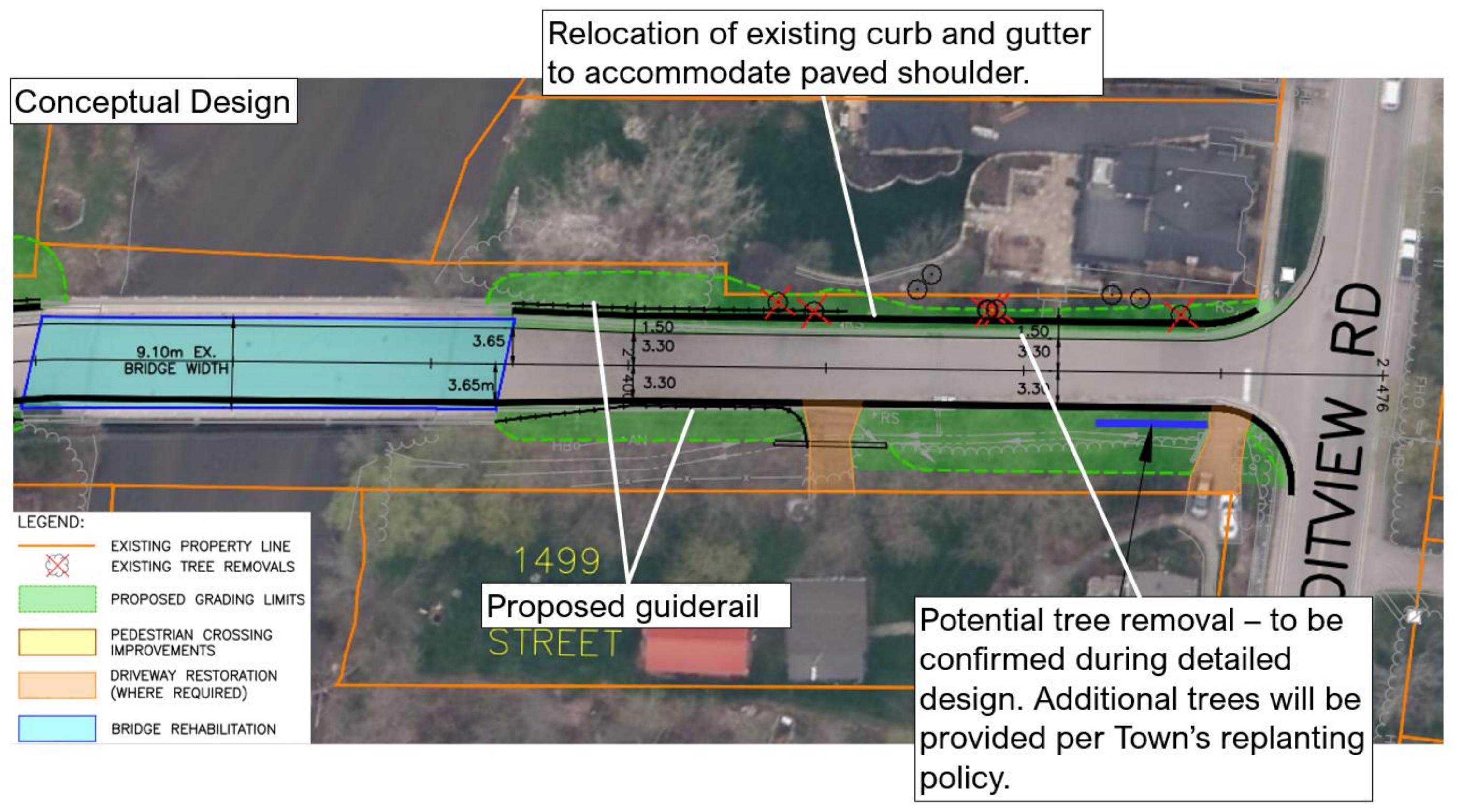






## PRELIMINARY RECOMMENDATIONS







## KEY IMPACTS & MITIGATION MEASURES



Mitigation measures will be further developed during detailed design to reduce the severity and duration of any impacts associated with the recommendations.

Archaeological and Cultural Heritage

- Lands that exhibit archeological potential will require a Stage 2 Archaeological Assessment.
- Construction activities and staging should avoid impacts to identified cultural heritage resources. Impacted cultural heritage resources may require a property-specific heritage impact assessment.

**Property Requirements** 

- Property acquisition where existing road is within private property.
- Grading easement required for 7 properties adjacent to s-curve.
- Driveway restoration to existing conditions where impacted.

Vehicle Traffic, Pedestrians and Cyclists

- Town to consider additional traffic calming measures
- Local and emergency traffic will be maintained during road works with alternative detour routes for non-local traffic

Natural Environment Impacts

Removal of street trees and vegetation adjacent to the existing ROW to facilitate grading.
 Construction and vegetation clearing will be conducted in appropriate seasons to limit ecological impacts (nesting birds, spawning fish, etc).

 Relocation of Credit River tributaries and replacement of existing culverts. Erosion and sediment controls to protect the Credit River and its tributaries from sediment during construction

**Utility Impacts** 

Relocation of utility poles will be required.



## SUMMARY OF NEXT STEPS





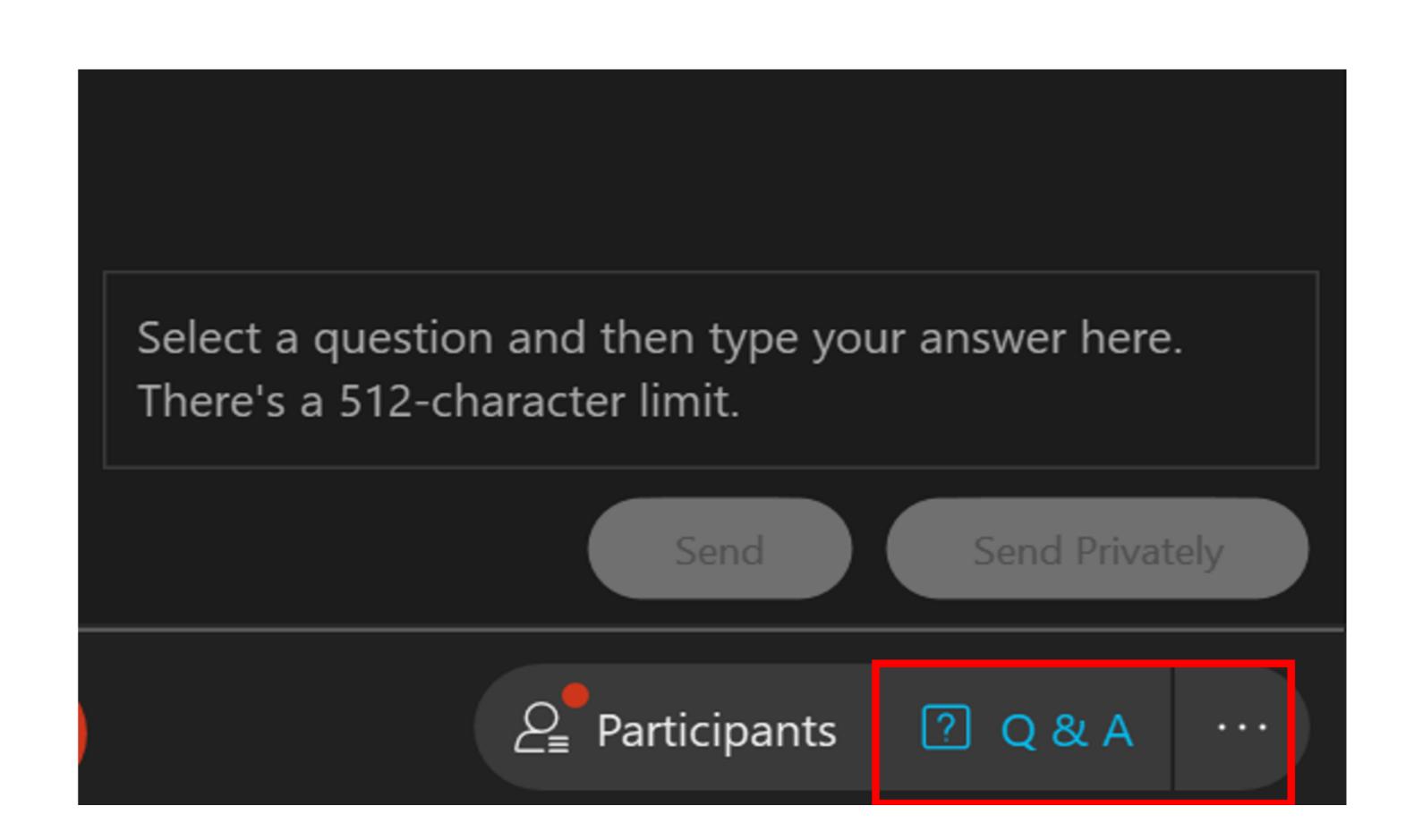
- Review and address the comments submitted at this PIC
- Consult with additional stakeholders and technical agencies, as required
- Confirm study recommendations (i.e. preliminary preferred solutions)
- Prepare and submit a Project File Report for 30 Day public review
- Proceed to detailed design and construction (planned for 2022 pending Council approval and budget)

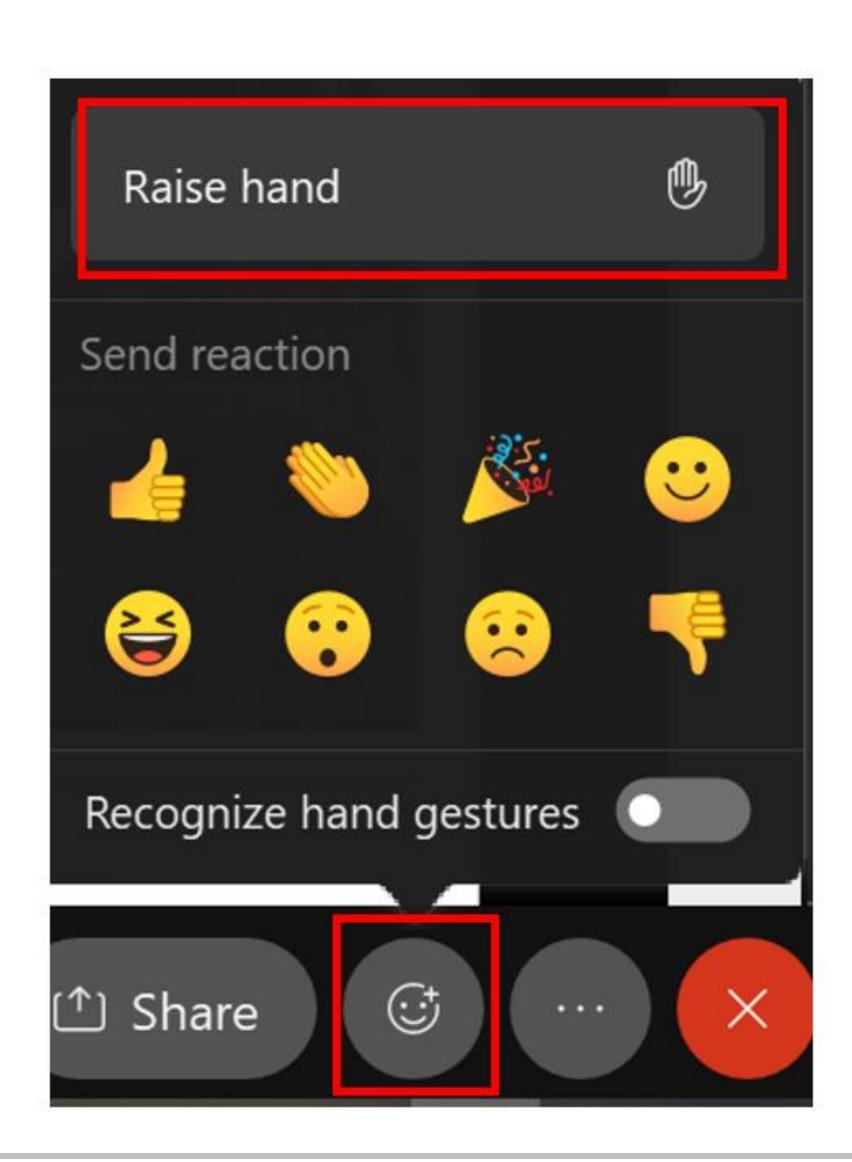
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## YOUR INPUT IS IMPORTANT



You can also provide your feedback on the project by providing your comments to the project team contacts listed below by **October 19, 2021**.

## THANK YOU FOR ATTENDING

## Project Team Contacts:

#### **Town of Caledon**

Shun Cheung, P.Eng., PMP

Project Manager, Engineering Services

Tel: (905) 584-2272 x 4040

E-mail: <a href="mailto:shun.cheung@caledon.ca">shun.cheung@caledon.ca</a>

#### R.V. Anderson Associates Limited

Winnie Wong, P. Eng., PMP., M.Eng.

Project Manager, Transportation

Tel: (416) 497-8600 x1471

E-mail: winnie.wong@rvanderson.com