



**Mill Street (Mississauga Road to Creditview Road)**  
**Municipal Class Environmental Assessment**

Project File Report

Final

April 6, 2023

Prepared for:



RVA 205388

April 6, 2023

Town of Caledon  
6311 Old Church Road  
Caledon, ON, L7C 1J6

**Attention: Mr. Shun Cheung, P.Eng., PMP**

Dear Mr. Cheung:

Re: Mill Street (Mississauga Road to Creditview Road)  
Municipal Class Environmental Assessment - Project File Report – Final

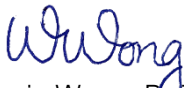
Please find enclosed the final Project File Report (PFR) for the Mill Street Municipal Class Environmental Assessment (Schedule B), completed by R.V. Anderson Associates Limited.

This Class Environmental Assessment was conducted in accordance with the requirements of the Municipal Class Environmental Assessment (Class EA) – Schedule 'B'. As such, we have prepared a Notice of Completion, for distribution to stakeholders and general advertisement inviting the public to review this Project File Report. The public will be invited to provide comments or concerns with this study. If no requests have been received by the Minister of Environment, Conservation and Parks within 60 calendar days of filing of the Notice of Study Completion, the Town may implement the study recommendations, complete the design and proceed to construction.

We appreciate the input and collaboration received from the Town throughout the study. If you have any questions, please do not hesitate to contact the undersigned by email or at 416-497-8600.

Yours very truly,

**R.V. ANDERSON ASSOCIATES LIMITED**



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



Andrew McGregor, MCIP, RPP  
Senior Environmental Planner

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# **Mill Street (Mississauga Road to Creditview Road) Municipal Class Environmental Assessment**

Project File Report  
Final

Town of Caledon



In Association With:



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**RVA 205388**

**April 6, 2023**

## **Mill Street (Mississauga Road to Creditview Road) MCEA Project File Report**

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## EXECUTIVE SUMMARY

The Town of Caledon is planning improvements to Mill Street between Mississauga Road and Creditview Road, located in the Village of Cheltenham, including state of good repair roadway and drainage improvements along the corridor. This project followed a Schedule 'B' process of the Municipal Engineers Association Municipal Class Environmental Assessment (October 2000, amended in 2007, 2011 & 2015).

Public and technical agency consultation played a key role in the Study, with key stakeholders including members of the local public and business community, special interest groups (e.g. Cheltenham Area Residents Association) and technical agencies (e.g. Credit Value Conservation Authority, Ministry of the Environment Conservation and Parks, Ministry of Natural Resources and Forestry, Niagara Escarpment Commission, Ministry of Citizenship and Multiculturalism, etc.).

Various technical studies were completed to assess the existing conditions and potential impacts of the alternatives being considered. Studies included: Natural Environmental Assessment Memo, Cultural Heritage Report, Stage 1 Archaeological Assessment, Traffic Memorandum, Stormwater Drainage Design Brief, Topographic and Subsurface Utility Engineering Survey, and a Pavement Evaluation Report. The findings of these studies were incorporated into the evaluation of alternative solutions.

The report summarizes the Municipal Class Environmental Assessment (the Study) that was conducted to select the preferred solutions for improvements to Mill Street in the Town of Caledon. The Study Area is outlined in **Figure E-1.1 - Study Area**.



Figure E-1.1 - Study Area

## EA Phase 1 ~ Problem & Opportunity Statement

Per Phase 1 requirements of the Municipal Class Environmental Assessment process for a Schedule 'B' project, a "Problem and Opportunity Statement" was prepared following the assessment of the existing conditions within the Study Area to identify the various problems and opportunities to be addressed throughout the Study.

The problem & opportunity statement for this Study has been defined by the following key elements:

- 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

## EA Phase 2 ~ Alternative Solutions

The evaluation of alternatives was completed in Phase 2 in accordance with Schedule 'B' Municipal Class EA requirements. As part of the alternative solutions development for the Mill Street corridor, the Town held a Community Outreach Meeting to consult with area residents on May 27, 2021, from 6 p.m. to 7 p.m. Upon reviewing feedback at the Community Outreach Meeting, various topics were received, with a number of trends becoming evident:

- Road safety improvements at intersections and the "S" bend are not strongly supported.
- Residents do not desire any pedestrian and cyclist accommodation throughout the corridor, including through the "S" bend of the roadway.
- Residents only want to rehabilitate the road pavement with no other change.
- Concern over property impacts and tree removals.
- Concern over the potential for improvements to increase traffic volumes and disrupt the existing character of the corridor.
- Additional traffic calming measures are supported.

Under this phase alternative solutions were presented at Public Information Center (PIC) #1 for the road alignment and road cross section within the Study Area, as follows:

### Road Alignment Alternative Solutions – S-Curve Alignment

1. Do Nothing
2. Adjust Alignment Slightly
3. Adjust Alignment to Meet Design Standards

### Road Cross Section Alternative Solutions



1. Do Nothing
2. Curb and Gutter with Sidewalks
3. Curb and Gutter with Paved Shoulder
4. Paved Shoulders and Re-instate Ditches

Based on the feedback received from the community, the Town undertook a Traffic Study and a second Public Information Centre (PIC #2) to present alternative solutions for Mill Street pedestrian accommodation:

1. Existing with Mountable Curb
2. Sidewalk
3. Asphalt Boulevard

Following PIC #2, the Town invited residents and the general public to provide their comments to the options provided, and to also describe their usage of Mill Street from an active transportation perspective. Upon reviewing the feedback received, the Town acknowledges that the local residents are the major users of Mill Street and the following proposed improvements will best serve the local community as follows:

- Little support for road safety improvements at intersections and the “S” bend.
- Pedestrian and cyclist accommodation throughout the corridor is not supported by Mill Street residents.
- General support for rehabilitating the road pavement only, with no other changes.
- Residents expressed a desire to maintain the rural character of the roadway.
- Concern over property impacts and tree removals.
- Support for drainage improvements where feasible.
- Concern over road improvements will potentially increase traffic volumes and attract other road users to Mill Street.
- Support for additional traffic calming measures.

### Impacts, Mitigation & Monitoring

The key impacts associated with the implementation of the proposed solution and general mitigation measures are identified in the report. Following the completion of this EA, detailed design of the preferred alternative is required prior to proceeding to construction. During detailed design, the Town will continue to work with the technical agencies to confirm the findings from the Class EA through additional investigations and design. The public will be notified of the project status update via the Town’s project website.

### Preliminary Construction Timing and Cost Estimates

Construction is anticipated to commence in 2025, and last one construction season. The anticipated timeline for the proposed works is outlined in the table below.

**Table ES.1 - Preliminary Timing Summary**

Activity	Timing
Detailed Design	Summer / Fall 2023
Property Acquisition	Fall 2023
Utility Relocations	2024
Construction	2025

## 1.0 INTRODUCTION AND BACKGROUND

### 1.1 Introduction

The Town of Caledon retained R.V. Anderson Associates Limited (RVA) to conduct a Schedule 'B' Municipal Class Environmental Assessment (EA) for improvements to Mill Street between Mississauga Road and Creditview and other related works (the 'Project'), including consideration of road and drainage improvements along the corridor.

The Class EA was completed in accordance with the requirements of the Municipal Engineers Association (MEA) Municipal Class Environmental Assessment (October 2000, amended in 2007, 2011 & 2015).

### 1.2 Study Area

The Study Area includes Mill Street between Mississauga Road and Creditview Road, as well as the intersection with John Street, and the Caledon Trailway crossing and entrances along the corridor. The rehabilitation of Mill Street Bridge (ID: B20304037), located between John Street and Creditview was not included in the scope of the Study. The Study Area is outlined in Figure 1.1.



Figure 1.1 – Study Area

### 1.3 Background

The Mill Street Class EA was initiated to identify a solution to implement the recommendations of these previously completed studies in a way which minimizes impacts to the broad definition of the environment as described in the EA Act.

### **1.3.1 Town of Caledon 2017 Transportation Master Plan**

The Town of Caledon Transportation Master Plan (TMP) completed in November 2017, identifies and addresses the transportation needs of the Town for the foreseeable future (Town of Caledon, 2017). The TMP establishes goals and implements strategies and initiatives to achieve the vision of what the transportation system will need to incorporate to support residents in the future. The transportation system includes both road right-of-way (ROW) and off-road transportation routes such as trails.

High-level recommendations of the TMP relevant to Mill Street include, but are not necessarily limited to the following:

- Within Hamlet and Village areas, the Town should incorporate complete streets objectives and prioritize active transportation modes.
- Where possible, explore opportunities to incorporate innovation through storm water management and accommodating evolving technologies for transportation in the roadway cross-section.
- Implement active transportation improvements through planned capital works projects to the extent possible.

The 2017 TMP does not identify any pedestrian or cyclist network improvements specific to Mill Street.

### **1.3.2 2019 Development Charge (DC) Background Study**

The Town of Caledon's 2019 Development Charge (DC) Background Study identifies infrastructure costs associated with development and growth, including road construction, which are recommended to be accounted for in the Town's approved Development Charges (Watson & Associates Economists Ltd., 2019). The Background Study recommends the improvement type (rural road upgrade and urban reconstruction with desired geometrics) for the roads identified for construction.

The 2019 DC Study identified Mill Street as requiring an urban reconstruction with a 9.8m paved road width consisting of two lanes, curb and gutter, bike path, and sidewalk on both sides of the road.

### **1.3.3 2022 Growth Related Roads**

Continued growth in Caledon's population is creating challenges for the Town, including increased wear and tear on existing infrastructure, increased traffic, the requirement for new infrastructure, and increased expectations as to the type and quality of services that

the Town provides. In order to manage the wide range of assets needing repair and rehabilitation the Town has undertaken a comprehensive assessment of all asset categories and has formulated an asset management strategy for all Town assets. One of the key asset categories is the Town's inventory of 750km of roads comprising both gravel and hard surface pavements. The Town's inventory consists of the Growth Related Roads program which identified three roadways intended for construction for 2022, including Mill Street from Mississauga Road to Creditview Road.

The 2022 Growth Related Roads Program recommends the subject roads to be reconstructed in accordance with the 2019 DC Study described above.

## 1.4 Municipal Class Environmental Assessment Process

This Study is being conducted in accordance with the requirements of the Municipal Class Environmental Assessment (MCEA) – Schedule 'B' which is an approved process under the Environmental Assessment Act. **Figure 1.2** illustrates the framework for the Class EA process which is a legislated planning process comprised of up to five phases with mandatory points of public contact. The focus of the framework is a comprehensive and transparent decision-making process.

The Class EA is broken down into phases, as follows:

- Phase 1 – Identify problem or opportunity;
- Phase 2 – Identify alternative solutions, evaluate and select the preferred solution;
- Phase 3 – Identify alternative design concepts, evaluate and select the preferred design concepts;
- Phase 4 – Complete the Environmental Study Report (ESR) and place it on the public record; and,
- Phase 5 – Project implementation, which is to undertake the contract drawings and tender documents for the project and proceed to construction and operation of the project.

This Schedule 'B' Study requires the completion of phases 1 and 2 of the Municipal Class Environmental Assessment process, with the final deliverable comprising the documentation of the planning process as provided in this Project File Report. The Project will then proceed to Phase 5 Implementation.

# **MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS**

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

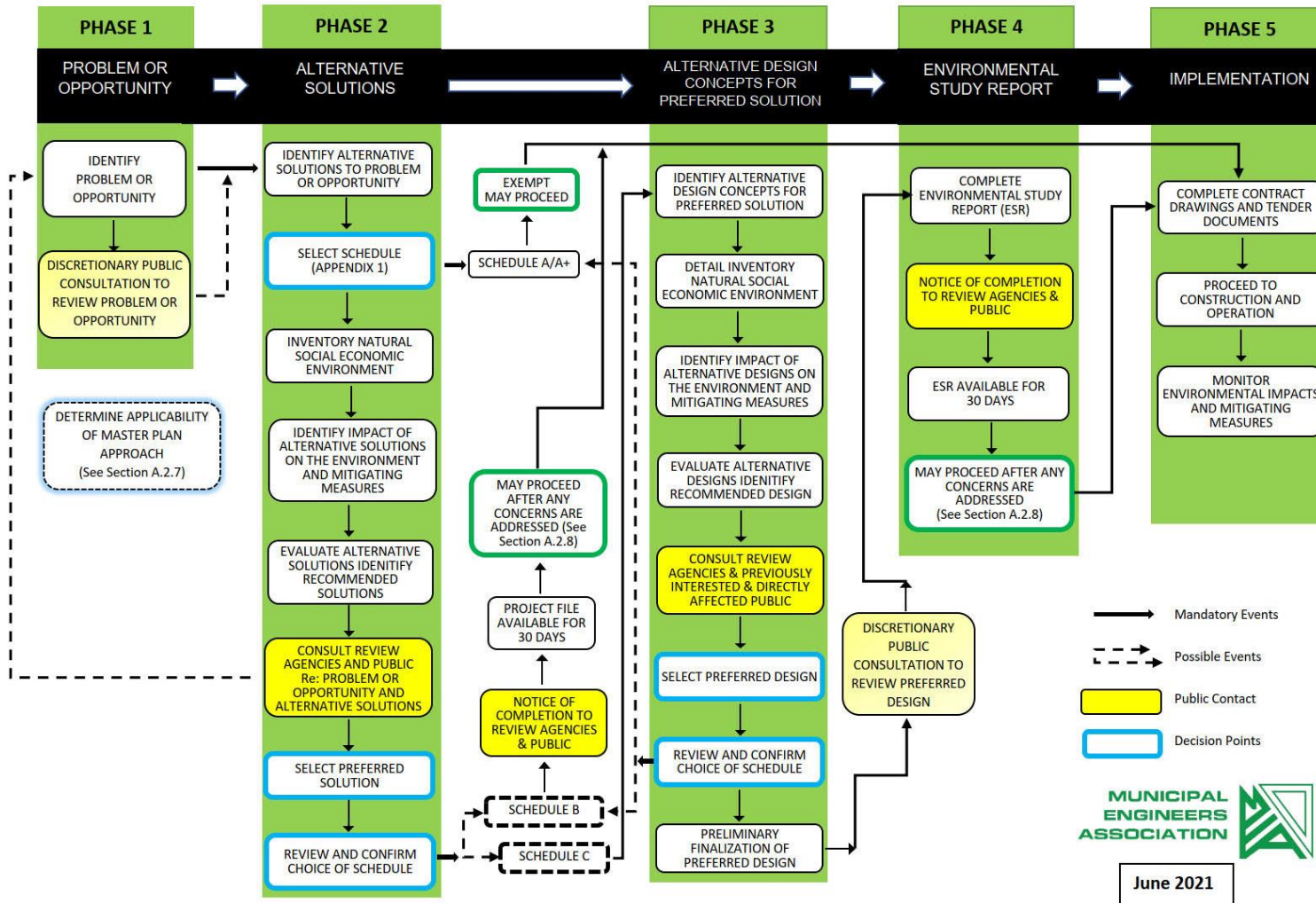


Figure 1.2 – Municipal Class Environmental Assessment Process (Municipal Engineers Association (2021))

### 1.4.1 Section 16 Order Requests

Anyone with concerns related to any aspect of the Study may express such concerns in writing to the Project Manager at the Town of Caledon within the 30-calendar day review period following the Notice of Study Completion. All comments and concerns should be sent directly to Project Manager at the Town of Caledon.

In addition, a request may be made to the Ministry of the Environment, Conservation and Parks for an Order requiring a higher level of Study (i.e. requiring an individual/comprehensive EA 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 would not be considered. Requests should include the requester contact information and full name for the Ministry.

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 Ministry is able to efficiently begin reviewing the request.

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

Minister of the Environment, Conservation and Parks  
Ministry of Environment, Conservation and Parks  
777 Bay Street, 5th Floor  
Toronto ON M7A 2J3  
[minister.mecp@ontario.ca](mailto:minister.mecp@ontario.ca)

and

Director, Environmental Assessment Branch  
Ministry of Environment, Conservation and Parks  
135 St. Clair Ave. W, 1st Floor  
Toronto ON, M4V 1P5  
[EABDirector@ontario.ca](mailto:EABDirector@ontario.ca)

Requests should also be sent to the Town of Caledon by mail or by e-mail.

## 1.5 Study Organization

The Class Environmental Assessment Study was carried out by a consulting team led by R.V. Anderson Associates Limited (RVA) on behalf of the Town of Caledon. The RVA team consists of several multi-disciplinary specialists. The Study team is outlined below:

Town of Caledon

- Shun Cheung, P.Eng., PMP – Project Manager

Consulting Team:

- R.V. Anderson Associates Limited – Lead Consultant, Planning, Natural Environment, Hydraulic Analysis, and Engineering
- ASI – Archaeology & Cultural Heritage
- Thurber Engineering Ltd. – Geotechnical Investigation
- Callon Dietz– Subsurface Utility Engineering & Topographic Survey

## 1.6 Study Schedule

The EA Study was initiated in October 2020. Key dates throughout the Study were as follows:

Table 1.1 – Study Schedule

EA Stage	Date
Notice of Study Commencement	October 22, 2020
Notice of Community Outreach Meeting	May 6, 2021
Community Outreach Meeting	May 27, 2021
Notice of PIC #1	September 9, 2021
PIC #1	October 5, 2021
Notice of PIC #2	May 26, 2022
PIC #2	June 15, 2022
Notice of Study Recommendations	January 12, 2023
Notice of Study Completion	April 6, 2023



## 1.7 Consultation Requirements

Public Consultation is a key feature of environment assessment planning projects. Input received from the public and various stakeholder groups, potentially affected indigenous communities, as well as from provincial ministries, agencies, and authorities can generate meaningful dialogue between the project planners and the public. This consultation allows for the exchange of ideas and the broadening of the information base, leading to better decision-making during the Study.

Various Indigenous communities, government agencies, authorities and interest groups were informed of the Class EA Study commencement, as well as the Public Information Centres, Notice of Study Recommendations, and Notice of Study Completion (forthcoming), through local newspaper notices, direct mailings (paper & electronic) to stakeholders and agencies and notices distributed to property owners in the Study Area.

A complete list of technical agencies, special interest groups and indigenous communities that were contacted as part of the Study is provided in **Appendix 1** of this report.

### 1.7.1 Contact with Stakeholders and Indigenous Communities

As per the MCEA, notification to the public and stakeholders of study commencement is required, as well as notification of Public Information Centres. Notification of Study Commencement, the Public Information Centres, Notice of Study Recommendations, and Notice of Study Completion (forthcoming) was provided through several different methods and media, as outlined below.

- General Public:
  - All Notices were published in the *Caledon Citizen* (local newspaper)
  - All notices were posted on the Town's municipal website
- Residents & Businesses with Study Area:
  - All Notices were mailed to all property owners within the Study Area
- Technical Agencies, Local Interest Groups and First Nations Communities:
  - Notices sent by email two weeks in advance of PIC or by mail if no email was on file for the contact
  - Meetings scheduled with especially interested local interest groups and stakeholders
  - Notice of Completion sent by email or mail
- Project Mailing List (stakeholders who submitted comments during the Study or indicated interest in the project):
  - Notices sent by email two weeks in advance of PIC

- Notice of Completion sent by email

Refer to **Appendix 1** for copies of the published notifications and the stakeholder list. A summary of consultation and comments is provided in Section 8.0

## 2.0 EXISTING CONDITIONS

### 2.1 Traffic and Operations

In support of the Class EA, a review of existing traffic conditions was undertaken to analyze the existing and future needs of the roadway from an operational and safety perspective. The full technical memorandum is provided in **Appendix 2**.

#### 2.1.1 Roadway Geometrics & Safety

Mill Street is a rural local road with a posted maximum speed limit of 40 km/h under the jurisdiction of the Town of Caledon. The road is oriented in a general east-west direction, connecting Mississauga Road (Regional Road 1) at its western extent and Creditview Road at its eastern extent. Intersections on both ends of the corridor are stop controlled on Mill Street. The features of the road corridor include the Caledon Trailway Path crossing, a series of back-to-back horizontal curves, and Mill Street Bridge crossing the Credit River. It should be noted that Mill Street Bridge in the urban section has slightly wider travel lanes and sidewalks, but is outside the scope of this Study.

Mill Street consists of two lanes with a paved platform width of 6 meters to 6.4 meters-wide, which does not meet the Town's design standard; however it is the minimum platform required by Transportation Association of Canada (TAC). It has a rural cross section with roadside ditches from Mississauga Road to 150m west of Creditview Road, and an urban cross section with curb and gutter for the remainder of the corridor. Residential driveways line both sides of the road throughout the corridor.

The existing road geometry does not meet the posted speed requirements, nor the observed operating traffic speeds on Mill Street. Driver sight distance is limited due to the tight horizontal curve radii and steep profile slopes found in the vicinity of the back-to-back horizontal curves. Unprotected hydro poles, trees, and utility boxes are located close to the road, with steep slope embankments behind them. There are no pavement markings on Mill Street except for stop bars at both Mississauga Road and Creditview Road intersections.

Although the Town has no collision history records available for the Study Area, anecdotally some residents have noted during the Study's public engagement activities a number of accidents and/or near misses along Mill Street. This has been considered during the review of the Study corridor and collected speed data as described herein.

### **2.1.1 Transit**

There is no transit service on Mill Street in the Study Area.

### **2.1.2 Active Transportation (Pedestrian and Cyclist Facilities)**

Active transportation facilities are limited to sidewalks along the bridge, with pedestrians and cyclists required to share the roadway with motorized vehicles for the remainder of the corridor. There is a skewed road crossing at the Caledon Trailway Path approximately 220 meters east of Mississauga Road. The crossing is uncontrolled with no supporting signage or pavement markings.

Video footage was reviewed to document pedestrian and traffic behaviour along Mill Street. Based on the video footage, a variety of active transportation (AT) activities along Mill Street have been observed (pedestrians, children, cyclists, dogs leashed and unleashed), with most pedestrians walking within the travel lanes, or along the middle of the road.

Throughout the Study, several residents have expressed to the project team that they feel comfortable walking and biking along Mill Street, with no dedicated active transportation facility. The substandard road geometrics resulting in limited driver's sightlines combined with the lack of separation between vulnerable road users (pedestrians and cyclists) remains a safety concern. The narrow pavement width, tight horizontal curves and lack of centerline pavement marking also creates a potential for vehicles to cross onto the opposing traffic lane.

### **2.1.3 Vehicle Speeds Analysis**

Traffic speed data was collected to support the review of existing traffic conditions. As noted above Mill Street is a rural local road with a posted maximum speed limit of 40 km/h. The operating speeds of vehicles travelling on Mill Street ranged from 42 kilometres per hour to 53 kilometres per hour.

Specifically on the western section of Mill Street between Mississauga Road to the west of the back-to-back horizontal curves, the existing road alignment and profile is relatively straight and flat. Combined with the rural characteristic of the road it is expected drivers will travel faster than the posted speed limit. This coincides with the Study findings when analyzing the collected traffic speed data, as the highest operating speed along Mill Street was recorded in this section of the road, and in some instances exceeds the posted speed limit by up to 13 kilometers per hour. It should also be noted the Caledon Trailway Path crosses Mill Street in this section of the corridor, as outlined in the previous section.

The identified variance between operating speeds and the posted speed limit is of greater concern in the vicinity of the horizontal curves given the identified substandard geometric, operational, and safety characteristics of the road.

Although the existing curves provide a traffic calming effect, which some local residents have communicated during consultation, the curves' substandard road geometry limits sight distance and is a safety concern for all road users in the absence of any active transportation facilities. The variance between operating speed and posted speed should be reduced by improving the road geometry to meet the design requirements of the curves and through effective traffic calming measures to slow down operating speed.

## **2.2 Municipal Services, Drainage & Utilities**

### **2.2.1 Water and Sanitary Services**

Existing municipal services include an existing 300-millimetre diameter PVC watermain along the centre of Mill Street connecting to a 300-millimetre diameter watermain on Mississauga Road and Creditview Road. This 300-millimetre diameter PVC watermain is the sole source of water supply for Mill Street residents and any interruption will require provision of a temporary water supply.

No existing sanitary services were found within the Study corridor.

### **2.2.2 Drainage & Stormwater Management**

A Storm Drainage Design Brief was prepared to document the existing drainage conditions within the Study Area for the purpose of developing a stormwater management strategy.

Under existing conditions, as highlighted in **Figure 2.1**, roadway drainage is generally conveyed via roadside grassed ditches throughout the Study Area to culvert outlets ultimately discharging to the Credit River, with no existing storm water management control. For the 120m section of Creditview Road to the west end of Mill Street Bridge ((structure ID# B20304037), roadway stormwater runoff is conveyed via catchbasins and drain outlets on the bridge along the curb and gutter. An additional catchbasin is found at 1346 Mill Street which collects roadway stormwater on the north side of the road in the absence of a ditch between 1328 Mill Street and 1382 Mill Street.

Five small creeks flow through separate cross culverts southeasterly underneath Mill Street. The three southernmost tributaries cross Mill Street and continue east to discharge to the Credit River; the two other tributaries cross through culverts M3-4 and M3-6 and continue parallel to the road creating a tributary regulated ditch that crosses under three driveways.

Two of the crossings are within private property. Therefore culverts M3-7D, M3-8D and M3-9D are considered crossing culverts.

Most properties on both sides of the road between the area of east of the area of 1260 Mill Street and Creditview Road are located within the 100-Year and Regulatory Floodplains for the Credit River. The Credit River flood plain elevations control the water levels for the creek which flows adjacent to Mill Street in the vicinity of 1347 and 1499 Mill Street. Due to both properties' proximity to the Credit River and being located within the regulatory floodplain, it is expected that these properties will experience flooding during most storms.

The full Design Brief is provided in **Appendix 3**.

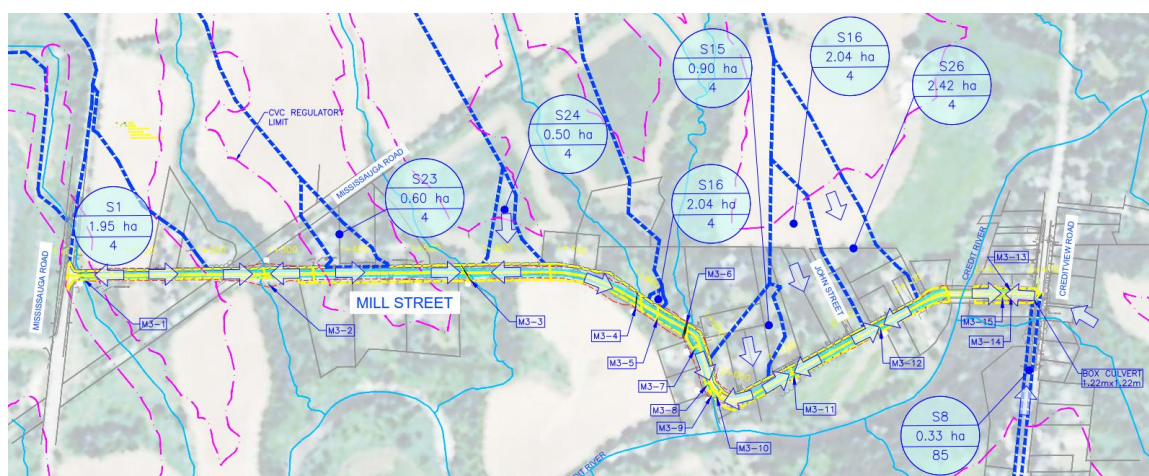


Figure 2.1 – Existing Drainage Area

### 2.2.3 Other Utilities

Mill Street is currently partially illuminated. During the consultation process a local resident raised their concern that the type of streetlight and levels of illumination is not suitable for Mill Street. Based on field review, the existing streetlights are mounted on hydro poles and are typically used for roadway streetlighting.

Other utilities on Mill Street include Enbridge, Bell, and Hydro One which are mainly found in the boulevard area on either side of the road.

## 2.3 Socio-Economic Environment

Mill Street is a rural local road in the Cheltenham settlement of Caledon. Current land uses in the area are mostly rural residential and includes lands designated as Environmental Policy Area within the Town of Caledon Official Plan. The land falls within the regulation

limits of the Credit Valley Conservation Authority (CVC), as well as the Niagara Escarpment Commission (NEC).

## 2.4 Natural Environment

Multiple site investigations within the Study Area were completed and summarized into a Natural Environment Assessment Memorandum (NEA), completed in 2022. A full copy of this memo is provided in **Appendix 4**.

### 2.4.1 Designated Natural Areas

Within the Study Area, lands surrounding the Credit River are identified provincially as components of the Natural Heritage System, including the vegetated valleylands associated with its various local tributaries which are identified as Woodlands. The Study Area is also located within the boundaries of both the Greenbelt Plan and Niagara Escarpment Plan. No wetlands, Areas of Natural or Scientific Interest (ANSI) or other features were identified by the background review.

#### 2.4.1.1 PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement (PPS, Ministry of Municipal Affairs and Housing (MMAH), 2020) sets the policy direction for regulating development and land use planning in the province. Both provincial and local land-use planning decisions build on the PPS and its relevant policies. This report deals specifically with the policies contained in Part V, Section 2.1 (Natural Heritage) of the PPS which is directed at protection and management of natural heritage systems and features. A natural heritage system is defined by the Province of Ontario as:

*“A system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions and working landscapes that enable ecological functions to continue.” (MMAH, 2020).*

The Natural Heritage Resource Manual (MNR, 2010) describes natural heritage features of significance, and areas where development and site alteration is not permitted. The Study Area occurs within the boundaries of both the Greenbelt Plan (2017) and the Niagara

Escarpment Plan (2017) as described below. The Study Area does not bisect the Oak Ridges Moraine Conservation Plan (2017), or Lake Simcoe Protection Plan (2014).

### GREENBELT PLAN

The Greenbelt Act was introduced in 2005 to help shape the future of the Greater Golden Horseshoe region (GGH). The Greenbelt Plan (2017), together with the Niagara Escarpment Plan (NEP) and Oak Ridges Moraine Conservation Plan (ORMCP), identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological and hydrological features, areas and functions occurring on this landscape. The Greenbelt Plan includes lands within, and builds upon the ecological protections provided by, the NEP and ORMCP. The Greenbelt Plan, together with the NEP and ORMCP, builds on the Provincial Policy Statement (PPS) to establish a land use planning framework for the GGH that supports a clean and healthy environment.

The Greenbelt Plan identifies that the Study Area is within the Niagara Escarpment Plan, as described below.

### NIAGARA ESCARPMENT PLAN AREA

Under the Niagara Escarpment Plan Land Use Designation, most lands within the study area are designated as Escarpment Rural Zone, which corresponds to existing developed, agricultural and unforested lands. Policies for these lands allow a broad range of uses with goals varying from preservation/enhancement of natural features to support for agriculture, industry and residential development. Remaining lands are Escarpment Natural Area, generally defined as those lands in a relatively natural state, including escarpment features, valleylands, wetlands and woodlands. As these are the most sensitive natural and scenic components of the escarpment, policies related to these features are aimed at protection and enhancement. An area of Mineral Resource Extraction Zone is located in the far west of the Study Area, west of Mississauga Road.

The Study recommendations are to be developed in accordance with the Greenbelt Plan and Niagara Escarpment Plan Area and works within the Niagara Escarpment Commission's Area of Developmental Control of the Niagara Escarpment Commission will require a Development Permit application under Ontario Regulation 828.

#### 2.4.1.2 TOWN OF CALEDON OFFICIAL PLAN

The Niagara Escarpment Plan is the overarching planning document for the Town of Caledon, as shown on Schedule S (Town of Caledon 2018). Lands within the Study Area are predominantly Environmental Policy Areas (Schedule A) that generally coincide with



watercourses, valleylands and areas of unmaintained vegetation, as well as a buffer around the Credit River. Additional land uses include Settlement Area to the north of Mill Street, Rural Lands on either side in the western section of the Study Area, and Extractive Industrial Area associated with the Cheltenham Brick Works property west of Mississauga Road.

#### **2.4.2 Terrestrial Vegetation Communities and Habitats**

A single-season floral inventory and Ecological Land Classification (ELC) was completed for the Study Area during the active growing season. Typical of southern Ontario, land use and the terrestrial ecosystem within the Mill Street Study Area has been shaped by agriculture and early industry associated with the Cheltenham Brick Works, as well as the topography of the region. As a result of this history, nearly vegetation communities within the Study Area are anthropogenic or anthropogenically influenced, with remnant natural communities (deciduous forest) within the steep-sloped valleylands.

The Study Area contains terrestrial habitats with the potential to support a variety of wildlife species, including resident and seasonally breeding birds, various mammals tolerant of or adapted to human habitation, as well as reptiles, amphibians, and insects. A list of observed terrestrial plant and animal species is presented in Appendix E of **Appendix 4**.

#### **2.4.3 Aquatic Habitats and Communities**

The Study Area is located within the Credit River Watershed, with lands west of the Mill Street Bridge within the Cheltenham to Glen Williams subwatershed and the lands east of the bridge within the Forks of the Credit to Churchville subwatershed. Credit Valley Conservation (CVC) is the agency responsible for development permitting within regulated areas of this watershed.

Five tributaries to the Credit River, as well as the Credit River itself, cross under Mill Street within the Study Area. Two roadside ditches that drain to the Credit River are also present within the Study Area. The watercourses west of the Mill Street Bridge crossing of the Credit River, including the regulated ditch between Stations 1+812 and 1+988, downstream of the M3-4 and M3-6 crossings, are identified to support small warmwater fish communities, while the Credit River is identified as mixed cool/cold water fish habitat. The remaining ditch, east of the Credit River functions as indirect fish habitat. Within the regulated ditch, west of the Credit River, two culverts (M3-5 and M3-10) that convey ephemeral drainage were also reviewed. While these culverts do not directly support fish, they discharge into the regulated ditch below the highwater mark, placing their outlets within direct fish habitat. Two additional drainage culverts within the Study Area, located at Sta. 2+102 and 2+240, were also reviewed and not found to support fish or fish habitat.

The watercourses that support direct fish habitat drain lands to the north of Mill Street south to the Credit River through vegetated valleys within active agricultural and residential land, while the roadside ditch east of the Mill Street Bridge that indirectly contributes to the Credit River drains lands to the east of Creditview Road. The fish community within the Study Area include coldwater species such as Brook Trout, as well as typical baitfish species like darters, minnows, suckers, catfish and sculpins.

#### **2.4.4 Species of Conservation Concern and Species at Risk**

Three occurrences of a protected at-risk plant, Butternut (*Juglans cinerea*, Endangered), were recorded within the Study Area along the roadside. Butternut are protected individually and receive habitat protection in the form of a 25-to-50-meter radius around each stem to protect the tree, as well as area of potential propagation, respectively. In addition, Eastern Wood-pewee (*Contopus virens*, Special Concern), was identified within the Study Area.

Consultation with MECP confirmed the aquatic species at risk (SAR) identified by the background review are considered historical within the vicinity of the Study Area. MECP also noted the potential for a number of at-risk species to occur within the Study Area, including Barn Owl (*Tyto alba*), Bobolink (*Dolichonyx oryzivorus*), Eastern Meadowlark (*Sturnella magna*), Eastern small-footed myotis (*Myotis leibii*), Eastern Whip-poor-will (*Antrostomus vociferous*), Grasshopper Sparrow (*Ammodramus savannarum*), Jefferson Salamander (*Ambystoma jeffersonianum*), Little brown myotis (*Myotis lucifugus*), Louisiana Waterthrush (*Parkesia motacilla*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), Tricolored Bat (*Perimyotis subflavus*) as well as a Restricted Record. Based on habitat within and beyond the Study Area, as well as further guidance from MECP on Jefferson Salamander habitat, no individuals or critical habitat for these, or other additional at-risk species was observed. At-risk bats and birds may utilize roadside trees during their breeding seasons, however, impacts to these habitats are typically managed through timing windows.

## **2.5 Cultural Heritage**

A Cultural Heritage Report of the Study Area was completed to evaluate the cultural heritage significance of the Study Area and assess impacts of the proposed undertaking in consideration of its determined cultural heritage value. Findings of their report are summarized below. The complete Cultural Heritage Report is provided in **Appendix 5**.

These include one cultural heritage landscape, twelve properties designated under Part IV of the *Ontario Heritage Act* (one of which is additionally included on Canada's Register of

Historic Places), five properties that are listed on the Town of Caledon's Heritage Register, and five properties that are listed on the Town of Caledon's Built Heritage Resource Inventory of Pre- 1946 Structures(BHRI) (Town of Caledon 2019; Scheinman 2009).

Identified cultural heritage resources are historically, architecturally, and contextually associated with land use and settlement patterns in the Town of Caledon and more specifically representative of agricultural land use and village settlement relating to early industrial activity dating back to the early nineteenth century as well as a twentieth century history of brickmaking along the Credit River.

Upon completion of ASI's review of cultural heritage resources described above, the Region of Peel, Town of Caledon, MCM, and Ontario Heritage Trust were consulted to determine whether they were aware of any additional cultural heritage resources or concerns within the Study Area for consideration in preparing the Cultural Heritage Resource Assessment. No additional cultural heritage resources were identified by any of the agencies.

## 2.6 Archaeological Potential

A Stage 1 Archaeological Assessment of the Study Area was completed to determine the potential for archaeological potential in the Study Area. Findings of their report are summarized below. The complete Stage 1 Archaeological Assessment report is provided in **Appendix 6**.

Through the assessment, it was determined that much of the Study Area beyond the disturbed roadway right-of-way and residential buildings exhibit archaeological potential and will require Stage 2 assessment, prior to any proposed impacts to the property.

These areas were determined to exhibit archaeological potential on account of:

- Water sources: primary, secondary, or past water source (Credit River);
- Early historic transportation routes (Mississauga Road, Creditview Road, Mill Street and John Street);
- Proximity to early settlements (Cheltenham); and
- Well-drained soils (Oneida clay loam and Lockport clay).

The Stage 1 background Study determined that no previously registered archaeological sites are located within one kilometre of the Study Area.

The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, or slopes in excess of 20 degrees. These lands do not require further archaeological assessment.

## 2.7 Geotechnical and Roadway Pavement

A pavement design report was completed to evaluate the pavement condition of the roadway and provide pavement design recommendations for the reconstruction of Mill Street.

The existing pavement on Mill Street is considered in Fair to Poor condition for most of the corridor. In the rural pavement area between Mississauga Road to 150m west of Creditview Road, the observed pavement distress includes extensive, severe pavement edge cracking, with moderate severity potholes, wheelpath rutting, and longitudinal and transverse cracking.

From 150 meters west of Creditview Road to Creditview Road, the pavement changes to urban platform. In the urban pavement area, the general condition of the pavement surface is considered to be in good condition; although considerable random cracking was observed on the bridge deck over the Credit River. In the approach pavement sections, limited cracking was observed in the travel lanes; however, alligatored cracking was observed at the pavement edge.

Visible slope stability issues have been noted during field reviews at 250m east of Mississauga Road where the major road crossing culvert east of the Caledon Trailway Path. During the consultation process a resident have notified the Town the embankment just west of the Caledon Trailway Path, north side of the road, is also experiencing erosion issues.

A copy of the full report is provided in **Appendix 7**.

### 3.0 PROBLEM AND OPPORTUNITY STATEMENT

Per Phase 1 requirements of the Municipal Class Environmental Assessment process for a Schedule 'B' project, a "Problem and Opportunity Statement" was prepared to identify the various problems and opportunities to be addressed throughout the Study. In essence, the Problem Statement outlines the need and justification for the overall project and establishes the general parameters, or scope, of the Study.

The Problem Statement was developed following the assessment of the existing conditions within the Study Area, as described in Section 2.0, along with having discussions with Town staff regarding municipal servicing and transportation infrastructure needs; and through consultation with the public and technical agencies undertaken throughout the Study.

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

## 4.0 ALTERNATIVE SOLUTIONS

Under Phase 2 of the Class EA process, all reasonable solutions to the problem are identified and described, including the “Do Nothing” alternative. After general inventories of the technical, natural, social, cultural and economic environments are prepared and potential environmental impacts are determined for each alternative, the net positive and negative effects are identified, and the alternatives are evaluated resulting in a recommended solution. The recommended solution is then presented to the public, stakeholders and agencies to solicit input into the selection of the “preferred solution”.

### 4.1 Assessment Criteria and Evaluation Methodology

The Project Team considered criteria that represents the broad definition of the environment as described in the EA Act to comparatively evaluate the alternative solutions. The general evaluation criteria used in evaluating the alternative solutions and design concepts are outlined in **Table 4.1**.

**Table 4.1 – Evaluation Criteria**

Criteria	Description
Technical	Does the alternative adequately address the technical requirement of the project (e.g. geometric and operational improvement, improved quality and safety)?
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 / Archaeological	Will the alternative affect archaeological, cultural heritage resources or Indigenous communities?
Costs	What is the capital cost of the alternative? What is the cost for utility relocations and property acquisitions? What are the operation and maintenance costs?

### 4.2 Evaluation Methodology and Ranking System

The project team comparatively ranked each alternative solution from least desirable to most desirable, for each of the criteria described in Section 4.1, to determine the preferred

solution(s). **Figure 4.1** demonstrates the rating scale used in the evaluation of alternative solutions described below.

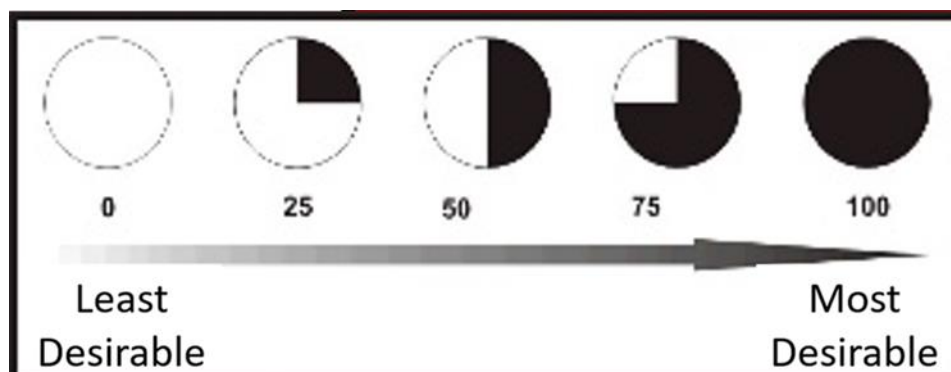


Figure 4.1 – Alternative Solution Ranking System

### 4.3 Alternative Solutions – Roadway Alignment Through Curves

This section documents the geometric roadway alignment options considered to address the identified roadway, safety and traffic operational requirements through the curves in Mill Street corridor.

#### 4.3.1 Roadway Alignment Through Curves

The alternative solutions considered to address the identified deficiencies through the curves are described below.

**Alternative 1 – Do Nothing:** The roadway curves would remain as is, with no improvements undertaken. This alternative does not address the problem statement. This alternative is required to be considered under the Municipal Class EA planning process as a baseline for the comparison of alternative solutions.

**Alternative 2 – Adjust Alignment Completely to Fully Meet TAC Standard:** Under this alternative, the roadway alignment would be adjusted completely to fully meet TAC standards, significantly increasing the radius of the curves and improving vehicle, pedestrian and cyclist safety as shown in **Figure 4.2**. Safety concerns related to vehicles, pedestrians and cyclists navigating the curves are fully addressed, however vehicle speeds are likely to increase. Additionally, significant property impacts are required to accommodate the new roadway alignment, including the complete purchase of the property at 1346 Mill Street.



Figure 4.2 – Alternative 2: Adjust Alignment Completely to Fully Meet TAC Standard

**Alternative 3 – Adjust Alignment Slightly to Improve Curve Radius:** A slight realignment of the roadway to reduce the radius through the curve, and sight distance improvements (tree trimming) to improve vehicle, pedestrian and cyclist safety through the curve as shown in **Figure 4.3**. The natural traffic calming barrier of the s-curve remains mostly intact, and concerns regarding vehicle and pedestrian/cyclists safety are mitigated through a slightly improved radius and operational improvements including cutting back existing vegetation, improved signage and pavement marking, and providing a 1.5 meter wide sidewalk to accommodate pedestrians. Minor property impacts limited to the south side of the road; however, TAC standards are not fully met.



[illegible]

Figure 4.4 – Alternative 4: Operational Improvements in Current Alignment
























<sup>1</sup> Alternative 4 – was added to the evaluation of alternative solutions following PIC No. 1

#### **4.3.2 Evaluation of Alternative Solutions – Roadway Alignment Through Curve**

The table below summarizes the evaluation of alternative solutions for the roadway alignment through the curve based on the criteria presented in Section 4.1 and the evaluation methodology described in Section 4.2.



Table 4.2 – Roadway Alignment Through Curves Alternatives Evaluation

EVALUATION CRITERIA	1. Do Nothing		 2. Adjust Alignment to Fully Meet TAC Standard		 3. Adjust Alignment Slightly to Improve Curve Radius		 4. Operational Improvements in Current Alignment	
TECHNICAL		Natural Traffic Calming barrier remains intact however concerns regarding vehicle and pedestrian/cyclists safety are not addressed.		Safety concerns related to vehicles, pedestrians and cyclists navigating curve addressed however vehicle speeds likely to increase.		Natural Traffic Calming barrier partially remains and concerns regarding vehicle and pedestrian/cyclists safety are partially addressed.		Natural Traffic Calming barrier partially remains. Concerns regarding vehicle and pedestrian/cyclists safety are not addressed.
SOCIAL ENVIRONMENT		No property requirements at this time. Property required delayed to a later date.		Major property requirements, including the complete purchase of the property at 1346 Mill Street required.		Minor property requirements limited to the south side of the road, with minor encroachment towards these properties.		Minor property requirements limited to the south side of the road, with minor encroachment towards these properties.
NATURAL ENVIRONMENT		No additional impacts		Major vegetation impacts to the north side of the road. Major realignment of regulated watercourse (roadside ditch) will require CVC work permit.		Removal of trees and impacts limited to south side of the road. Slight realignment of regulated watercourse (roadside ditch) will require CVC work permit.		Removal of trees and impacts limited to south side of the road. Slight realignment of regulated watercourse (roadside ditch) will require CVC work permit.
HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS		No impact to archaeological or built heritage resources along the corridor		Stage 2 AA required to confirm Presence of archaeological resources required within small areas beyond currently disturbed ROW. No impacts to the built heritage resources along the corridor		Stage 2 AA required to confirm Presence of archaeological resources required within large area beyond currently disturbed ROW. No impacts to the built heritage resources along the corridor		Minor Stage 2 AA required to confirm Presence of archaeological resources required within minor graded area beyond currently disturbed ROW. No impacts to the built heritage resources along the corridor
COST		Costs of improvements delayed to a later date.		Significant construction, utility relocations, and property acquisition costs.		Moderate construction, utility relocations, and property acquisition costs. In line with Town's budget.		Moderate construction, utility relocations, and property acquisition costs. In line with Town's budget.
OVERALL SCORE	8.0		4.0		10.0		8.0	
EVALUATION SUMMARY	Not Recommended		Not Recommended		Initially Recommended		Preferred Alternative to be Carried Forward in Consideration of Comments Received	

4.3.3 Roadway Alignment Through Curves Preferred Solution

Alternative 3 - Adjust Alignment Slightly to Improve Curve Radius was initially identified as the preliminary recommended solution as it mitigates the identified safety concerns, maintains the natural traffic calming barrier, and minimizes impacts to adjacent properties through the curves. The preliminary recommendation was presented for public input at PIC #1.

In consideration of the public feedback at the PIC associated with implementing Alternative 3, including significant concerns regarding property impacts and increasing speeds through the curve as further described in Section 8.3.1.2, the project team developed an additional alternative for the roadway alignment through the curves. Based on the revised evaluation, **Alternative 4 – Operational Improvements in Current Alignment** is selected as the preferred solution.

## 4.4 Alternative Solutions – Cross Section

This section documents the cross-section options considered to address the identified roadway, safety and traffic operational requirements for the Mill Street corridor, from Mississauga Road to Creditview Road.

### 4.4.1 Preliminary Alternative Cross-Sections

The preliminary alternative cross-section solutions considered to address the identified deficiencies through the Mill Street corridor are described below.

**Alternative 1 – Do Nothing:** The roadway cross-section would remain as is, with no improvements undertaken. This alternative does not address the problem statement. This alternative is required to be considered under the Municipal Class EA planning process as a baseline for the comparison of alternative solutions.

**Alternative 2 – Curb and Gutter with Sidewalks:** One lane of traffic in each direction (3.5 meters wide) with signage for vehicles to share the roadway; 1.4-meter-wide paved shoulders with 0.5-meter-wide curb and gutter on both sides of the road; with 1.5-meter-wide boulevards on the south side of the road and 0.5-meter-wide asphalt splashpad with 1.5-meter-wide concrete sidewalk on the north side of the road as shown in **Figure 4.5** Figure 5.2. The total width of this cross-section alternative is 12.8 meters wide with 9.8 meters of paved roadways and would significantly impact adjacent properties.

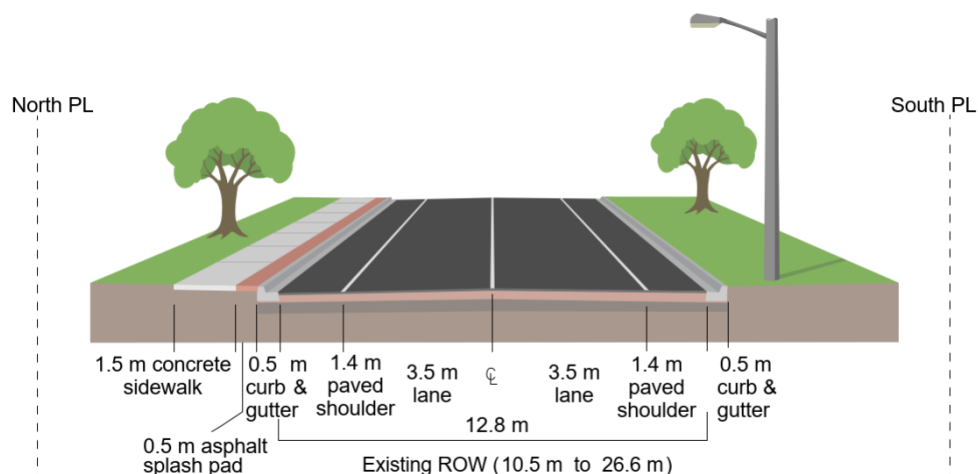
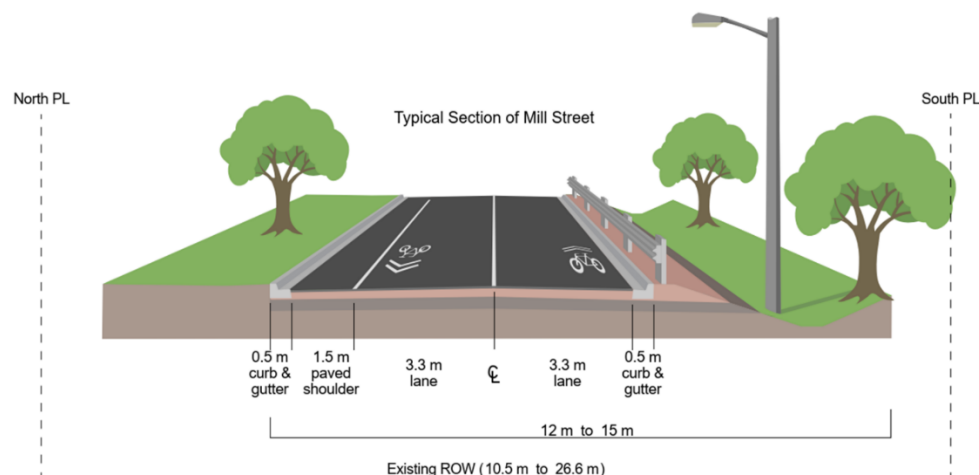


Figure 4.5 - Alternative 2: Curb and Gutter with Sidewalks

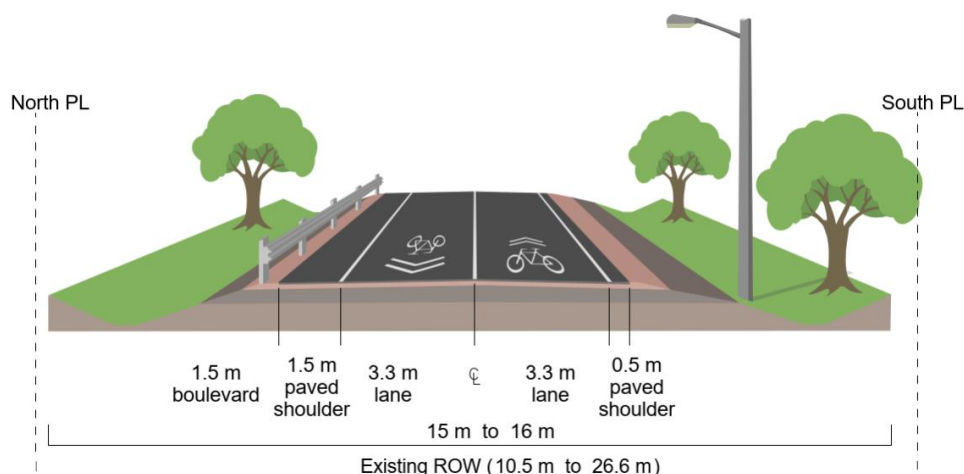
**Alternative 3 – Curb and Gutter with Paved Shoulder:** One lane of traffic in each direction (3.3 meters wide) with signage for vehicles and cyclists to share the roadway; curb and

gutter on both sides of the road; 0.5-meter depth ditch with 3:1 foreslope and maximum 2:1 backslope on the south side of the road and 1.5-meter paved shoulder on the north side of the road as shown in **Figure 4.6**. The total width of this cross-section alternative varies between 12 to 15 meters wide with 9.1 meters of paved roadway.



**Figure 4.6 - Alternative 3: Curb and Gutter with Paved Shoulder**

**Alternative 4 – Paved Shoulder and Re-instate Ditches:** One lane of traffic in each direction (3.5 meters wide) with signage for vehicles and cyclists to share the roadway; 0.5-meter depth ditch with 3:1 foreslope and maximum 2:1 backslope on both sides of the road; 1.5-meter-wide paved shoulder on the north side of the road and 0.5-meter-wide paved shoulder on the south side of the road as shown in **Figure 4.7**. The total width of this cross-section alternative varies between 15 to 16 meters wide with 10.1 meters of paved roadway.



**Figure 4.7 - Alternative 4 – Paved Shoulder and Re-instate Ditches**



#### 4.4.1.1 PRELIMINARY RECOMMENDATIONS

Alternative 3 - Curb and Gutter with Paved Shoulder was identified as the preliminary preferred solution as it provides adequate accommodation for pedestrians and cyclists, minimizes impacts to adjacent properties, and improves roadway drainage conveyance. The preliminary recommendation was presented for public input at PIC #1.

In consideration of the public feedback associated with implementing Alternative 3 at and following the PIC #1, including significant concerns regarding property impacts and retaining the rural look and feel of the corridor as further described in Section 8.3.1.2, the project team developed additional alternatives for the roadway cross-section for input at PIC #2, as described below.

#### 4.4.2 Cross Section – Additional Options

**Alternative 1 – Do Nothing:** The roadway cross-section would remain as is, with no improvements undertaken. This alternative does not address the problem statement. This alternative is required to be considered under the Municipal Class EA planning process as a baseline for the comparison of alternative solutions.

**Alternative 2 – Existing Cross-Section with Mountable Curb:** One lane of traffic in each direction (3.0 to 3.2 meters wide) with signage for vehicles to share the roadway; 0.5-meter-wide curb and gutter on both sides of the road, with sod boulevard on the north side of the road as shown in **Figure 4.8**.

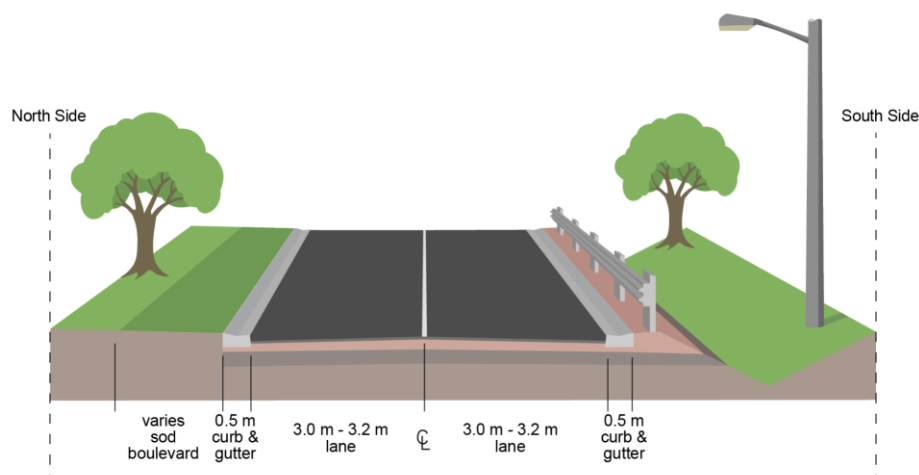


Figure 4.8 - Alternative 2: Existing Cross-Section with Mountable Curb

**Alternative 3 – Sidewalk:** One lane of traffic in each direction (3.0 to 3.2 meters wide) with signage for vehicles to share the roadway; 0.5-meter-wide curb and gutter on both sides of

the road, with 1.8-meter-wide concrete sidewalk on the north side of the road as shown in Figure 4.9.

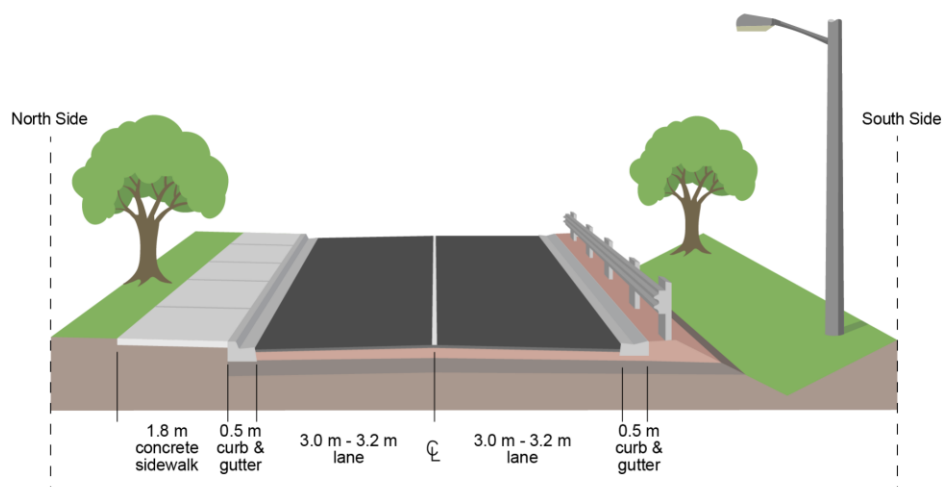


Figure 4.9 - Alternative 3: Sidewalk

**Alternative 4 – Asphalt Boulevard:** One lane of traffic in each direction (3.0 to 3.2 meters wide) with signage for vehicles to share the roadway; 0.5-meter-wide curb and gutter on both sides of the road, with 1 to 1.5-meter-wide asphalt boulevard on the north side of the road as shown in Figure 4.10.

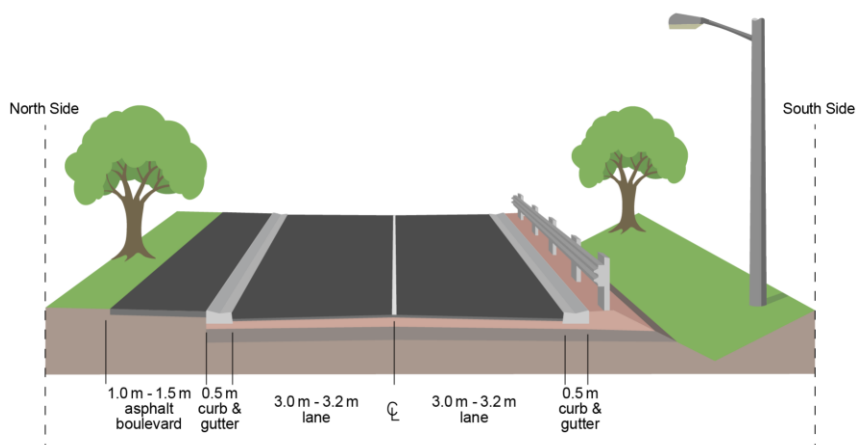


Figure 4.10 – Alternative 4: Asphalt Boulevard

**Alternative 5 – Rehabilitate Existing Roadway Only<sup>2</sup>:** One lane of traffic in each direction (3.0 to 3.2 meters wide in tangent section and 4.0 metres wide at tight curves), with no curb and gutter or pedestrian or cyclist accommodation as shown in **Figure 4.11**.

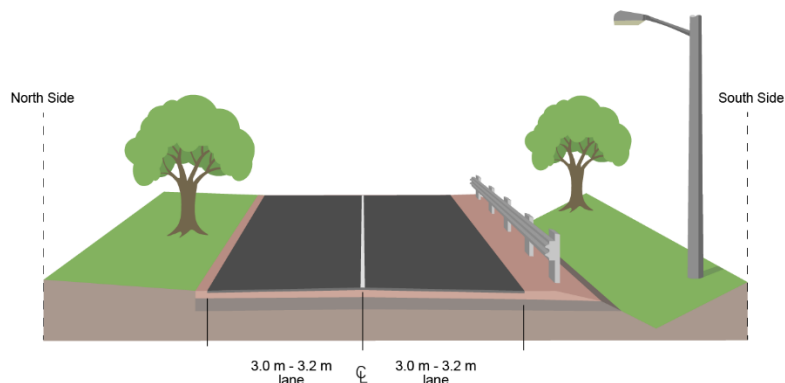


Figure 4.11 – Alternative 5: Rehabilitate Existing Roadway Only

#### 4.4.3 Evaluation of Alternative Solutions - Roadway Geometrics and Cross Section

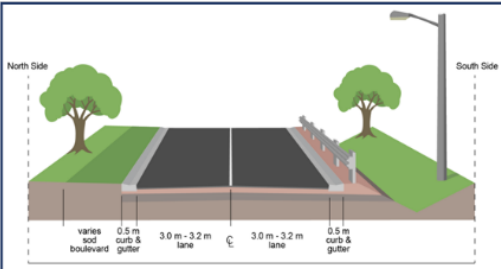
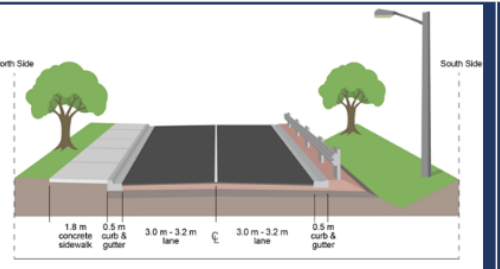
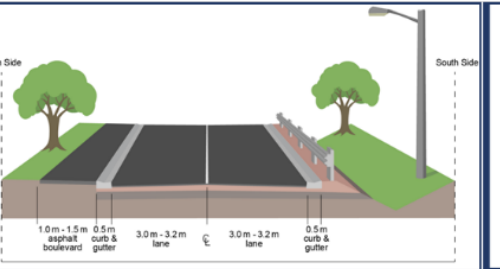
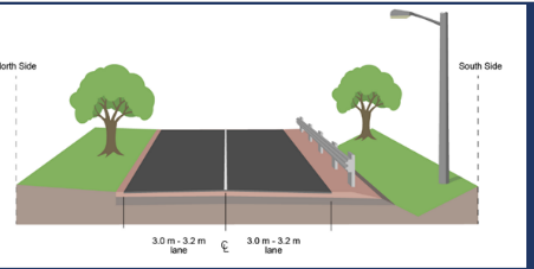

























Alternatives 1 to 4 were presented at PIC #2. Alternative 5 - Rehabilitate Existing Roadway Only, was added for evaluation following PIC #2 in consideration of the feedback received at PIC #2. The table below summarizes the evaluation of alternative solutions for the roadway cross-section based on the criteria presented in Section 4.1, the evaluation methodology described in Section 4.2, and feedback provided at PIC #2 documented in Section 8.3.1.3.

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<sup>2</sup> Alternative 5 – was added to the evaluation of alternative solutions following PIC No. 2



Table 4.3 – Roadway Cross Section Alternatives Evaluation

EVALUATION CRITERIA	1. Do Nothing									
			2. Existing Cross-Section with Mountable Curb		3. Sidewalk		4. Asphalt Boulevard		5. Rehabilitate Existing Roadway Only	
TECHNICAL (TRAFFIC OPERATIONS & SAFETY / ROADWAY DRAINAGE)		Operational & safety requirements of road users not addressed. Roadway drainage problems would continue		Physical separation between pedestrians and vehicles. No accommodation for cyclists. Some improvements to drainage conveyance.		Physical separation between pedestrians and vehicles. No accommodation for cyclists. Some improvements to drainage conveyance.		Physical separation between pedestrians/ cyclists and vehicles. Some improvements to drainage conveyance.		No physical separation between pedestrians/ cyclists and vehicles. Minor improvements to drainage conveyance.
SOCIAL ENVIRONMENT		No encroachment towards existing properties.		Minor encroachment towards existing properties.		Minor encroachment towards existing properties.		Minor encroachment towards existing properties.		Minor encroachment towards existing properties. Desired by residents.
NATURAL ENVIRONMENT		No negative or positive impacts on the natural environment.		No additional impervious surface Some impacts to adjacent trees to be mitigated.		Minor potential impacts associated with additional impervious surface Some impacts to adjacent trees to be mitigated.		Minor potential impacts associated with additional impervious surface Some impacts to adjacent trees to be mitigated.		No additional impervious surface Some impacts to adjacent trees to be mitigated.
HERITAGE / ARCHAEOLOGICAL / CULTURAL IMPACTS		No impact to archaeological or built heritage resources along the corridor		Potential indirect impacts to Cultural Heritage Resources associated with minor encroachment. Stage 2 Arhceological Assessment Required in more areas.		Potential indirect impacts to Cultural Heritage Resources associated with minor encroachment. Stage 2 Arhceological Assessment Required in more areas.		Potential indirect impacts to Cultural Heritage Resources associated with minor encroachment. Stage 2 Arhceological Assessment Required in more areas.		Potential indirect impacts to Cultural Heritage Resources associated with minor encroachment. Stage 2 Arhceological Assessment Required in some areas.
COST		No capital cost but ongoing costs to maintain infrastructure		Moderate construction, utility relocations, and property aquisition costs. In line with Town's budget.		Moderate construction, utility relocations, and property aquisition costs. In line with Town's budget.		Moderate construction, utility relocations, and property aquisition costs. In line with Town's budget.		Lower construction, utility relocations, and property aquisition costs. In line with Town's budget.
EVALUATION SUMMARY	Not Recommended		Not Recommended		Not Recommended		Not Recommended		Preferred Alternative to be Carried Forward in Consideration of Comments Received	

4.4.4 Roadway Cross Section Preferred Solution

Based on the revised evaluation, **Alternative 5 - Rehabilitate Existing Roadway Only** is selected as the preferred to be carried forward.

## 5.0 DESCRIPTION OF THE RECOMMENDED SOLUTIONS

The preferred solutions as described above were presented to review agencies and the public through a Notice of Study Recommendations in order to obtain comment and input prior to confirmation and/or revision of the preferred solution(s). Roll plans of the recommendations are provided in **Appendix 9**, while key elements of the preferred solution(s) developed for Mill Street are described below.

### 5.1 Roadway Design Recommendations

#### 5.1.1 Roadway Alignment Through Curve Recommendations

In consideration of the feedback received from PIC #2, the existing roadway alignment through the curve and along the entire Study corridor is to be maintained with operational improvements only as shown in **Figure 5.1**

The recommended operational improvements include cutting back existing vegetation to improve sightlines, traffic signs, pavement paint markings, and slightly widening the lane to 4 meters wide at the eastern most curve to provide sufficient width for large vehicle movements such as snowplows, emergency service vehicles, and garbage trucks.

Additional operational improvements in the area of the s-curve are recommended to include:

- Advanced curve warning signs;
- Speed limit indicators;
- Single solid yellow centreline;
- Chevron signs positioned outside of curves; and
- Pedestrian crosswalk pavement marking and pedestrian crossing signs at the Caledon Trailway Path.

By maintaining the alignment of the s-curve, impacts to adjacent properties will be minimized, the traffic calming properties of the existing curve will be maintained, and natural environmental impacts to the Credit River Valley will be largely avoided, whilst improving the safety of the s-curve for all road users. The roadway curve would remain as is, with improvements limited to resurfacing the roadway surface in the current alignment.

Further details regarding the Roadway Alignment Through Curves Recommendations, including Design Criteria and the recommended Plan and Profile sheets are provided in **Appendices 8 and 9 respectively**.

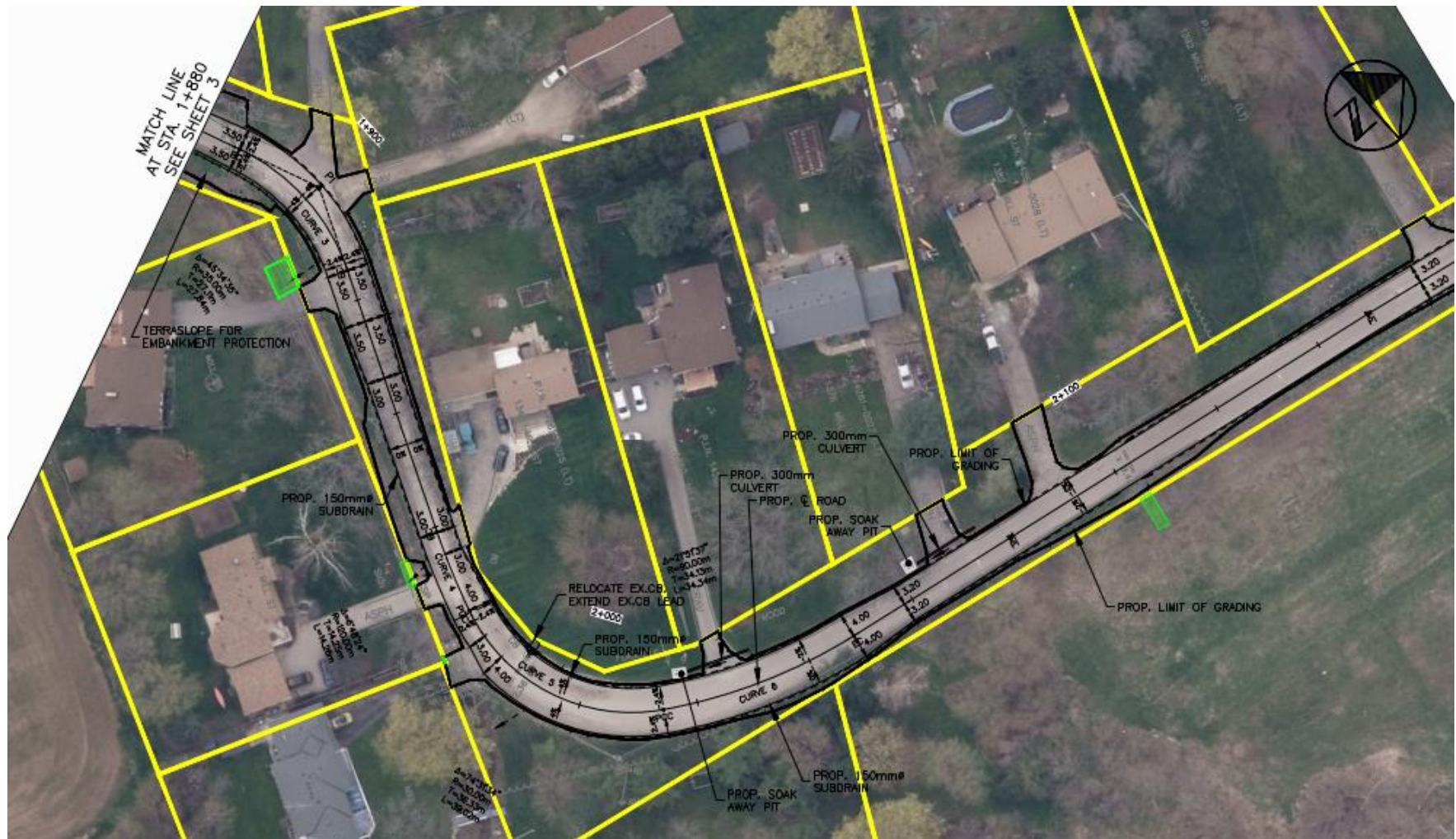


Figure 5.1 – Recommended Roadway Alignment Through Curve

### **5.1.2 Cross-Section Recommendations**

The preferred alternative for Mill Street is to maintain the existing road cross section and generally match the existing paved platform width as shown in **Figure 5.2**.

The cross section of the rehabilitated roadway will be comprised of two vehicle lanes (3.0 to 3.2 meters-wide in the tangent section, and 4.0 meters-wide wide at the curves), no new barrier curb and gutter, and maintain existing roadside ditches. Pedestrians and cyclists will continue to share the road with vehicular traffic.

This cross-section minimizes property, utility, and environmental impacts as it maintains the existing paved platform width. Where required, new steelbeam guiderail will be installed to protect traffic from roadside hazards including steep embankments.

Further details regarding the Cross-Section Recommendations, including the recommended Plan and Profile sheets are provided in **Appendix 9**.

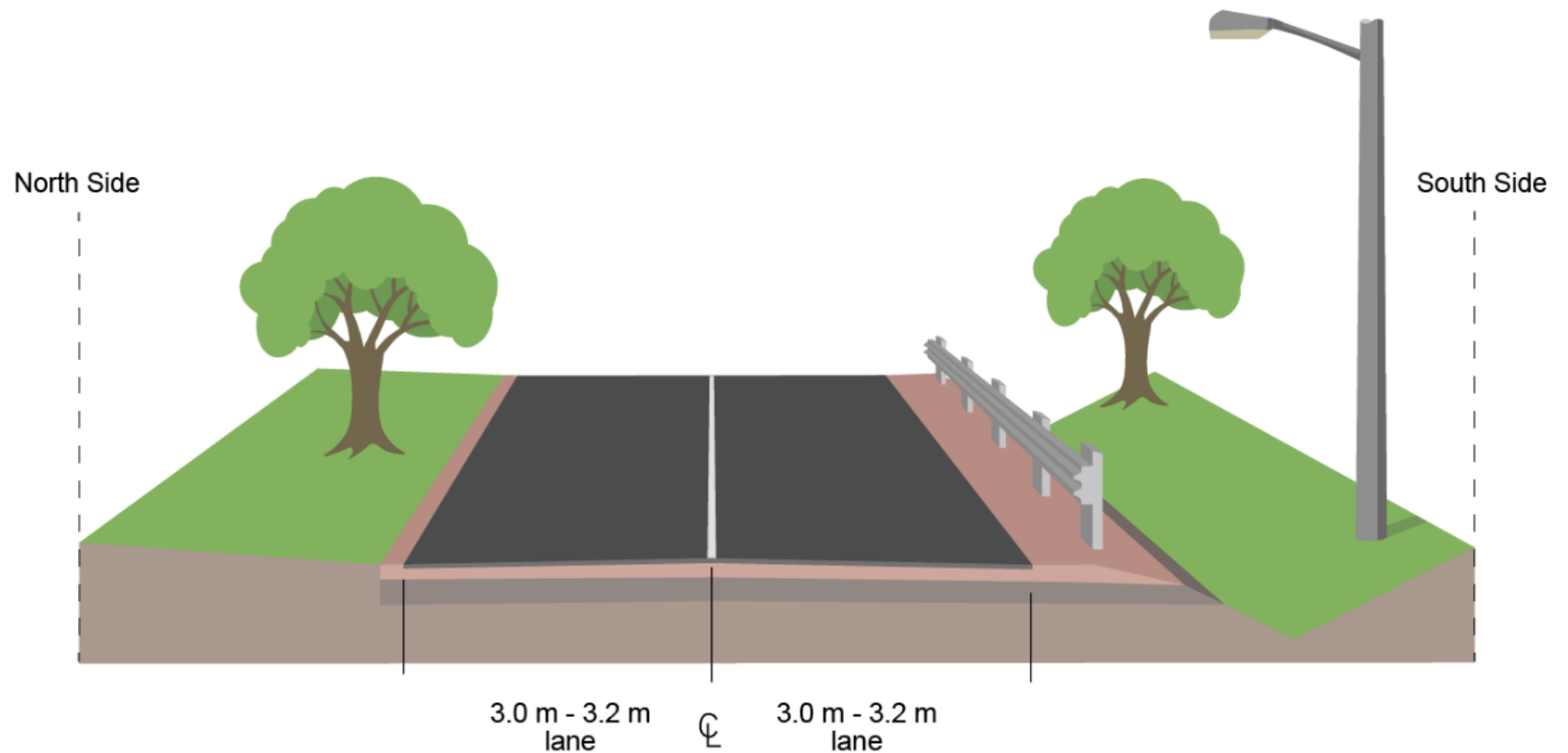


Figure 5.2 – Recommended Cross-Section (Tangent Section, 4.0m wide lanes at curves)



### **5.1.3 Monitoring for Future Pedestrian Needs**

In consideration of the feedback received through the Study, the Town recognizes Mill Street predominantly serves the needs of the local residents, most of which have strongly opposed any active transportation facility on Mill Street. After reviewing the existing conditions of the roadway as described in **Appendix 2**, and considering the associated property, utility, environmental, and cultural heritage impacts, and the Town's budgetary constraints, the Town has opted to continue to monitor Mill Street to determine if active transportation facilities are needed in the future.

## **5.2 Illumination Recommendations**

At this time the Town has opted to maintain the existing illumination levels and continue monitoring Mill Street's streetlighting needs and implement improvements in the future if needed.

## **5.3 Pavement Rehabilitation Recommendations**

In consideration of the observed pavement condition, and the extent of moderate to severe cracking in the rural pavement section, it is recommended that the rehabilitation strategy for the section of Mill Street from Mississauga Road to west of the Mill Street Bridge (Sta. 2+300) include pulverizing the existing asphalt with the underlying granular material (Full Depth Reclamation), grading the processed material as required to accommodate the placement of new 130mm layer of asphalt resulting in no change in road profile. Additional new Granular A base material may be required for minor correction of crossfall or localize profile grades.

In the urban pavement area with curb and gutters, the recommended rehabilitation strategy includes removal of the existing asphalt, with the exposed granular material graded as required for the placement of 130 mm of new asphalt to match existing curb and gutter.

Further details regarding the Pavement Rehabilitation Recommendations are provided in **Appendix 7**.

## **5.4 Municipal Services, Drainage & Utilities**

### **5.4.1 Drainage and Stormwater Management**

It is noted that solving drainage related issues on the properties at 1499 Mill Street and 1347 Mill Street may not be achievable given that these properties are situated within the floodplain with portions of the properties being within the 5-year flood elevations associated with the

Credit River. The recommended ditch cleanout could help conveyance during very small, frequent events; however, given the backwater effects for the receiving Credit River, the recommendations will not be able to address both properties owner's concerns regarding flooding on their properties.

To minimize blockage from ice and debris, the triple culverts at 1357 Mill Street will be assessed and replaced with a box culvert. The size and details to be confirmed through consultation with CVC during detailed design.

Further details regarding the recommended drainage and stormwater management approach is provided in **Appendix 3**.

#### 5.4.2 Utilities

No changes to the existing watermain and buried gas main along Mill Street is anticipated from the proposed road pavement rehabilitation work. Existing hydro poles and aerial Bell infrastructure may need to be relocated to accommodate grading changes in the road embankment, which will be confirmed with Hydro One during detailed design.

### 5.5 Preliminary Cost Estimate & Timeline

#### 5.5.1 Preliminary Construction Timeline

Construction is anticipated to commence in 2025, and last one construction season. The anticipated timeline for the proposed works is outlined in the table below.

Table 5.1 – Preliminary Timing Summary

Activity	Timing
Detailed Design	Summer / Fall 2023
Property Acquisition	Fall 2023
Utility Relocations	2024
Road Reconstruction	2025

#### 5.5.2 Preliminary Cost Estimate

A preliminary cost estimate has been prepared for the construction of the recommended design. The preliminary cost estimate to complete the reconstruction of the roadway and intersection is \$1,331,000 as shown in the table below. This estimate includes road rehabilitation, ditch and culvert cleanouts, site protection and restoration, and engineering fees,

but does not include utility relocation or property acquisition, extent and limits of both to be confirmed during detailed design.

**Table 5.2 – Preliminary Cost Estimate**

Item	Cost
Miscellaneous / General (Bonding, Site Office, Insurance, Traffic Control, Environmental Protection)	\$270,000
Drainage Improvements (Subdrain, Culvert Improvements, Catchbasin Relocation, Erosion Control)	\$178,000
Roadworks	\$576,000
<b>Subtotal</b>	<b>\$1,024,000</b>
Contingency (30%)	\$307,000
<b>Total</b>	<b>\$1,331,000</b>

## 5.6 Design Criteria

In developing the recommended design concepts for the Study Area, various design criteria were developed to ensure consistent design standards were incorporated into the recommended design. The design criteria were developed based on the Town of Caledon's current policies, plans and design standards; Transportation Association of Canada (TAC), Ontario Traffic Manual (OTM) and MTO's Geometric Design Standards for Ontario Highways and Roadside Safety Manual; and developed further through consultation with the Town and CVC. Design criteria were developed for both the road alignment and profile, as well as drainage and stormwater management requirements. In developing the design criteria, items that were considered included design and posted speeds, horizontal and vertical alignments, cross section and ROW widths, and road clear zone requirements. A complete list of the design criteria developed to accommodate the Study Recommendations is provided in **Appendix 8**.

In keeping with the above, the Town of Caledon Official Plan identifies Mill Street as local rural road and their design standards classifies it as a local residential. This is comparable to an undivided local rural road as per Transportation Association of Canada (TAC).

### 5.6.1 Deviations from Design Criteria

The design criteria summary tables provided in **Appendix 8** also contain notes on agreed-upon deviations from the design criteria. In general, most of these deviations arose from concerns



regarding property impacts and/or excessive costs associated with fulfilling the desired criteria. These proposed deviations include the following:

- The curve radii at the back-to-back horizontal curves between Sta. 1+880 to Sta. 2+050 supports a design speed lower than the posted speed. Improving the road alignment to achieve TAC minimum curve radii for design speed will involve buy out of adjacent private residential properties, and also incur major costs and environmental impacts due to the resulting realignment of the roadside ditch along the west side of the road, which currently conveys CVC's regulated watercourse. Without available collision data for review, the Town proposes to maintain existing road centerline alignment for the entire project corridor.
- The rehabilitated road and lane width will match existing cross-section, which is substandard to the Town of Caledon design standards. Widening the lanes will result in property acquisition, tree removals, and grading into ditches/ regulated watercourse. The Town has decided to maintain existing roadway and lane widths.
- The minimum side slope will match existing (3:1 or 1.5:1 max) which is steeper than the Town of Caledon design standards. Fixed objects (trees, hydro poles, Bell pedestals) are within the road clear zone defined by TAC standards, Flattening the side slopes will require encroachment into adjacent property and grading into the ditches and regulated watercourse. Removing the fixed objects will require extensive tree removals. New steel beam guiderail, traffic warning signs, and erosion control blankets is therefore proposed to improve safety.
- The vertical sag curve at the following locations do not meet TAC minimum K-values: Sta. 1+020, Sta. 1+280, Sta. 1+410, Sta. 1+560, Sta. 1+845, Sta. 1+985, Sta. 2+295, and Sta. 2+445. The proposed vertical crest curve do not meet TAC minimum K-values: Sta. 1+235, Sta. 1+485, Sta. 1+700, and Sta. 2+370. Achieving TAC minimum standards would require significant property impacts, grading into regulated watercourse, and tree removals. The Town therefore has decided to maintain the existing road profile.

## 6.0 IMPACTS, MITIGATION AND MONITORING

The text below summarizes the key impacts associated with the implementation of the recommended solution(s) and general mitigation required. In addition to the mitigation measures identified in the report, additional work will be required to be completed following the Class EA, prior to construction. During detailed design, findings from the Class EA will be confirmed through additional investigations, planning and consultation with the public and technical agencies.

### 6.1 Natural Environment

The following sections describe the impacts and mitigation measures developed to avoid or minimize potential impacts to the natural environment associated with the proposed road improvements. These measures should be considered and elaborated on, as required, during detailed design.

The complete Natural Environment Assessment Memo that discusses the preliminary impacts and proposed mitigation measures are provided in **Appendix 4**.

#### 6.1.1 Vegetation and Vegetation Communities

Vegetation removal within and beyond the current right of way to support grading/filling activities has the potential to impact vegetation communities including residential lands, Mineral Cultural Meadow, Thicket and Woodland communities, as well as Deciduous Forest and riparian areas, negatively affecting terrestrial habitats. Efforts have been made to reduce vegetation impacts by reducing roadside grading requirements. A tree inventory will be completed during detailed design to further refine the potential impacts, and mitigation measures to roadside trees. While grading will also be reduced around adjacent sensitive habitats, limiting encroachment, debris, dust and/or sediment may still be released into terrestrial environments. Heavy industrial equipment can also compact soils, negatively affecting existing and future vegetation. General mitigation measures to minimize these impacts are identified in **Appendix 4** and include:

- Employ Clean Equipment Protocols to prevent movement of exotic invasive species to and throughout the project area (Halloran *et al.* 2013).
- Erect tree protection to help prevent damage to trees intended to remain due to equipment movement or grading activities.
- Design and implement an erosion and sediment control (ESC) plan to contain/isolate the construction zone, manage site drainage and prevent erosion of exposed soils and migration of sediment to adjacent sensitive areas during all phases of the project.

- Inspect and maintain all ESC measures to ensure they are functioning as intended throughout construction and until such time that disturbed areas have stabilized.
- Implement dust suppression measures, such as moistening dry soils with water, as required during construction and adhering to erosion and sediment management measures.
- Develop and implement a restoration plan to immediately stabilize all exposed soils following final grading with a suitable seed and cover mix following.
- Revegetate/restore disturbed areas with native seed mixes and tree/shrub plantings as appropriate.

### **6.1.2 Wildlife and Wildlife Habitat**

No individuals of, or habitats for, at-risk wildlife species protected under the ESA were observed during field studies. One Special Concern species, Eastern Wood-Pewee, was noted within the Study Area. Proposed impacts to Eastern Wood-Pewee habitat are anticipated to be minor and are not expected to impact the ability of the species to continue to use the area. Roadside vegetation provides habitat for a variety of other common wildlife species and may also provide habitat for at-risk bats and their active-season maternity colonies located in dead/dying or injured trees. Vegetation clearing will be limited to relatively small areas of vegetation along or slightly beyond the existing right-of way, and as such, the ability of these species to continue to use the area post-construction is not expected to be impacted. General mitigation measures to minimize these impacts include:

- To prevent incidental impacts to nesting birds, (including at-risk and rare species) as well as bat maternity colonies, clearing of unmaintained and/or woody vegetation should be restricted to outside of the migratory bird nesting and maternity bat roosting seasons, generally combined as April 1 through October 31. If vegetation clearing must occur within this window, a qualified ecological professional should be retained to ensure no birds or bats are incidentally harmed by vegetation removals.
- Education of construction staff regarding the potential of encountering wildlife, and appropriate actions (i.e., allow the animal to leave on its own, contact a wildlife professional, etc.) is an effective mitigation against unintended impacts to turtles and other wildlife.
- Limiting construction activities to daylight hours will reduce the impacts to behaviour changes (avoidance) of local wildlife in response to the project.

### 6.1.3 Aquatic Habitats and Communities

Riparian vegetation removal can negatively impact aquatic habitats by reducing shading and organic inputs, potentially affecting water temperature and the availability of food, cover and nutrients within aquatic ecosystems. Vegetation clearing, as well as grading or filling activities exposes soils increasing the likelihood of erosion, and can alter slopes and grades, affecting drainage patterns, potentially releasing sediment into nearby aquatic environments. Additionally, the heavy industrial equipment used to carry out these activities has the potential to release deleterious substances such as oil, fuel, or grease into nearby aquatic environments.

In-water work (work below the high water mark) has the potential to result in the death of fish and/or the Harmful Alteration, Disruption or Destruction (HADD) of fish habitat. Impacts to fish and fish habitat may result from the placement of temporary (e.g., cofferdams) and permanent (e.g., culvert extensions) materials below the high water mark of a watercourse. Where water extraction is required, pumping activities may lead to the entrainment and/or impingement of fish, or strand fish within the unwatered work areas. Site isolation and construction unwatering may also temporarily change flow, which can erode banks, scour the creek bed, alter substrate composition, change sediment and nutrient input concentrations, and obstruct fish passage. General mitigation measures to minimize these impacts are identified in **Appendix 4** and include, but are not limited to the following:

- Schedule in-water work to between June 15 and September 15, when in-water work is permitted.
- Complete work below the high water mark in isolation of the watercourse, in accordance with all measures identified in the DFO's **Interim code of practice: Temporary cofferdams and diversion channels** ([Interim code of practice: Routine maintenance dredging \(dfo-mpo.gc.ca\)](#)) and **Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater** ([Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater \(dfo-mpo.gc.ca\)](#))
- Prior to unwatering activities, retain a qualified biologist to undertake fish rescues within the isolated work areas, under a Licence to Collect Fish for Scientific Purposes issued by the MNRF.
- Install flow by-pass systems to maintain upstream to downstream flow around isolated areas.
- Design new culvert structures to be sufficiently embedded and provide adequate drainage that maintains existing culvert velocities.
- Implement mitigation measures identified by CVC's 2017 Fish and Wildlife Crossing Guidelines (CVC 2017), as required.

- Limit riparian vegetation removal to only the area required for construction and access and apply proper clearing techniques to protect and retain the surrounding vegetation. Root masses should be left in place for stabilization, where feasible.
- Prior to work, develop and implement an ESC plan (e.g., silt fence, fibre filtration tubes, etc.) in accordance with DFO's measures to protect fish and fish habitat to control sediment and prevent deleterious substances from entering watercourses.
- A Spill Response and Action Plan shall be prepared by the contractor in advance of work that describes actions to be taken in the event of a spill, and a spill kit containing appropriate absorbent materials will be kept on site at all times to be used in the event deleterious materials are released into a watercourse.
- Should any deleterious substances enter the watercourse, including sediment, this must be reported to the MECP Spills Action Centre (1-800-268-6060).

Due to the in-water work proposed, impacts to fish and fish habitat cannot be completely mitigated, resulting in residual effects. While the potential areas of impact are relatively small in relation to the overall size of available fish habitat, the project has the potential to permanently alter fish habitat within the footprint of new and extended culverts, and as a result of ditch cleanout and retaining wall construction. As such, the proposed project has the potential to result in the death of fish or the HADD of fish habitat.

#### **6.1.4 Source Water Protection**

Under the MECP 2006 *Clean Water Act*, municipalities are required to conform to Source Protection Plans (SPPs) to protect surface and groundwater sources to municipal drinking water systems. The Study Area for this project is within the Credit Valley Source Protection Plan (SPA), under the jurisdiction of the Credit Valley, Toronto and Region, and Central Lake Ontario Peninsula (CTC) Source Protection Plan (SPR).

The SPR identifies where there is potential for significant threat to the quality and quantity of groundwater through delineation of Wellhead Protection Areas (WHPAs), Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), and Intake Protection Zones (IPZs).

The Mill Street EA Study Area is located outside of the Source Protection areas described above and is not considered vulnerable to drinking water threats.

#### **6.1.5 Climate Change Impacts**

Project impacts and resiliency to climate change were taken into consideration during the Study. Considering how a project contributes to climate change, through its greenhouse gas

emissions or its effects on the natural environment, is important to the planning process as it allows proponents to consider climate mitigation measures to avoid, minimize, or offset such effects. As well, considering how climate change may affect a project, such as through increased flooding or drought, is also critical to the planning process through enabling proponents to make informed decisions around how to design a project to withstand such environmental conditions.

Approaches for considering and addressing climate change in project planning are through 1). Reducing a project's effect on climate change; and 2) Increasing the project's resilience to climate change.

For this Study, key elements that were factored into the reconstruction of Mill Street that could serve to reduce the overall effect on climate change include the provision of active transportation features in the recommendation. Recommendations developed for the roadway do not include designated facilities for active transportation, however, residents expressed comfort cycling and walking along the roadway without formal accommodation. Resurfacing the deteriorated roadway will help to encourage active transportation supporting the reduced use of vehicular traffic and GHG emissions. In addition the pavement rehabilitation will provided renewal strategies using existing materials and minimize the amount of disposal off site.

With regards to the project's resilience to climate change, the impact of climate change on drainage and stormwater management quality and quantity was a key consideration in the Study Recommendations. The improvements to stormwater management infrastructure are anticipated to mitigate the impacts of increased severity and frequency of storms.

## 6.2 Cultural Heritage Resources

### 6.2.1 Impacts to Cultural Heritage Resources

Following the selection of the preliminary, a preliminary impact assessment was undertaken to identify potential impacts to the identified cultural heritage resources described in Section 2.5. The complete Existing Conditions and Preliminary Impact Assessment Report is provided in **Appendix 5**.

It was determined that no direct impacts to identified cultural heritage resources are anticipated as a result of implementing the preferred alternative.

Indirect impacts associated with construction related vibrations associated with the implementation of the Study Recommendations may have an indirect impact on the structures on the properties within CHL 1 (Cheltenham Village Core) and CHL 2 (Cheltenham and the

Brickworks on Mississauga Road) as structures in the CHL are within a 50-metre buffer of the proposed grading limits.

To ensure that these structures are not adversely impacted during construction, baseline vibration monitoring should be undertaken during detailed design. Should this advance monitoring assessment conclude that the structures on any of the identified properties will be subject to vibrations, a vibration monitoring plan should be prepared and implemented.

Additional mitigation measures developed for each potentially indirectly impacted cultural heritage resource include establishing no-go zones with fencing and issuing instructions to construction crews to avoid the cultural heritage resource.

### **6.2.2 Impacts to Archaeological Resources**

Based on the Stage 1 archaeological assessment, implementation of the Study recommendations could impact several areas that may have archaeological potential including large swaths of the undisturbed areas beyond the existing ROW. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance and low and wet conditions. These lands do not require further archaeological assessment.

Prior to construction, areas identified as having archaeological potential will require a Stage 2 archaeological assessment to determine if those areas exhibit archaeological resources and warrant further assessment, or if they can be considered clear of archaeological potential.

In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Citizenship and Multiculturalism (MCM) should be immediately notified. that construction activities impacting the archaeological resources will stop and an archaeologist licensed under the Ontario Heritage Act will be engaged to assess the site.

More information is provided in the complete Stage 1 Archaeological Assessment report in **Appendix 6**.

## **6.3 Socio-Economic Environment**

### **6.3.1 Property Requirements**

The reduction of property requirements was a key criterion in the identification and evaluation of the alternative solutions developed by the project team. Nevertheless, the existing section of Mill Street approximately between 1254 Mill Street and 1294 Mill Street encroaches on private property.

Anticipated preliminary property requirements to implement the Study Recommendations are summarized in **Table 6.1** and highlighted in **Appendix 9**. Although most of Mill Street with its existing road alignment is within the Town's ROW, the section approximately between 1254 Mill Street and 1294 Mill Street encroaches the private property on the south. To maintain the existing road centerline, acquiring the property listed below is recommended to bring this section of Mill Street back onto the Town's ROW. Actual requirements are to be confirmed during the detailed design phase of the project.

Negotiations with impacted property owners to secure lands required to implement the Study Recommendations will be initiated during the detailed design phase of the Study.

**Table 6.1 – Preliminary Property Impact Summary**

Property Project Information Number (PIN)	Estimated Area	Description
142630014	365 m <sup>2</sup>	Fee simple property acquisition required to accommodate existing Mill Street alignment within Town's Right-of-Way (ROW)
<b>TOTAL</b>	365 m <sup>2</sup>	<b>Fee Simple Property Acquisition</b>

### 6.3.2 Temporary Easements

In addition to the fee simple property required to implement the Study Recommendations, approximately 1,232 square meters (m<sup>2</sup>) of temporary easement lands will be required across several properties along the corridor. The temporary easements are required where access to private property during construction is necessary to complete the recommended works. Temporary easement lands will be restored to as close as reasonably possible to their previous conditions. Permissions to Enter will be required for all properties requiring temporary easements prior to construction.

The estimated preliminary temporary easements required to implement the Study Recommendations are summarized below in **Table 6.2** and included in **Appendix 9**. Property addresses and the approximate temporary easement areas were identified for all necessary locations within the Study corridor.

During detailed design, the property requirements will be finalized.



**Table 6.2 – Estimated Temporary Easements Summary**

Property Address / Information Number (PIN)	Estimated Area	Description
1140 Mill Street	195 m <sup>2</sup>	Required for grading tie-ins.
142630014 / CVC lands	1105 m <sup>2</sup>	Required for grading tie-ins.
1331 Mill Street	22 m <sup>2</sup>	Required for grading tie-ins.
<b>TOTAL</b>	<b>1,232 m<sup>2</sup></b>	<b>Temporary Easement Requirements</b>

### 6.3.3 Noise and Air Quality Impacts During Construction

Although no long-term air quality impacts from the proposed works are anticipated, dust and/or emissions during construction have the potential to degrade air quality in the short term.

Measures to minimize these impacts should include dust/debris control measures such as the application of water or non-chloride based compounds; covering of soil and other material storage piles to prevent wind erosion; and, covering of fine particulate materials during transportation to and from site. The contractor should use new or well-maintained equipment and machinery, preferably ones fitted with fully functional emission control systems, mufflers, exhaust system baffles and/or engine covers.

Construction may also result in temporary noise impacts. Measures to minimize noise-related impacts during construction include:

- Limit construction to the time periods allowed by local noise control by-laws. If construction activities are required outside of these hours, the applicable permits/exemptions must be obtained through the municipality in advance.
- Maintain construction equipment in an operating condition that prevents unnecessary noise (muffling systems, secured components, lubrication of moving parts).
- Restrict idling equipment to the minimum necessary to perform the specified work.
- Investigate all noise complaints from the public to verify that the required noise control measures are in effect. Persistent complaints will require a contractor to comply with MECP NPC-115 (Guidelines for noise effects from construction equipment). Subject to the results of a field investigation, alternative noise control measures may be required.

## 6.4 Municipal Infrastructure and Utilities

Based on the EA, conflict with Hydro One's poles are expected and may require elevation adjustment to accommodate road grading. No impact to existing watermain and Enbridge gas

is anticipated from the proposed road work. It should be noted that the Town intends to undertake Mill Street Bridge rehabilitation work (separate to this EA Study) which may impact those utilities on the bridge. The Town is also undertaking slope stability review around the Caledon Trailway Path and depending on the outcome of the review, may impact the buried gas main in the area.

All utility impacts, including location, depths, and relocation requirements are to be confirmed early in the subsequent detailed design phase of the Study in direct consultation with the affected utility companies.

## **6.5 Monitoring During Construction**

The mitigation measures identified in this report shall be written into the contract specifications. During construction, the contract administrator should ensure that full-time monitoring/inspection of the project works is undertaken to verify that all environmental commitments identified in the Project File Report are considered. Following completion of construction (i.e., post construction), an inspection should be undertaken to ensure the effectiveness of the identified mitigation measures.

## 7.0 FUTURE WORK AND APPROVALS

### 7.1 Permits and Approvals

The following approvals have been identified as potentially being required prior to the implementation of the proposed works.

- Works which bisect the Credit Valley Conservation Authority (CVC) regulated lands, will require an CVC Work Permit under *Ontario Regulation 160/06*.
- An Environmental Activity and Sector Registry will be required from the MECP if dewatering exceeds 50,000 but less than 400,000 litres per day. A Permit to Take Water would be required, should dewatering exceed 400,000 litres per day.
- An Environmental Compliance Approval could be required prior to construction to ensure that the proposed works comply with MECP guidelines for the design of sanitary sewage systems, storm sewer systems and/or water systems.
- A Request for Review (RFR) application submitted to Fisheries and Oceans Canada (DFO) will be required for works below the high water mark of a watercourse. DFO will review to determine if the proposed project may contravene the *Fisheries Act*.
- For Butternut located within 25m of areas of grading, vegetation clearing or other construction activities beyond the existing gravel shoulder, an assessment by a certified Butternut Health Expert will be required to determine appropriate protection and compensation measures. Based on initial assessment, it is likely that impacts can be registered online through the provincial One-key system.
- Works which bisect the Niagara Escarpment Commission's Area of Developmental Control will require a Development Permit application under *Ontario Regulation 828*.

### 7.2 Detailed Design Commitments

In addition to the mitigation measures described in Section 8.0, additional work is required to be completed following the Class EA. During detailed design the following work is needed to confirm findings from the Class EA phase and to further refine the design:

- Confirm and obtain required approvals and necessary permits as outlined above.
- Confirm construction staging and traffic management plans for the road reconstruction.
- Complete further consultation with the CVC to confirm any permitting requirements under O. Reg. 160/06.
- Develop a plan to deal with the transportation and disposal/reuse of any excess soils under O.Reg. 406/19.
- Continue consultation with utility companies and coordinate utility relocations.

- Incorporate recommendations of the Cultural Heritage Resource Assessment if any identified cultural heritage resources within the corridor are impacted.
- Finalize mitigation measures and requirements for construction work.

### 7.3 Distribution of Notice of Study Completion and Project File Report

In accordance with the requirements of the Municipal Class Environmental Assessment (MCEA) – Schedule ‘B’, a Notice of Study Completion is to be issued April 6, 2023. Through issuance of the Notice of Study Completion, this Project File Report (PFR), documenting the planning process undertaken, details of the Study recommendations as well as potential impacts and mitigation measures identified through the EA Study, will be placed on the public record for the mandatory 30-day review period.

The Notice of Study Completion will also advise the public that during the 30-day review period, a request may be made to the Ministry of the Environment, Conservation and Parks (MECP) for an order requiring a higher level of Study (i.e. requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights.

Following the close of the 30-day public review period, the MECP has an additional 30 days to consider the project and review any potential Section 16 Order requests submitted during the 30-day public review period. The Town may not proceed with the project for at least these 30 days following the end of the public review period.

Following this 30-day MECP review period, the project may proceed to detailed design and construction, provided the ministry is not reviewing Section 16 Order requests related to the project, and subject to any other permits and approvals that may be required.

## 8.0 CONSULTATION SUMMARY

Schedule 'B' EA projects are subject to the full five phase planning progress, in accordance with the Municipal Class Environmental Assessment (October 2000, amended in 2007, 2011, 2015). As such, extensive public and technical agency consultation plays a key role in developing the Study recommendations.

Per the MCEA, notifications to the Public and stakeholders were provided in advance of key consultation opportunities.

### 8.1 Key Stakeholders, Interest Groups & Technical Agencies

Various government agencies, authorities, utility companies, local developers and stakeholder / interest groups were informed of the Study commencement, as well as the Public Information Centres, through local newspaper notices, and direct mailings (paper & electronic). A complete list of stakeholders who were contacted is provided in **Appendix 1**.

During the course of the Study, correspondence was received from various technical agencies, as outlined in Table 8.1 and included in **Appendix 1**.

Table 8.1 – Comments Received from Technical Agencies

Agency / Group	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
Dufferin-Peel Catholic District School Board (DPCDSB)	In response to the Notice of Study Commencement, DPCDSB noted that while they have no comments at this time, please continue to keep the Board informed of the status of this project so that we may monitor its progress and provide comments as necessary.	October 23, 2020	DPCDSB to remain on Study mailing list and be provided updates as the study progresses.
Hydro One Telecom Inc.	In response to the Notice of Study Commencement, Hydro One Telecom noted that they do not have infrastructure (existing or planned) in the project work area.	October 23, 2020	No follow-up required. Hydro One Telecom Inc. removed from Study mailing list.
Hydro One Networks Inc.	In response to the Notice of Study Commencement, Hydro One Networks Inc. noted that in their preliminary assessment, we confirm there are no existing Hydro One Transmission assets in the subject area. Please be advised that this is only a preliminary assessment based on current information. If plans for the undertaking change or the Study area expands beyond that shown, please contact Hydro One to assess impacts of existing or future planned electricity infrastructure.	October 29, 2020	No follow-up required.
	In response to the Notice of PIC #2, Hydro One Networks Inc. noted that in their assessment, we confirm there are no existing Hydro One Transmission assets in the subject area. If plans for the undertaking change or the Study area expands beyond that shown, please contact Hydro One to assess impacts of existing or future planned electricity infrastructure	June 24, 2022	No follow-up required. Hydro One Networks Inc removed from Study mailing list.
Peel District School Board (PDSB)	In response to the Notice of Study Commencement, PDSB noted that they are interested in this project and needs to know what the haulage routes will be to determine possible impact, if any on school bus routes. Please continue to keep us informed of the status of this project so that we may monitor its progress and provide comments as necessary.	November 5, 2020	PDSB remained on Study mailing list and was provided all notices as the Study progressed.
Group Telecom (GT)	In response to the Notice of Study Commencement, GT noted that they have no plant within 2m of proposed work, and as such, there is no conflict.	November 9, 2020	No follow-up required. Group Telecom removed from Study mailing list.
Ministry of Citizenship and Multiculturalism (MCM) (formerly MHSTCI)	In response to the Notice of Study Commencement, MHSTCI provided information regarding the MHSTCI mandate of conserving Ontario’s cultural heritage in the context of the Mill Street Class EA Study. MHSTCI inquired whether any technical cultural heritage studies will be completed for the EA, and requested any technical cultural heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent to the Ministry for review.	November 12, 2020	Project team notified the MHSTCI that both a Stage 1 Archaeological Assessment and Cultural Heritage Resource Assessment will be completed as part of the EA, and that the Draft Report will be provided to the Ministry for review upon completion.
	MHSTCI further inquired on the Stage 1 Archaeological Assessment Project Information Form Number (PIF).	November 13, 2020	<ul style="list-style-type: none"><li>The project team provided the Project Information Form (PIF) number to the Ministry on November 16, 2022.</li><li>Final Stage 1 Archaeological Assessment was entered into the Ontario Public Register of Archaeological Reports on March 28, 2022.</li></ul>

Agency / Group	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
			<ul style="list-style-type: none"> <li>Upon completion of ASI's review of cultural heritage resources, MCM, was consulted to determine whether they were aware of any additional cultural heritage resources or concerns within the Study area for consideration in preparing the Cultural Heritage Resource Assessment.</li> </ul>
	In response to the identified cultural heritage properties within the Study Area, no additional cultural heritage resources were identified by the Ministry. MHSTCI also requested that any technical cultural heritage studies completed as part of the project be sent to MHSTCI for review upon completion.	December 02, 2020	Draft Cultural Heritage Report was sent to Ministry for review on January 13, 2023.
	In response to the Notice of Study Recommendations and the PIC #2 Summary Report, MCM inquired on the status of the Cultural Heritage Report.	January 13, 2023	MCM was notified that the preliminary impact assessment portion of the Cultural Heritage Report is being finalized based on the Study recommendations. Draft Cultural Heritage Report was sent to Ministry for review on January 13, 2023.
	MCM noted that a review of the draft Cultural Heritage Report would be provided by mid-February.	January 13, 2023	Project team inquired on the progress of the MCM's review of the Draft Cultural Heritage Report on February 24, 2023. MCM noted that any comments would be provided the week of February 27, 2023.
	MCM noted that they have reviewed the report and confirmed that they have no concerns with its content	March 6, 2023	Draft Cultural Heritage Report was finalized.
Rogers Communications	In response to the Notice of Study Commencement, Rogers Communications identified existing infrastructure within the Study Area, and provided utility markups to the project team, as well as instructions for working in the vicinity of Rogers Communications infrastructure including ensuring that clearances of 0.3m vertically and 0.6m horizontally are maintained.	November 12, 2020	The project team considered the locations of Rogers Communications' infrastructure during design.
Credit Valley Conservation Authority (CVC)	In response to the project team's notification of the project within CVC's jurisdiction, including a request for data and an initiation meeting, CVC Regulations Officer requested a map of the Study area, and additional Study background information/	November 10 & 11, 2020	The project team provided the required information and scheduled a project initiation meeting with CVC to discuss the Class EA for November 17, 2020 (details below).
	<p>The project team met with the CVC to discuss the Study. Inputs from the CVC included:</p> <ul style="list-style-type: none"> <li>Project team to provide draft ecological, hydraulic, and stormwater management reports for review and comment prior to finalizing;</li> <li>Project team to incorporate CVC LID Guidelines into the roadway recommendations;</li> <li>Project team to Minimize impacts (encroachment &amp; drainage changes) to PSWs and wetlands adjacent to corridor;</li> <li>Permitting expectations to support culvert replacements were noted to include: <ul style="list-style-type: none"> <li>Addressing fish barriers</li> <li>Redside Dace habitat requires a 30 meter buffer to avoid ESR permitting;</li> <li>Potentially improving fluvial processes</li> <li>Benefitting water quality and quantity</li> </ul> </li> <li>PIC display boards to be submitted to the CVC prior to presenting to the public</li> </ul>	November 17, 2020	<ul style="list-style-type: none"> <li>Project team provided draft SWM and Natural Environment reports, along with the draft PFR, to CVC for review and comment prior to filing the PFR.</li> <li>The project team worked to minimize encroachment beyond the existing ROW, while improving existing drainage. RVA incorporated CVC LID Guidelines for incorporating LID measures into the roadway recommendations wherever possible but is constrained by the tight ROW.</li> <li>Project team scheduled a follow-up meeting with CVC to discuss the HEC-RAS files on January 21, 2020 (details below). The purpose of this meeting was to confirm RVA's SWM/ drainage review and design approach with CVC for both the project as well as the information required for the CVC permit application.</li> <li>RVA provided the CVC with a Notice of PIC, and inquired whether the CVC would like to review draft PIC slides on September 17, 2021.</li> </ul>



Agency / Group	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
	<ul style="list-style-type: none"> <li>CVC provided HEC-RAS modelling files and floodplain maps for Mill Street for project team use in developed a SWM strategy.</li> </ul>		
	<p>The project team met with the CVC to discuss the Study. Inputs from the CVC included: Depending on the outcome of the PIC, Mill St may be urbanized, and CVC notes the following:</p> <ul style="list-style-type: none"> <li>The ditch west of the horizontal curve is part of a regulated watercourse.</li> <li>RVA will provide infiltration chambers for storage wherever possible</li> <li>RVA to provide pre to post development comparison to demonstrate the proposed works will not worsen existing conditions</li> <li>SAR is present on Mill St</li> <li>RVA to provide the following as part of their permit application: <ul style="list-style-type: none"> <li>A memo summarizing the existing condition and proposed works of culverts</li> <li>Only post-development model will be provided for all roads except Mill St, if urbanized</li> <li>ESC measures and details to be included on contract drawings</li> <li>Cover letter to state there is no offset impacts due to the proposed change</li> <li>Memo, analysis, and cover letter to be stamped by engineer</li> </ul> </li> <li>CVC noted that in order to assist with the permit application, the following should be submitted to CVC for review: <ul style="list-style-type: none"> <li>SWM design criteria – prior to sizing culvert and ditches</li> <li>List of proposed culverts for replacement – prior to permit application submission</li> </ul> </li> </ul>	January 21, 2021	<ul style="list-style-type: none"> <li>The project team addressed CVC requirements through the following: <ul style="list-style-type: none"> <li>SWM design criteria forwarded to CVC on February 1, 2021 email</li> <li>List of culverts and sub catchment areas provided to CVC June 7, 2021</li> <li>RVA completed the analysis of conveyance and capacity for culverts/ ditches. As the rehabilitated road matches the existing alignment and paved platform width, no increase in impervious area/ stormwater runoff is expected. The design brief summarized the existing condition and proposed works of culverts. The cover letter stated there is no offset impacts due to the proposed change, and the memo was stamped by engineer.</li> <li>ESC measures and details included on contract drawings</li> <li>Project team inquired whether TRCA's Erosion and Sediment Control Guide for Urban Construction was the appropriate guideline to develop ESC measures on May 10, 2021.</li> </ul> </li> </ul>
	CVC confirmed that TRCA's <i>Erosion and Sediment Control Guide for Urban Construction</i> was the appropriate guideline to develop ESC measures, and also provided CVC's standard notes to be included for drawings submitted to CVC.	May 11, 2021	Project team will be incorporating TRCA's Erosion and Sediment Control Guide for Urban Construction guideline and CVC's standard notes to develop ESC measures in detailed design.
	<ul style="list-style-type: none"> <li>September 17, 2021: In response to the Notice of PIC and invitation to review the PIC slides, CVC requested the preliminary preferred solution to be submitted.</li> <li>September 20, 2021: In response to a separate 2022 Growth Related Roads design submission, CVC inquired whether a design submission will be provided for CVC review. CVC noted concern that the Town is going to the PIC without having provided CVC the necessary supporting technical studies or the justification for the proposed alignment/culvert replacements.</li> </ul>	September 17, 2021 & September 20, 2021	<ul style="list-style-type: none"> <li>On September 23, 2021, the project team clarified with the CVC that the PIC being held October 5, 2021, will present the preliminary recommendations, before finalizing drawings for Mill Street, in order to incorporate public comments into the design. The project team provided details on the preliminary recommendations including the preliminary roll plans and cross section to be presented at the PIC.</li> <li>CVC was informed that while the roadworks design may change depending on the outcome of the PIC, the following stormwater management improvements are proposed for all alternatives for CVC comments: <ul style="list-style-type: none"> <li>Proposed realignment of the two culverts at Sta. 1+880 and 1+882</li> <li>Shifting the ditch towards west at 1347 Mill Street, Kleinburg and upsizing the driveway culverts in this regulated ditch (1331 Mill Street, 1347 Mill Street, 1357 Mill Street)</li> </ul> </li> </ul>



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	<ul style="list-style-type: none"> <li>CVC staff noted that an erosion assessment to delineate and confirm that the erosion hazard limits would not change a result of any proposed alternative, as well as a natural heritage review would be required.</li> <li>CVC noted that they have not seen a summary or evaluation of alternatives to date, and that the focus seems to be on storm water management/flooding aspect the project and there are other important factors that seem to not be considered or supporting information has yet to be provided.</li> <li>CVC noted concern as that information may inform whether or not CVC can support particular design alternatives.</li> </ul>	September 24, 2021	<ul style="list-style-type: none"> <li>On October 7, 2021, the project team provided the CVC with the PIC slides which included further details on the need and justification of the Study, the alternatives considered, and the preliminary preferred solution.</li> <li>The Notice of Study Recommendations, with the revised recommendations was distributed to the CVC January 12, 2023.</li> </ul>
	<p>In response to the Notice of Study Recommendations, CVC requested that drawings which reflect the study recommendations be shared once available. CVC staff noted an understanding that further consultation with CVC will occur once the Study recommendations are finalized and represented on plan and profile drawings.</p> <p>CVC noted that there are areas within the CVC's area of interest that where impacts the floodplain and erosion hazard may result depending on the preferred alternatives, and that final review of this has not occurred.</p>	January 13, 2023 & January 20, 2023	<ul style="list-style-type: none"> <li>Project team notified CVC that the project team is finalizing the Project File Report in consideration of input received at PIC #2, and that that consultation with CVC will be continued through detailed design.</li> <li>Project team provided draft 30% design drawings as requested by NEC, February 9, 2023. The project team noted to the CVC that the design does not involve changes to the existing road horizontal and vertical alignment. The rehabilitated roadway will also match the existing edge of asphalt so no changes to erosion hazard limits is anticipated. The project team noted that they will continue to work with CVC during detailed design to address erosion and sediment concerns.</li> <li>Project team provided the Draft PFR, draft SWM and Natural Environmental Assessment Memo to CVC for review and comment prior to finalizing the reports on March 2, 2023.</li> <li>Project team scheduled meeting with CVC staff March 6, 2023, to discuss the draft documents, provided March 2, with comments received from CVC described below.</li> </ul>
	<p>CVC noted that in review of the the draft Project File Report (PFR), in general, there are no concerns with the PFR however there are a number of comments to be addressed at detailed design including:</p> <ol style="list-style-type: none"> <li>Please provide 60% general arrangement design drawings to show the individual crossings details with information such as existing &amp; proposed invert elevation of the culverts, size, and length etc.</li> <li>Section 3.4 of the SWM Design brief indicated that LID locations are to be confirmed by the soil study results at the vicinity of culverts M3-10 and M3-11. CVC will provide comments upon review of the LID design when submitted.</li> <li>For culvert M3-2 (east of Caledon Trailway), slope stability issues are considered and a geotechnical study is proposed to be undertaken as per the draft PFR. CVC will provide comments upon receipt more detailed plans.</li> <li>Appendix 4, Natural Environment Assessment Memo: Section 5.1.2 Excavation, Grading and Industrial Equipment identifies the nature of the work has potential to pollute the watercourse. Please provide a robust ESC plan to avoid polluted runoff reaching the watercourse. For further details, please follow the link below and refer to Erosion and Sediment Control for Urban Construction (TRCA, 2019). <a href="https://cvc.ca/document/erosion-sediment-control-guideline-for-urban-construction/">https://cvc.ca/document/erosion-sediment-control-guideline-for-urban-construction/</a></li> </ol>	March 28, 2023	<ul style="list-style-type: none"> <li>Draft PFR, draft SWM and Natural Environmental Assessment Memo were finalized as the project team will continue working with CVC to address the comments provided during detailed design stage.</li> </ul>

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	<p>5. Appendix 4, section 5.1.3 indicates the need for in-water works for culvert replacement. Please include a temporary dewatering plan and flow diversion plan on drawings.</p> <p>6. ESC drawings should include (but not limited to) the following items:</p> <ul style="list-style-type: none"><li>○ Include all staging and stockpiling areas within the plan</li><li>○ Delineate the limit of disturbance on the plan</li><li>○ A note about the environmental monitoring should be added to the ESC drawing.</li></ul> <p>7. Please add CVC's standard ESC notes within the plan. Please refer to the following link for these notes: <a href="https://cvc.ca/wp-content/uploads/2017/12/Standard-Notes-for-Drawings-Submitted-for-CVC-Review.pdf">https://cvc.ca/wp-content/uploads/2017/12/Standard-Notes-for-Drawings-Submitted-for-CVC-Review.pdf</a></p> <p>8. With the submission of detailed design of the proposed culverts, further comments will likely be provided.</p> <p>9. Additional studies may be required at detailed design to evaluate and demonstrate no impacts to flooding and erosion or to provide appropriate mitigation measures.</p> <p>10. CVC has previously completed research and have assessed several culverts within the project limits that are priorities for improving fish and wildlife passage. Enhancement of ecosystem connectivity is an objective in the Niagara Escarpment Natural Areas and as such the project should demonstrate improvements to these culverts to achieve enhancement of the NHS. Please have a qualified professional review the CVC Fish and Wildlife Crossing Guideline; a CVC Planning Ecologist can be contacted for further discussion.</p> <ul style="list-style-type: none"><li>○ a. Culvert 2 has been assessed as Very High Priority for enhancing fish passage given that the current culverts is perched by 20cm. The project scope should include improving fish passage and NHS connectivity in this location.</li><li>○ b. Culvert 5 has been assessed as High Priority for fish and moderate for wildlife passage given that the culvert is a complete barrier to fish passage (perched &gt;100cm). The project scope should include improved fish and wildlife passage and NHS connectivity at the location.</li><li>○ c. Culvert 3 has been assessed as Moderate Priority for improve fish and wildlife passage given that the culvert is currently perched. The project scope should include improving fish and wildlife passage and NHS connectivity in this location.</li></ul> <p>Based on the draft PFR, it is unclear which culverts are to be replaced, the above comments are to be considered during detailed design if those culverts are proposed to be replaced.</p> <p>11. It appears that the existing Right of Way will be increased as a result of the project. Please note that portions of this project are within the Regional NHS and any impacts to these features should be avoided, minimized, mitigated, or if</p>		

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	<p>required, offset according to the CVC Ecosystem Offsetting Guideline. Although the scale of the work appears to be less than previously anticipated, the comment remains relevant and the proponent should provide details on impact to vegetation within CVC's regulated areas, which should include quantities, species, DBH, and locations. This information should be used in conjunction with CVC's Ecosystem Offsetting Guidelines (Table D-1) to determine offsetting numbers for the loss of trees within regulated areas. Any forthcoming Restoration Plan should be guided by CVC's Plant Selection Guideline and CVC's Healthy Soils Guideline.</p> <p>12. Given that works are proposed in or near water, it is the responsibility of the proponent to ensure that works, undertakings or activities do not cause the death of fish or cause the harmful alteration, disruption or destruction of fish habitat under the Fisheries Act. Please review the complete list of measures to avoid harm at <a href="http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html">http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html</a> and implement those that are applicable to the proposed work. If it is not possible to avoid or mitigate impacts, proponents can submit a request for review form to their region's Fish and Fish Habitat Protection Program office (contact info: <a href="mailto:fisheriesprotection@dfo-mpo.gc.ca">fisheriesprotection@dfo-mpo.gc.ca</a> or 1 855 852-8320). Please refer to the Fisheries and Oceans Canada (DFO) website for additional information.</p> <p>13. Roadside grading is proposed near 1+560 and 1+800 where the roadside ditch is also a section of the creeks.</p> <ul style="list-style-type: none"><li>o a. Please clarify why grading is necessary in this location. CVC does not typically support alteration of watercourses and all effort should be made to avoid and mitigate impact to natural features. The hydraulic benefits of altering the watercourse must be demonstrated to the satisfaction of CVC before staff can support such alterations.</li><li>o b. Please provide clarification regarding the location of the proposed embankment protection 'Terraslope' and the rationale for using it as opposed to natural slope design. CVC recommends the use of natural material primarily through dense planting of woody vegetation to provide bank stabilization and erosion control.</li></ul> <p>14. Roadside grading is also proposed near 1+300 on the south side of the road.</p> <ul style="list-style-type: none"><li>o a. Please clarify why grading is necessary in this location and the extent of grading. CVC does not typically support alteration in watercourses and all effort should be made to avoid and mitigate impact to natural features.</li></ul> <p>15. Please clearly identify on the plans the locations of all tree hoarding measures.</p> <p>16. Please clearly identify on the plans the locations of all staging and material stockpiling areas, which should all be outside the dripline of any trees and minimum 30m from a watercourse to the extent possible.</p>		

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	<p>17. It is not clear what the areas of green overlay in Appendix 9 – Recommended Plan and Profile. Please clarify what those areas are and ensure drawings are labeled accordingly.</p> <p>18. A permit from CVC will be required for the proposed works. In order to apply for a permit, please follow this link. Details regarding how to pay for the permit will be provided once an application has been submitted and a file number has been assigned. A permit fee will be confirmed once detailed design drawings have been submitted.</p>		
Ministry of the Environment, Conservation and Parks (MECP)	In response to the Notice of Study Commencement sent directly to the MECP Regional Environmental Planner, MECP requested that the project team submit the completed Project Information Form, to the MECP Central Region EA notifications email address (eanotification.cregion@ontario.ca) in accordance with our EA notifications procedures. MECP provided information regarding the EA notifications process for reference.	October 23, 2020	The project team completed and submitted the Project Information Form to the MECP Regional EA email address as in accordance with the MECP’s EA notification procedure on October 23, 2020.
	<p>General information provided on the Class EA process, MECP technical review issues and Aboriginal consultation. Identified the following Indigenous communities as potentially affected by the projected project to be consulted:</p> <ul style="list-style-type: none"><li>• Mississaugas of the Credit First Nation;</li><li>• Six Nations of the Grand River;</li><li>• Haudenosaunee Confederacy Chiefs Council; and</li><li>• Huron-Wendat Nation (if there are potential archeological impacts)</li></ul> <p>The MECP requested to receive a draft copy the Project File Report prior to filing of the Notice of Completion, as well as to send the Notice of Completion to the ministry’s Regional EA notification email account after the draft report is reviewed and finalized.</p>	November 23, 2020	<ul style="list-style-type: none"><li>• The project team incorporated the input into the Study as required. The project team initiated consultation with all the Indigenous communities identified by MECP.</li><li>• On March 21, 2023, the project team inquired whether the MECP would require review of the draft Project File Report (PFR) prior to filing.</li></ul>
	MECP noted that they have no problem reviewing the final PFR the public review period.	March 22, 2023	<ul style="list-style-type: none"><li>• Notice of Completion and final PFR to be forwarded to MECP as requested.</li></ul>
Niagara Escarpment Commission	<p>In response to the project team’s notification of the project within NEC’s jurisdiction, including a request for data and an initiation meeting, a project initiation meeting was scheduled December 8, 2020. Inputs from the NEC included</p> <ul style="list-style-type: none"><li>• NEC noted that some classes of development are exempt from obtaining a Development Permit from the NEC, and that the area west of the trail on Mill St will most likely require a Development Permit</li><li>• Permit application should be submitted at 90% design and should include details on the scope of work, grading limits and impacts.</li><li>• NEC noted the application should demonstrate the project is in compliance with the Endangered Species Act and that it is necessary and inevitable. The application needs to include identification of the ELC communities and screen SAR, similar to TRCA/ CVC application requirements.</li></ul>	June 17, 2020	Application for a Development Permit application under Ontario Regulation 828 to be completed in consultation with NEC during detailed design.
	In response to the Notice of PIC #1, NEC noted that the development envelope is partially within the NEC’s area of Development Control (the area west of the trail) which	September 21, 2021	Application for a Development Permit application under Ontario Regulation 828 to be completed in consultation with NEC during detailed design.

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	means that an NEC Development Permit may be required for any work along that section of Mill Street.		
	In response to the Notice of PIC #2, NEC provided updated contact information for the project.	June 17, 2022	<ul style="list-style-type: none"> <li>On September 9, 2022, the project team provided an update on the Mill Street Study, including that updated design drawings will be provided to CVC for comment following confirmation of the recommendations following PIC #2.</li> <li>Project team scheduled a meeting with NEC staff October 31, 2022, as described below.</li> </ul>
	<ul style="list-style-type: none"> <li>Project update was provided at the meeting with NEC and project team staff.</li> <li>NEC confirmed that an NEC Development Permit may be required.</li> </ul>	October 31, 2022	<ul style="list-style-type: none"> <li>Project team provided draft 30% design drawings to NEC, February 22, 2023. The project team noted to the NEC that the design does not involve changes to the existing road horizontal and vertical alignment. The rehabilitated roadway will also match the existing edge of asphalt so no changes to erosion hazard limits is anticipated. The project team noted that they will continue to work with CVC during detailed design to address erosion and sediment concerns.</li> <li>Project team provided the Draft PFR, draft SWM and Natural Environmental Assessment Memo to NEC for review and comment prior to finalizing the reports on March 2, 2023.</li> <li>Project team scheduled meeting with NEC staff March 3, 2023, to discuss the draft documents, provided March 2.</li> </ul>
	<p>Key outcomes / discussion points of the March 3, 2023 meeting with CVC included:</p> <ul style="list-style-type: none"> <li>Mill Street is a detailed design project completed under Schedule 'B' Municipal Class Environmental Assessment. RVA is currently wrapping up the Project File Report (PFR) and will be forwarding a copy of that to the NEC, CVC, and the Town</li> <li>After the public consultation process, the Town opted to maintain the existing road alignment, profile, and match back the existing asphalt pavement edges. Ditches will be regraded (localized sections) and cleaned out to restore positive drainage</li> <li>The section of Mill Street under NEC's jurisdiction runs between Mississauga Road and the Caledon Trailway Path. RVA confirmed there are no culvert replacement or new culvert additions in this section</li> <li>Based on the scope of work, Mill Street may be granted an exemption from NEC. RVA to submit application form together with the PFR for NEC to review. Review period is approximately 3 weeks</li> <li>If scope of work changes during detailed design, then RVA will notify NEC and forward a copy of drawings for review again</li> </ul>	March 3, 2023	<ul style="list-style-type: none"> <li>No further comments were received from NEC at the time of writing this report.</li> <li>Application for a Development Permit application under Ontario Regulation 828 to be completed in consultation with NEC during detailed design.</li> </ul>
Ontario Heritage Trust	In response to the identified cultural heritage properties within the Study Area, Ontario Heritage Trust confirmed that the Trust has no cultural or natural heritage properties within or adjacent to the Study Area.	December 20, 2020	<ul style="list-style-type: none"> <li>Upon completion of ASI's review of cultural heritage resources Ontario Heritage Trust were consulted to determine whether they were aware of any additional cultural heritage resources or concerns within the Study Area for consideration in preparing the Cultural Heritage Report.</li> <li>No additional consultation required.</li> </ul>



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Region of Peel	<p>In response to the project team’s inquiry to the Region of whether improvements to the Mill Street and Mississauga Road (Regional Road 1) intersection should be developed, via email May 17, 2021, the Region provided the following feedback.</p> <p>June 3, 2021: Infrastructure Programming and Studies team noted that there are no future works planned for the Mill Street and Mississauga Road (Regional Road 1) intersection.</p> <p>June 4, 2021</p> <ul style="list-style-type: none"><li>• Roads Design &amp; Construction<ul style="list-style-type: none"><li>○ Support not including the Mill Street and Mississauga Road (Regional Road 1) intersection, as it hasn’t been long since Region reconstructed it. There should be no cost to the Region since the improvements are being made within the Town’s jurisdiction.</li></ul></li><li>• Sustainable Transportation<ul style="list-style-type: none"><li>○ consider adding a crossing treatment at the intersection of Mill St and the Caledon Trailway path</li></ul></li></ul>	June 3 – 4, 2021	<ul style="list-style-type: none"><li>• No improvements to the Mill Street and Mississauga Road (Regional Road 1) intersection were developed as part of the Study.</li><li>• Project team recommended adding a crossing treatment at the intersection of Mill St and the Caledon Trailway path.</li><li>• Region of Peel was provided preliminary design drawings September 1, 2021. No comments were received at this time.</li></ul>
	<p>In response to the Notice of PIC #2, and PIC #2 materials, various Region of Peel staff departments provided comments to the project team, as summarized below.</p> <p>June 20, 2022</p> <ul style="list-style-type: none"><li>• Water &amp; Wastewater<ul style="list-style-type: none"><li>○ The Region has a 250mm and 300mm watermain that runs predominantly on the north side of Mill Street. This is the only source that provides water to the residents in the area. Impact to our underground infrastructure, Valve, chambers and fire hydrants will need to be taken into consideration during this project. Furthermore, in order to comment on the solutions presented we would like the project material to be available for viewing digitally as many of us could not attend the in person meeting and the Town’s website does not contain the material online.</li></ul></li></ul> <p>June 23, 2022</p> <ul style="list-style-type: none"><li>• Transportation System Planning<ul style="list-style-type: none"><li>○ Option 2 – Sidewalk is our preferred alternative as it provides the safest option for pedestrians</li><li>○ Why is the focus only on pedestrians and not active transportation (cyclists)?</li></ul></li></ul> <p>July 15, 2022</p> <ul style="list-style-type: none"><li>• Traffic Operations<ul style="list-style-type: none"><li>○ Does this EA cover the entire intersection of Mississauga Road and Mill Street?</li><li>○ Please provide soft copies of the materials for reference after the PIC Meeting #2</li></ul></li></ul>	June 20 – July 22, 2022	<ul style="list-style-type: none"><li>• Study recommendations developed in consideration of Regional input and infrastructure. Town forwarded the link to PIC #2 presentation to the Region on June 14.</li><li>• The project team clarified that the study area EA does not include the intersection of Mississauga Road.</li><li>• Study recommendations were developed in consideration of public comments, which included strong opposition to Option 2 – Sidewalk.</li><li>• Pedestrian crossing improvements including new traffic signs and pavement markings are proposed and details to be confirmed during detailed design. It is noted that the trail currently intersects both Mill Street and Mississauga Road</li></ul>

Agency / Group	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
	<ul style="list-style-type: none"><li>Traffic Signals<ul style="list-style-type: none"><li>Will Town of Caledon be conducting a Trail Crossing Treatment Warrant for the Trail Crossing at Mill Street?</li><li>Would the Town of Caledon consider a connection between Mill Street and the Trail crossing as well along Mississauga Road?</li></ul></li></ul>		
	<p>In response to the Notice of Study Recommendations, various Region of Peel staff departments provided comments to the project team, as summarized below.</p> <p>February 6, 2023</p> <ul style="list-style-type: none"><li>Water &amp; Wastewater<ul style="list-style-type: none"><li>Potential final grade adjustment of watermain valve boxes</li><li>Potential final grade adjustment of hydrant valve boxes</li><li>Potential final grade adjustment of hydrants themselves</li><li>Concept designs had identified proposed retaining walls and steel beam guide rails. Please be aware of existing watermain in close proximity. The Region of Peel requests to see a detailed design of proposed infrastructure in relation to existing watermain.</li><li>Things to considers are the zone of influence of proposed infrastructure in relation to existing watermain. -Furthermore, the design shall consider structural integrity of proposed infrastructure should the watermain break and liquify the soil. (Existing watermain is not within a steel linear)</li><li>Current hydrant locations may be in conflict of proposed concrete/asphalt sidewalk. Minimum clearance of hydrant body to backside of sidewalk must be a minimum of 1.0m clearance.</li></ul></li></ul> <p>February 6, 2023</p> <ul style="list-style-type: none"><li>Traffic Signals and Streetlighting<ul style="list-style-type: none"><li>Will look into streetlighting requirements when this project moves forward to design</li></ul></li></ul>	February 6 – 10, 2023	Detailed design to ensure that required infrastructure setbacks are implemented into the design. Further coordination to be with Region of Peel water/wastewater staff to be completed during detailed design.
Town of Caledon Fire	In response to the project team inquiring on the required lane width for fire trucks/ ambulance to drive through the s-curve, especially during winter when there is also snow storage on the road that a minimum 3.3-meter-wide lane width through the curve is desired.	December 21, 2020	Recommendations include widening the lane widths around the curve to 4 meters wide at eastern most curve to provide sufficient width for large vehicles movements such as snowplows, emergency service, and garbage trucks.



## 8.2 Indigenous Communities Consultation

Various Indigenous communities were notified of the Study, in order to identify any potential issues or concerns regarding possible impacts to Aboriginal and Treaty Rights, or any other interests or questions that the community may have with regard to this Study. The following Indigenous Communities were notified of the Study:

- Haudenosaunee Confederacy Chiefs Council
- Huron-Wendat Nation
- Metis Nation of Ontario
- Mississaugas of the Credit First Nation
- Six Nations of the Grand River

Correspondence was received from Huron-Wendat Nation, Metis Nation of Ontario and Mississaugas of the Credit First Nation. Correspondence received from these Indigenous communities during the Study are outlined in **Table 8.2** and included in **Appendix 1**.

Table 8.2 – Comments Received from Indigenous Communities

Indigenous Community	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
Mississaugas of the Credit First Nation (MCFN)	In response to the Notice of Study Commencement, MCFN provided initial input related to the project, including expectations for involvement in the project through Field Liaison Representatives (FLR), as well as relevant contact information.  The MCFN Archaeological Operations Supervisor of the Department of Consultation and Accommodation (DOCA) Megan DeVries, noted that the MCFN expects to review any archaeological assessment reports. The MCFN Standards and Guidelines for Archaeology as well as the MCFN Archaeological Review Agreement and MCFN FLR Participation Agreement were also provided.	November 23, 2020 - November 25, 2020	Project team provided information on the project, and invited MCFN to participate in the field work to be completed as part of the natural environment resource assessment, and review the Stage 1 Archeological Assessment (AA) Report.
	MCFN thanked the project team for the update and information, and noted they look forward to receiving the signed agreements for MCFN participation.	December 15, 2020	Town of Caledon provided the signed Archaeological Review Agreement to the MCFN on December 24, 2020.
	MCFN provided the fully executed review agreement for the Mill Street Cass EA Stage 1 AA Report.	January 4, 2021	Draft Stage 1 AA Report was provided for review and comment on September 17, 2021, prior to finalization. The project team followed-up on MCFN comments on the Stage 1 Report
	MCFN have noted that they have forgone a full review of the Stage 1 AA Report, in anticipation that MCFN Field Liaison Representatives will be invited to participate in the recommended Stage 2 archaeological assessment. MCFN also noted that the FLR participation agreement would need to be renewed prior to Stage 2 involvement.	October 19, 2021	Stage 1 Archaeological Assessment Report finalized and submitted for review to the MHSTCI.  MCFN DOCA is to be invited to participate in the recommended stage 2 Assessment required to be completed during detailed design, prior to undertaking any fieldwork.
	In response to the Notice of Study Recommendations and PIC No.2 Summary Report, MCFN DOCA requested a digital copy of the EA for review when complete, and requested a follow-up on the Archaeological studies that were done for this project.	January 13, 2023	The project team advised MCFN DOCA that the Stage 1 Archaeological Assessment Report was submitted to the Ministry of Heritage, Sport, Tourism, and Culture Industries (now MCM), and entered into the Ontario Public Register of Archaeological Reports.  MCFN DOCA is to be invited to participate in the recommended stage 2 Assessment required to be completed during detailed design, prior to undertaking any fieldwork.  MCFN DOCA will receive notice of the completion of the EA as well as a digital copy of EA Project File Report as requested.
Huron-Wendat First Nation	In response to the Notice of Study Commencement, Huron-Wendat First Nation inquired whether any archaeological studies will be completed as part of the EA.	October 23, 2020	The project team notified the Huron-Wendat First Nation that a Stage 1 AA will be completed as part of the Study, offering to provide the draft report for review prior to finalization.
	Huron-Wendat confirmed that they would like to receive a copy of the Stage 1 AA report.	October 26, 2020	Draft Stage 1 AA Report was provided for review and comment on September 17, 2021 prior to finalization.
	In response to receiving the Draft Stage 1 AA Report, Huron-Wendat archaeological representative inquired on the deadline for submitting comments on the Stage 1 AA Report, and also inquired whether Huron-Wendat could send a monitor on site for the Stage 2 AA field work.	October 1, 2021 - October 5, 2021	Project team advised the that comments are requested to be provided by October 18th, and requested an approximate cost to send a monitor on site for a Stage 2 AA for budgeting purposes.
	Huron-Wendat requested that the deadline to provide comments on the Stage 1 AA Report be extended to October 29th	October 22, 2022	Project team waited until comments were received by Huron-Wendat First Nation to finalize the Stage 1 AA Report.
	Huron Wendat noted that in review of the Stage 1 AA Report, the report is satisfactory for and requested that the Huron-Wendat Nation be involved with the Stage 2 AA work.	October 25, 2021	Stage 1 AA Report was finalized and submitted for review to the MHSTCI.

Indigenous Community	Comment Summary	Date Received	Response and Consideration of Comments in Class EA
			Huron-Wendat First Nation is to be invited to participate in the recommended stage 2 Assessment required to be completed during detailed design, prior to undertaking any fieldwork.
Metis Nation	Metis Nation inquired about the two creeks flowing through the site and whether the project team had considered potential impacts on the local ecology such as turtle nesting or beaver lodging.	January 21, 2021	<p>Project team notified the Metis Nation that while field work has not yet been initiated for the project's natural environmental review, two species of turtles came up in our background review: Midland Painted Turtle and Common Snapping Turtle. These are our most common native turtles and both have been recorded within the 10km survey square as a part of the Ontario Nature Ontario Reptile and Amphibian Atlas. Midland Painted Turtle was also noted within the more detailed (1km squares) Nature Heritage Information Center (NHIC) database. Both species have a high-probability of being present within the Study Area and we will assume their presence within the permanent water features. Nesting habitat is a very important and limited habitat for these species and they are known to use roadways and other disturbed areas for nesting. As such, we will be looking for evidence of nesting (scavenged nests, old shells, test pits) within the Study Area as a component of our field work. We will also note their likely presence as a part of mitigation recommendations for construction.</p> <p>The iNaturalist database does indicate some records of Beaver in the local area, mainly in parks and protected areas, such as the Heart Lake Conservation Area. During field investigations, we will note any beaver activity and include these observations into the natural heritage report.</p> <p>No response was received. No further consultation required at this time.</p>

## 8.3 Residents and General Public

Residents within and adjacent to the Study Area received direct mailings of all notices, while members of the general public were invited to participate in the Study through the Town of Caledon's municipal website and notices advertised in *The Caledon Citizen* (local newspaper).

A detailed summary of comments received regarding from residents and members of the general public during the Study is provided below, while a full copy of all comments received is included in **Appendix 1**.

### 8.3.1 Public Open Houses

#### 8.3.1.1 COMMUNITY OUTREACH MEETING

As part of the alternative solutions development for the Mill Street corridor, the Town held a Community Outreach Meeting to consult with area residents on May 27, 2021, from 6 p.m. to 7 p.m. The meeting was attended by both Town staff and RVA's project team. Residents were invited to participate in the Community Outreach Meeting by calling in via phone, or by registering for the live WebEx event.

The Community Outreach Meeting included an approximately 20-minute presentation on the MCEA process, existing conditions, consultation completed to date, and next steps, followed by an approximately 40-minute question and answer period.

Residents were encouraged to submit their questions using the WebEx Q & A function, or by using the "Raise Your Hand" feature, to ask a question directly to the project team. Questions submitted using the Q & A feature were read aloud to the project team by an RVA moderator and answered during the meeting by the representatives of both the Town and RVA. Residents who called in were also able to ask questions to the project team directly.

Following the Community Outreach Meeting, the recording of the meeting and the presentation slides were available for review and comment until June 11, 2021 on the Town's website.

A total of 77 comments and questions were received through the Q & A function, with residents also providing their comments / question directly to the project team using the "Raise Your Hand" feature. A total of 6 residents provided additional comments and/ or questions to the project team following the Community Outreach Meeting. Comments on various topics were received, with a number of trends becoming evident:

- Road safety improvements at intersections and the "S" bend are not strongly supported.

- Residents do not desire any pedestrian and cyclist accommodation throughout the corridor, including through the “S” bend of the roadway.
- Residents only want to rehabilitate the road pavement with no other change.
- Concern over property impacts and tree removals.
- Concern over the potential for improvements to increase traffic volumes and disrupt the existing character of the corridor.
- Additional traffic calming measures are supported.

A detailed summary report including the comments received, and how these were considered in the Study, is included in the Community Outreach Summary Report included in **Appendix 1**.

#### 8.3.1.2 PUBLIC INFORMATION CENTRE #1

The Town held an Online Public Information Centre (PIC) to consult with area residents on the preliminary Study recommendations on October 5, 2021 from 6 p.m. to 7 p.m. The meeting was attended by both Town staff and RVA’s project team. Residents were invited to participate in the PIC by calling in via phone, or by registering for the live WebEx event.

The PIC included an approximately 30-minute presentation on the MCEA process, existing conditions, alternative solutions, preliminary recommendations, and next steps, followed by an approximately 30-minute question and answer period.

Residents were encouraged to submit their questions using the WebEx Q & A function, or by using the “Raise Your Hand” feature, to ask a question directly to the project team. Questions submitted using the Q & A feature were read aloud to the project team and answered during the meeting. Residents who called in were also able to ask questions to the project team directly.

A total of 25 comments and questions were received through the Q & A function, with four residents providing their comments / question directly to the project team using the “Raise Your Hand” feature.

Following the PIC, video recording of the meeting was posted to the Town’s project website. Members of the public were invited to review the recording and submit their comments and/or questions to the project team by providing their comments to the project team directly via mail e-mail, and/or phone.

An additional seven residents made comments to the project team regarding the preliminary recommendations following the PIC, including a Cheltenham Area Residents Association proposal signed by several residents within the Study Area.

Comments on various topics were received, with a number of common themes:

- Road safety improvements at intersections and the “S” bend are not strongly supported.
- Residents do not desire any pedestrian and cyclist accommodation throughout the corridor, including through the “S” bend of the roadway
- Concern over property impacts and tree removals.
- Concern over the potential for improvements to increase traffic volumes and disrupt the existing character of the corridor.
- Additional traffic calming measures are supported.

A detailed summary report including the comments received, and how these were considered in the Study, is included in the PIC #1 Summary Report included in **Appendix 1**.

### 8.3.1.3 PUBLIC INFORMATION CENTRE #2

The second Public Information Centre (PIC) was held on June 15, 2022, at the Cheltenham Community Centre (14190 Creditview Rd, Caledon, ON) from 5:30pm to 7:00pm. The format of the PIC was an informal “Open House” with materials pertaining to the Study on display for the public to review. Members of the project team (Town of Caledon and RV Anderson Associates staff) were on hand to discuss the project and concerns brought forward by the attendees.

The purpose of the second PIC was to share and receive input from the public on the options for pedestrian accommodations developed for Mill Street in consideration of the feedback received during and following PIC #1, held online October 5, 2021.

The display materials presented information on the Study to date including the Study Area and purpose of the Study, public and technical agency consultation completed to date, preliminary recommendations for the roadway, and alternative solutions for pedestrian accommodation. Display materials were posted to the project website in advance of the PIC, and were available in an alternate format (i.e., hard copy) upon request.

The PIC presented three pedestrian accommodation alternatives for Mill Street. These were developed in response to the team’s earlier preliminary recommendation for pedestrians to be accommodated via paved shoulders throughout the corridor.

Attendees were requested to sign-in upon arriving at the Public Information Centre. Based on the sign-in sheet, there were 31 attendees, including representation from Town Council, Cheltenham Area Residents Association, and residents of the Town.

A total of eleven (11) comments / questions were received from the public in advance of the PIC, from 4 residents, regarding the format of PIC, participation and documentation of the PIC, availability of the PIC Slides, content of the PIC, and the design of the roadway.

A total of twenty (20) completed comment sheets questions were submitted, in addition to three comments provided via email. The comment sheet included six questions, requesting respondents to identify their mode and frequency of travel along Mill Street, their opinion of how well the presented alternatives accommodate pedestrians, as well as any other comments and questions they may have.

The PIC provided an opportunity for residents to provide input to the development of the Study recommendations, with a focus on pedestrian accommodations. Comments on various topics were received, with a number of trends becoming evident:

- Little support for road safety improvements at intersections and the “S” bend.
- Pedestrian and cyclist accommodation throughout the corridor is not supported by Mill Street residents.
- General support for rehabilitating the road pavement only, with no other changes.
- Residents expressed a desire to maintain the rural character of the roadway.
- Concern over property impacts and tree removals.
- Support for drainage improvements.
- Concern over road improvements will potentially increase traffic volumes and attract other road users to Mill Street.
- Support for additional traffic calming measures.

### **8.3.2 Notice of Study Recommendations**

In accordance with the requirements of the Municipal Class Environmental Assessment, the public is to be contacted following the identification of the recommended solution(s), prior to issuing the Notice of Study Completion. As such, a Notice of Study Recommendations was distributed to the Study contact list to notify the public of the Study recommendations. The notice was issued on January 12, 2023, and requested that comments, questions, or concerns on the Study recommendations be submitted to the project team by February 2, 2023.

A total of two comments were received from residents within the Study Area, as summarized in the table below. A copy of the comments is provided in **Appendix 1**.



Table 8.3 – Temporary Easements Summary

Comment Summary	Date Received	Response and Consideration of Comments in Class EA
Resident expressed concern regarding the ability of the study recommendations to rectify the existing flooding issues at 1499 Mill Street.	February 1, 2023	Recommendations were developed to improve conveyance of roadway drainage, however, it is noted that solving drainage related issues on the properties at 1499 Mill Street and 1347 Mill Street may not be achievable given that these properties are situated within the floodplain with portions of the properties being within the 5-year floodplain associated with the Credit River. The recommended ditch cleanout could help conveyance during very small, frequent events; however, given the backwater effects for the receiving Credit River, the recommendations are not intended to address both properties owner's concerns regarding flooding on their properties.
Resident expressed dissatisfaction with the project timeline. Resident inquired when specifics regarding items such as traffic calming, street lighting, and guiderails would be determined and will be determined and communicated to residents.	January 17, 2023	<p>At this time the Town has opted to maintain the existing illumination levels and continue monitoring Mill Street's streetlighting needs and implement improvements in the future if needed.</p> <p>Where required, new steel beam guiderail will be installed to protect traffic from steep embankments.</p> <p>Traffic calming measures will be developed with the Town during Detailed Design.</p> <p>Residents will be notified prior to construction.</p>

Additional comments were received from the Region of Peel, as well as the Mississaugas of the Credit First Nation as summarized in Sections 8.1 and 8.2 respectively.

## REFERENCES

Town of Caledon, 2017. Town of Caledon Transportation Master Plan. Paradigm Transportation Solutions Limited, Lura Consulting, Watt Consulting Group.

<https://www.caledon.ca/en/government/transportation-studies.aspx#Caledon-Transportation-Master-Plan-2017>

Watson & Associates Economists Ltd., 2019. 2019 Development Charges Background Study (as amended by Staff Report 2019-63 and Council Resolution). Town of Caledon.

<https://www.caledon.ca/en/town-services/resources/Documents/business-planning-development/Development-Charges-Background-Study-2019.pdf>

# **APPENDIX 1**

## CONSULTATION MATERIAL



## **APPENDIX 1-1**

### Notices



## **APPENDIX 1-2**

### Technical Agency and Stakeholder List



## **APPENDIX 1-3**

### Residents and General Public Consultation



## **APPENDIX 1-4**

### **Technical Agency and Key Stakeholder Consultation**





## **APPENDIX 1-5**

### **Indigenous Communities Communication**



## **APPENDIX 2**

### **TRAFFIC MEMORANDUM**



## **APPENDIX 3**

### **STORM DRAINAGE DESIGN BRIEF**



## **APPENDIX 4**

# **NATURAL ENVIRONMENT ASSESSMENT MEMO**



## **APPENDIX 5**

### **CULTURAL HERITAGE REPORT**



## **APPENDIX 6**

### **STAGE 1 ARCHAEOLOGICAL ASSESSMENT**





## **APPENDIX 7**

### **PAVEMENT EVALUATION REPORT**





## **APPENDIX 8**

### **DESIGN CRITERIA**



## **APPENDIX 9**

### **RECOMMENDED ROLL PLANS**

