



ENVIRONMENTAL STUDY REPORT

Town of Whitchurch-Stouffville

Edward Street Improvements

Municipal Class Environmental Assessment
Schedule "C"

ENVIRONMENTAL STUDY REPORT
February 2021
FINAL

AINLEY FILE # 117145



550 WELHAM ROAD, BARRIE, ON L4N 8Z7
TEL: (705) 726-3371 • FAX: (705) 726-4391

WWW.AINLEYGROUP.COM

**Town of Whitchurch-Stouffville
Edward Street Improvements
Municipal Class Environmental Assessment, Schedule 'C'**

ENVIRONMENTAL STUDY REPORT

Prepared For:

Tim Hayward
Policy Planner II
Town of Whitchurch-Stouffville
111 Sandiford Drive
Stouffville, ON L4A 0Z8
Tel: 905 640 1910
Fax: 905 640 7957
Email: tim.hayward@townofws.ca

Prepared By:

Jodi Moore
Environmental Planner
Ainley Group
550 Welham Road
Barrie, ON L4N 8Z7
Tel: 705-726-3371 ext. 239
Fax: 705-726-4391
Email: moore@ainleygroup.com

Reviewed By:

Nimit Mittal, M.Eng., P.Eng.
Project Manager
Ainley Group
195 County Court Boulevard, Suite 300
Brampton, ON L6W 4P7
Tel: 905-452-5172 ext. 204
Fax: 905-595-6701
Email: mittal@ainleygroup.com

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
1.0 PROJECT OVERVIEW	7
1.1 Introduction	7
1.2 Purpose of this Report	8
1.3 Environmental Assessment Process.....	8
1.4 Project Team.....	9
2.0 PLANNING CONTEXT.....	11
2.1 Provincial Policy Statement (2020)	11
2.2 Places to Grow Act (2005)	12
2.3 Oak Ridges Moraine Conservation Act (2001).....	13
2.4 Clean Water Act (2006).....	13
2.5 Town of Whitchurch-Stouffville Official Plan (2000)	14
2.6 Community of Stouffville Secondary Plan (2017).....	14
2.7 Town of Whitchurch-Stouffville Transportation Master Plan Update 2017.....	15
2.8 Town of Whitchurch-Stouffville Active Transportation Servicing Plan 2018.....	15
2.9 Toronto Region Conservation Authority	16
2.10 Climate Change	16
3.0 NEED AND JUSTIFICATION.....	16
3.1 Existing Infrastructure Deficiencies	16
3.2 Problem / Opportunity Statement.....	19
4.0 TRAFFIC REQUIREMENTS	20
4.1 Future Development Areas	20
5.0 EXISTING CONDITIONS	28
5.1 Physical Environment.....	28
5.2 Natural Environment	30
5.3 Socio-Economic Environment	35
5.4 Cultural Environment.....	37
5.5 Built Heritage and Cultural Heritage Landscapes	38
6.0 PHASE 2 ALTERNATIVE SOLUTIONS	39
6.1 Description of Alternative Solutions	39

6.2	Evaluation of Alternative Solutions.....	43
6.3	Phase 2 Input Received	47
6.4	Selection of the Preferred Solution	47
7.0	PHASE 3 DESIGN OPTIONS	48
7.1	Description of Design Options.....	48
7.2	Public Information Centre No. 2 Evaluation of Design Options.....	49
7.3	Selection of the Preferred Design	53
8.0	DETAILS OF THE RECOMMENDED PLAN	53
9.0	CONSULTATION	57
9.1	Points of Contact.....	57
9.2	Consultation Contact List	59
9.3	Notice of Study Commencement / Public Information Centre No. 1	61
10.0	MITIGATION.....	75
10.1	Natural Environment	75
10.2	Socio-Economic Environment	78
10.3	Cultural Environment.....	79
11.0	CLIMATE CHANGE	80
11.1	Potential for Project to Impact Climate Change	80
11.2	Potential for Climate Change to Impact this Project.....	81
12.0	PERMITS AND APPROVALS.....	81
13.0	MONITORING	81
14.0	REFERENCES	82

LIST OF FIGURES

Figure 1: Project Study Area.....	7
Figure 2: Municipal Class Environmental Assessment Flow Chart.....	10
Figure 3: Cracking of Pavement	17
Figure 4: Edward Street looking South at Harold Ave	17
Figure 5: Termination point at School Board Property	18
Figure 6: Intersection of Edward Street and Main Street.....	18
Figure 7: Existing Termination of Edward Street	19
Figure 8: Existing 2018 Annual Average Daily Traffic.....	26

Figure 9: Future 2031 Annual Average Daily Traffic.....	27
Figure 10: Environmental Features.....	32
Figure 11: Source Protection Information Atlas	34
Figure 12: Land Use Mapping.....	36
Figure 13: Built Heritage Inventory	38
Figure 14: Alternative 2.....	40
Figure 15: Alternative 3.....	41
Figure 16: Alternative 4.....	42
Figure 17: Design Option 1.....	48
Figure 18: Design Option 2.....	49
Figure 19: Construction Cost Estimate	57

LIST OF TABLES

Table 1: 2018 Existing Operations.....	22
Table 2: 2031 Intersection Operations – with Future Road Connection and High School Development	23
Table 3: 2031 Intersection Operations – with Future Road Connection without High School Development	24
Table 4: Phase 2 Evaluation Criteria	43
Table 5: PIC 1 Evaluation Matrix Part A	45
Table 6: PIC 1 Evaluation Matrix Part B	46
Table 7: PIC 2 Evaluation Matrix Part A	51
Table 8: PIC 2 Evaluation Matrix Part B	52
Table 9: Key Consultation Points.....	58
Table 10: External Agency and Indigenous Community List of Contacts	60
Table 11: Summary of Comments Received	64

APPENDICES

Appendix A	Traffic Analysis
Appendix B	Stage 1 Archaeological Assessment
Appendix C	Natural Heritage Assessment
Appendix D	Built Heritage Checklist
Appendix E	Technical Memorandum
Appendix F	Phase 1 Environmental Site Assessment
Appendix G	Noise Assessment and Air Assessment
Appendix H	Recommended Plan
Appendix I	Consultation Point No. 1 : Notice of Commencement
Appendix J	Consultation Point No. 2: Public Information Centre No. 1
Appendix K	Consultation Point No. 3: Public Information Centre No. 2
Appendix L	Consultation Point No. 4: Notice of Completion

EXECUTIVE SUMMARY

In January 2018 the Town of Whitchurch-Stouffville retained the services of the Ainley Group to undertake a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to facilitate improvements to Edward Street in the Downtown Area of Stouffville. This project was initiated to enhance traffic operations, improve pavement condition, promote active transportation (walking, cycling, etc.), and provide additional direct access and continuity to Stouffville's downtown businesses. The proposed improvements also provide an opportunity to upgrade and extend Edward Street from the existing termination point to Millard Street.

The site is not within an area that is subject to the *Greenbelt Plan (2017)* or the *Niagara Escarpment Plan (2017)*, however the study area is within the *Oak Ridges Moraine Conservation Plan (2017)*. The policies of which are applied through the Community of Stouffville Secondary Plan. There are no Provincially Significant Wetlands (PSW) or Areas of Natural & Scientific Interest (ANSI) within or adjacent to the subject study area. The Stouffville Marsh is located 200m northeast at its closest point to Edward Street, therefore outside of the project study area. Given that the study area is developed with minimal vegetation and no watercourses, there is limited wildlife habitat available. Area wildlife is limited to those species which have become accustomed to an urbanized environment.

Area land use is commercial and residential scattered throughout the corridor. The northern portion of the study area consists primarily of residential & institutional land uses. The York Region District School Board (YRDSB) currently owns the existing vacant institutional lands within the study area. The southern portion of study area currently supports a mixture of residential and commercial related land uses.

During Phase 2 of the Class EA process four alternative solutions were presented to the public at Public Information Centre (PIC) No. 1 held May 3rd, 2018. Following the receipt of input from interested parties, the Preferred Solution was selected and a second PIC held November 25th, 2019 was held to present design options. Comments submitted during the Class EA process focused on active transportation, road design elements, landscaping, and impacts to area businesses as well as area drainage and safety concerns. Residents also expressed concern with the heavy vehicle traffic on Edward Street.

The final Recommended Plan proposes the reconstruction of the corridor with a fully urbanized cross-section for the entire corridor from Main Street to Millard Street. This would incorporate two 4.25 m wide shared lanes, a 3.0 m wide multi-use path on the east side of the corridor and a 1.5 m wide sidewalk on the west side of the corridor for the entire project length. This will incorporate servicing improvements such as storm sewer, sanitary sewer and water main. Hydro polls, street lighting and trees will alternate on the west side throughout the corridor.

Overall, this project is expected to have a low potential for negative impacts given that construction will be contained within the existing road right-of-way. There is no in-water work proposed as part of this project and no potential to directly impact fish and fish habitat. Consultation between the Town of Whitchurch-Stouffville and the York Region District School Board will continue to determine the appropriate way to obtain the lands on Edward Street

from the current termination point to Millard Street. Mitigation will need to address standard construction related impacts such as sediment and erosion control, accidental spillage, disposal requirements for excavated material, noise, traffic management and property access during construction. It is anticipated that impacts will not be significant and any potential for impact can be reduced through the implementation of appropriate mitigation.

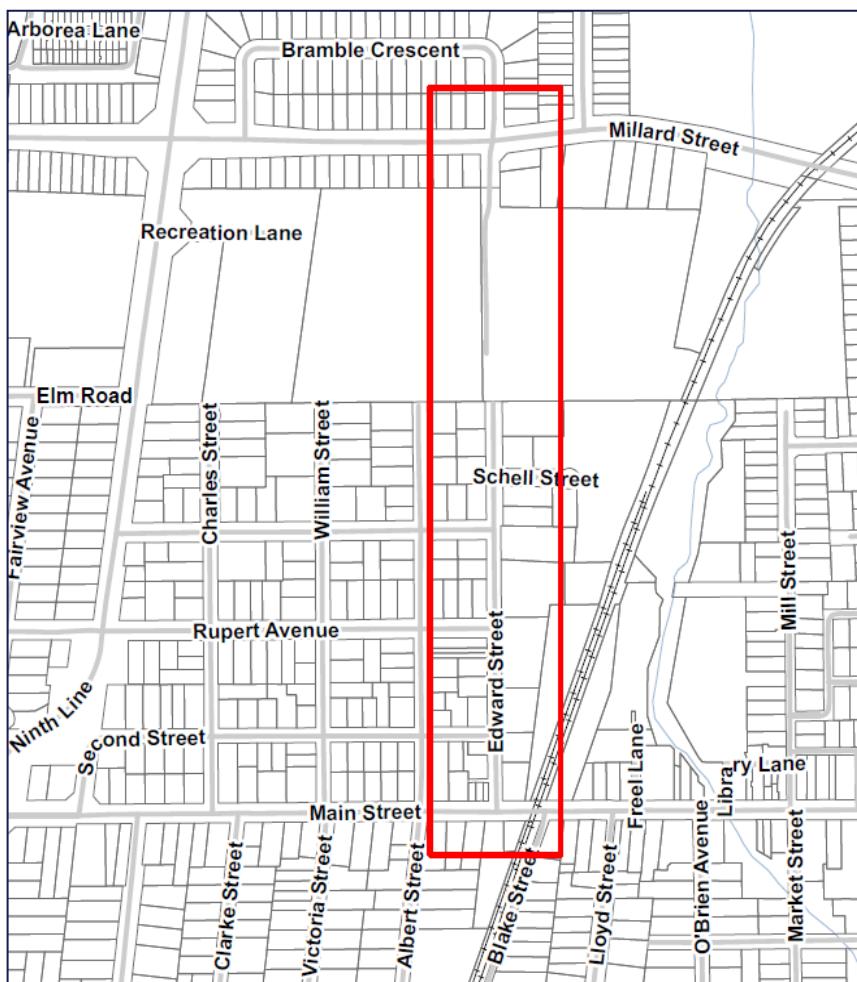
1.0 PROJECT OVERVIEW

1.1 Introduction

In January 2018 the Town of Whitchurch-Stouffville retained the services of the Ainley Group to undertake a Schedule 'C' Municipal Class Environmental Assessment (Class EA) to facilitate improvements to Edward Street in the Downtown Area of Stouffville. This project was initiated to enhance traffic operations, improve pavement condition, promote active transportation (walking, cycling, etc.), and provide additional direct access and continuity to Stouffville's downtown businesses. The proposed improvements also provide an opportunity to upgrade and extend Edward Street from the existing termination point to Millard Street.

As illustrated in *Figure 1*, the study area (outlined in red) for this project includes Edward Street from Main Street to Millard Street, a distance of approximately 680 m.

Figure 1: Project Study Area



1.2 Purpose of this Report

The purpose of this Environmental Study Report (ESR) is to document the Schedule 'C', Class EA planning process completed for Edward Street Improvements.

This report will identify the deficiencies affecting the Edward Street study area and the rationale for this Class EA. The alternatives considered to address the existing deficiencies are summarized as well as the evaluation of these alternatives and the decision-making process leading to selection of the preferred solution. This report describes the existing project environment (physical, natural, socio-economic, and cultural), the potential for environmental impact and the mitigation strategy proposed. Consultation completed during this process is also summarized in this document.

1.3 Environmental Assessment Process

The purpose of the Ontario Environmental Assessment Act (EA Act) is to provide for "...*the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment.*" The term "environment" is broadly defined and includes the built, natural, socio-economic and cultural environments. The EA Act applies to provincial ministries and agencies, municipalities and public bodies (i.e. Conservation Authorities and Metrolinx).

The Class EA is a planning process that has been approved under the EA Act for a class or group of undertakings. A Class EA follows an approved process designed to protect the environment and ensure compliance with the EA Act. A municipality is required to complete a Municipal Class Environmental Assessment (Class EA) before infrastructure improvements like the one proposed can be undertaken. Projects that are identified in the Class EA can proceed to implementation without further approval under the Act provided that the approved Class EA planning process is followed.

Since the scope of work for this project involves an upgrade to the existing road and extending Edward Street from the current termination point through the current York Region School Board Property to Millard Street, the high-level cost estimate is \$3.4 M, this project constitutes a Schedule "C" project in accordance with the MCEA document. The proponent for this project is the Town of Whitchurch-Stouffville. A detailed estimate will be completed during the detail design phase.

Schedule 'C' projects require completion of Phases 1 to 4, with implementation during Phase 5. The MCEA flow chart, included as *Figure 2*, illustrates the Class EA process and steps required for each phase. The process requires the evaluation of potential solutions and design concepts so as to select a suitable approach that will address the problem and / or opportunity, but also keep impacts to a minimum. The end goal is to select a solution that will address the problem, but create the least amount of impact on the area environment.

Consultation is an integral part of an environmental assessment. Opportunity is provided throughout the process for members of the public, key stakeholders, external agencies and Indigenous communities to provide input regarding the project.

The specific Class EA tasks completed for this project are as follows:

Phases 1 & 2

- Identify the problem/opportunity;
- Inventory the existing environment (physical, natural, social and economic);
- Develop alternative solutions to address the problem(s);
- Evaluate the proposed alternatives;
- Schedule Public Information Centre No. 1;
- Select the Preferred Solution in consideration of comments received.

Phases 3 & 4

- Establish alternative design concepts to implement the Preferred Solution as selected at the close of Phase 2;
- Evaluate the impacts of the proposed alternative designs on the existing environment;
- Schedule Public Information Centre No. 2;
- Select the Preferred Design in consideration of comments received;
- Develop a suitable mitigation strategy to minimize potential environmental effects;
- Prepare an Environmental Study Report (ESR) to document the Class EA process;
- File the ESR for a 30-day public review period.

Phase 5 - Implementation

- Complete the detailed design and prepare the contract drawings and tender documents and proceed to construction.
- Monitor for environmental provisions and commitments.

1.4 Project Team

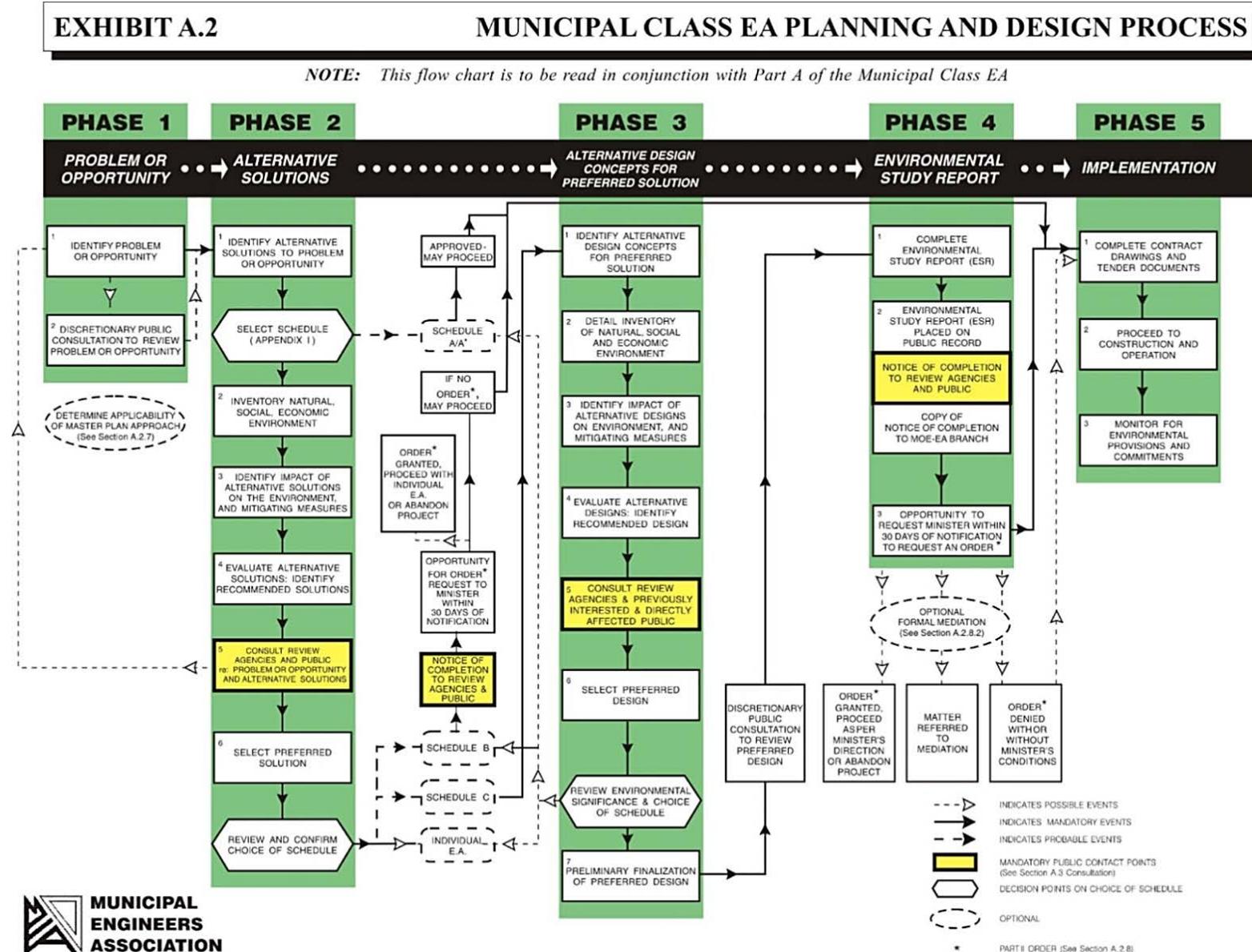
The project team involved in the completion of this Schedule 'C' Class EA includes the following:

Proponent: Town of Whitchurch-Stouffville

Prime Consultant: Ainley Group

- **Sub-Consultants:** ASI
Azimuth Environmental Consulting Inc.
Cambium Inc.
Golder Associates Ltd.
RDWI

Figure 2: Municipal Class Environmental Assessment Flow Chart



2.0 PLANNING CONTEXT

Prior to undertaking improvements as proposed it is important to review the policy framework that guides land use planning and the development of area infrastructure. This section provides a discussion of the provincial and municipal planning documents that are applicable to this Municipal Class EA. This report will demonstrate how this project is consistent with these policies.

2.1 Provincial Policy Statement (2020)

The *Provincial Policy Statement, 2020* (PPS) outlines provincial policies relating to land use planning and development. The policies provide for the efficient use of land, environmental protection and future sustainability. Growth is to be directed away from significant resources and focused within settlement areas. Land is to be managed to achieve an efficient use that accommodates both existing and future needs but also limits environmental impacts. Section 3 of the *Planning Act* requires that land use planning decisions be consistent with the policy statements issued under the Act. Some of the key policies applicable to this project are identified below:

Section 1.0 Settlement Areas

- **S. 1.1.3.1:** “Settlement areas shall be the focus of growth and development.”

1.5 Public Spaces, Recreation, Parks, Trails and Open Space

- **S.1.5.1a):** “Healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.”

Section 1.6 Infrastructure and Public Service Facilities

- **S. 1.6.1:** “Infrastructure and public service facilities shall be provided in an efficient manner that prepares for the impacts of a changing climate while accommodating projected needs. Planning for infrastructure and public service facilities shall be coordinated and integrated with land use planning and growth management so that they are:
 - a) financially viable over their life cycle, which may be demonstrated through asset management planning; and
 - b) available to meet current and projected needs.”
- **S. 1.6.6.7:** “Planning for stormwater management shall minimize or where possible, prevent increase in contaminant loads; minimize erosion and changes in water balance, and prepare for the impacts of a changing climate through the effective management of stormwater, including the use of green infrastructure; maximize the extent and function of vegetative and pervious surfaces; and promote stormwater management best practices, including stormwater attenuation and re-use, and low impact development.”

- **S.1.6.7.1** “Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address project needs.”

1.8 Energy Conservation, Air Quality and Climate Change

- **S.1.8.1b)** “Planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns which promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas”

Section 2.1 Natural Heritage

- **S. 2.1.1:** “Natural features and areas shall be protected for the long term.”

Section 2.6 Cultural Heritage and Archaeology

- **S. 2.6.1:** “Significant built heritage resources and significant cultural heritage landscapes shall be conserved.”

The Study Area for this Class EA is located within the Town of Whitchurch-Stouffville and this Class EA was initiated to complete improvements to enhance traffic operations, improve pavement condition, promote active transportation (walking, cycling, etc.), and provide additional direct access and continuity to Stouffville’s downtown businesses. The Town’s Official Plan and other planning documents (i.e. Long Range Policy Planning and Growth Management) were developed in accordance with provincial policy, including the Growth Plan.

As the current project is following a Municipal Class Environmental Assessment process consideration is being given to the potential to impact the physical, natural, socio-economic and cultural environment prior to selection of the preferred design. Various studies have been completed to obtain a better understanding of the existing conditions of the study area so that impacts can be properly assessed and appropriate mitigation developed.

This Class EA process will assist the Town in completing infrastructure improvements in a manner that is both cost effective and environmentally responsible. The proposed undertaking is therefore consistent with the policies of the *Provincial Policy Statement, 2020*.

2.2 Places to Grow Act (2005)

Under the *Places to Grow Act (2005)*, regional Growth Plans have been developed to manage long-term growth and infrastructure renewal throughout the province. *The Growth Plan for the Greater Golden Horseshoe 2019* was prepared and approved under the *Places to Grow Act, 2005*. Amendment 1 (2020) to the *Growth Plan for the Greater Golden Horseshoe 2019* was approved to take effect on August 28, 2020. A *Place to Grow* is the document that provides direction for the Town of Whitchurch-Stouffville in this regard. A *Place to Grow* is a long-term plan that supports the achievement of complete communities, a thriving economy, a clean and healthy environment, and social equity.

Regional and local municipalities are required to comply with the policies of the Growth Plan and are to manage growth through their respective Official Plan documents using the population and employment growth forecasts contained in the Growth Plan. The Province of Ontario through its *Growth Plan for the Greater Golden Horseshoe (2019)* has allocated a population of 2,020,000 for the Region of York by the year 2051. The existing population of Region of York as of 2018 is approximately 1,191,400.

This Class EA will provide the necessary infrastructure and servicing improvements that will assist the Town in accommodating anticipated growth and in meeting Provincially established, infill and intensification targets in accordance with the Town's Official Plan and provincial policy.

2.3 Oak Ridges Moraine Conservation Act (2001)

The Oak Ridges Moraine Conservation Plan (2017) is set out in O. Reg. 140/02 under the Oak Ridges Moraine Conservation Act, 2001. The *Greenbelt Plan*, together with this Plan and the *Niagara Escarpment Plan*, 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 and found within the Oak Ridges Moraine. The Plan provides land use and resource management planning direction to provincial ministers, ministries, and agencies, municipalities, landowners and other stakeholders on how to protect the Moraine's ecological and hydrological features and functions.

The study area is located on lands designated as Settlement Area under the Plan. The Plan defines Settlement Areas as; "areas that reflect a range of existing communities planned by municipalities to reflect community needs and values. Urban uses and development as set out in municipal official plans are allowed." The Community of Stouffville Secondary Plan (Section 2.6 of this report) ensures that the established principles, objectives and general policies conform to the Plan.

2.4 Clean Water Act (2006)

The purpose of the *Clean Water Act (2006)* is to protect drinking water at the source and to safeguard human health and the environment. It aims to protect existing and future drinking water sources. It ensures that municipal drinking water supplies are protected through prevention by the development of a watershed-based source protection plan. The source protection plans identify vulnerable areas within each municipality that include Wellhead Protection Areas, Intake Protection Zones, Highly Vulnerable Aquifers, Significant Groundwater Recharge Areas, Event-based modeling areas, and Issues Contributing Areas. Source protection plans provide policies to address existing and future risks to municipal drinking water sources within these vulnerable areas.

This project is subject to the Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Plan and is within the Toronto Source Protection Area. The Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Plan (CTC-SPP) was reviewed to confirm if the subject study area is located within a designated vulnerable area. The results of the review identified that the parts of the project area are within areas designated as Highly Vulnerable Aquifer (HVA) and Significant Groundwater Recharge Area (score of 4 and 6). It is also within a Wellhead Protection Area – Q1 and Q2. Refer to Section 5.2.5 for further details.

2.5 Town of Whitchurch-Stouffville Official Plan (2000)

As per S.1.3.3.2, the focus of population and employment growth in the Town will continue to be the Community of Stouffville. The Environment Conservation Strategy is intended to ensure that environmental sustainability is considered as a major factor in the future planning of the municipality, and particularly in the assessment of any proposed changes in the community. The current project is located in the Secondary Plan Area (Community of Stouffville) designation of the Town of Whitchurch-Stouffville. Residential intensification in the Community of Stouffville where there is sufficient existing or planned infrastructure is encouraged as per S. 6.2.2. This will require additional through accesses to the downtown area.

S.6.5.2.4 Streetscape Design identifies that landscaping provides for features such as the definition of the street, framing of views and focal points, direction of pedestrian movement and demarcation of areas with different functions as appropriate. Lighting shall provide suitable illumination for vehicles, pedestrians and cyclists and utilities on public or private property are clustered or grouped where possible to minimize visual impact. The Town shall encourage innovative methods of containing utility services, particularly large utility or utility cluster sites on or within streetscape features such as gateways, lamp posts or transit shelters. These relate to new developments however there should be a consistency throughout the Town.

As per section 4.16.2.2 Stouffville is the main urban community of the Town of Whitchurch-Stouffville. It is the focus for the community with respect to social, recreation, cultural, government, commercial and employment uses. Development shall be subject to the policies of the Community of Stouffville Secondary Plan.

2.6 Community of Stouffville Secondary Plan (2017)

The Community of Stouffville Secondary Plan (Secondary Plan) establishes principles, objectives and general policies, as well as specific strategies with respect to community structure, community character, natural environment, servicing, land use and transportation to guide the planning of the existing urban area and adjacent lands. The Secondary Plan provides a planning framework for all levels of government, as well as existing and future residents, landowners and other interested groups. The Plan also recognizes the location of the Community of Stouffville in the Oak Ridge's Moraine and conforms with the *Oak Ridges Moraine Conservation Plan (2017)*. The Greenland System for the Community of Stouffville includes the Key Natural Heritage and Hydrologically Sensitive Features. All development and

site alteration in the Greenland System shall be subject to the provisions of Part III of Oak Ridges Moraine Conservation Plan, and any related definitions.

Section 12.4 of the Secondary Plan provides for Community character strategy which will apply to this Project as Edward Street will be a link to the downtown core area. The infrastructure will be developed in line with the Town's Community Vision to reflect Stouffville's unique character. S. 12.4.2.1.1 outlines general streetscapes including street design plans and safe community design.

As per S.12.4.2.7 of the Secondary Plan Community Linkage states "New areas of the Town will be connected to the existing community wherever possible through road, pedestrian and bicycle links to ensure that the community functions in an integrated manner. These linkages will be developed in a manner Town of Whitchurch-Stouffville Official Plan which is sensitive to the character of the existing areas, while promoting communication between all parts of the community."

Furthermore, S. 12.4.2.9 of the Secondary Plan indicates "In considering the design of both public and private facilities, a key consideration shall be features which contribute to enhancements to the ability for movement by pedestrians and bicyclists including additions to the Town's trail system, wide sidewalks where appropriate, bicycle paths and bicycle parking."

2.7 Town of Whitchurch-Stouffville Transportation Master Plan Update 2017

This Transportation Master Plan (TMP) document identifies the transportation infrastructure improvements required for the Town to accommodate existing and future development. This document contains population information, traffic volume projections, and more recent development. The TMP identifies Edward Street as a Town Local Road and Millard Street as an Urban Collector Road. This document was utilized in the Traffic Analysis completed for this Class EA to establish existing and future traffic capacity requirements.

2.8 Town of Whitchurch-Stouffville Active Transportation Servicing Plan 2018

The Town of Whitchurch-Stouffville's Active Transportation Servicing Plan, 2018 (AT Plan) states that "The Town has a number of neighbourhoods that were constructed with rural and semi-rural cross-sections resulting in a discontinuous sidewalk and bicycle road network. The objective of this plan is to address these issues and create a connected active transportation network. Through the guidance of the AT Plan, the Town will have a comprehensive multi-year strategy to develop and implement active transportation (walking and cycling) infrastructure and create a healthier, safer and more connected active transportation network." The AT Plan includes design guidelines and policies to encourage walking and cycling throughout the Town and to improve connectivity.

2.9 Toronto Region Conservation Authority

Much of the Town of Whitchurch-Stouffville is within the Toronto Region Conservation Authority's (TRCA) jurisdiction and consultation for this project is therefore subject to a TRCA review. Notice was received that identified Edward Street to not be within a Regulated Area therefore no concerns were reported from TRCA.

2.10 Climate Change

The MECP has released a document entitled "Considering Climate Change in the Environmental Assessment Process" (2017) that provides guidance relating to the ministry's expectations for considering climate change during the environmental assessment process. The Guide is now a part of the Environmental Assessment program's Guides and Codes of Practice. The environmental assessment of proposed undertakings is to consider how a project might impact climate change and how climate change may impact a project. Climate Change was considered during the course of this Class EA and is discussed further in Section 11.0 of this document.

3.0 NEED AND JUSTIFICATION

This section of the report identifies the existing deficiencies affecting the project study area and discusses the existing and future traffic capacity requirements.

3.1 Existing Infrastructure Deficiencies

3.1.1 Pavement Structure Deficiencies

As illustrated in *Figures 3 to 6*, Edward Street is subject to pavement deterioration. Potholes, cracking and disintegrating pavement are evident throughout the corridor.

Figure 3: Cracking of Pavement



Figure 4: Edward Street looking South at Harold Ave



Figure 5: Termination point at School Board Property

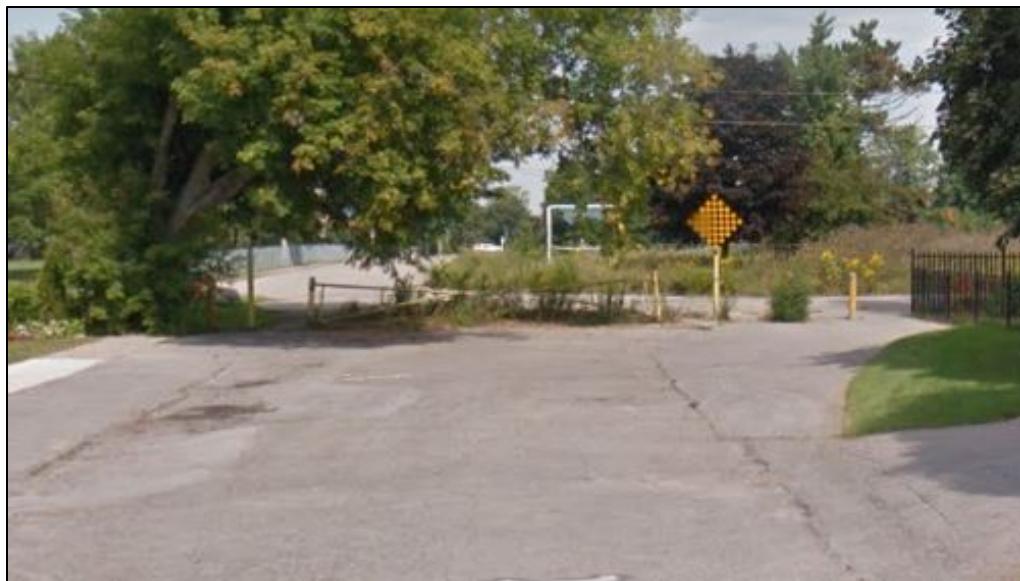


Figure 6: Intersection of Edward Street and Main Street



3.1.2 Sidewalk Deficiencies

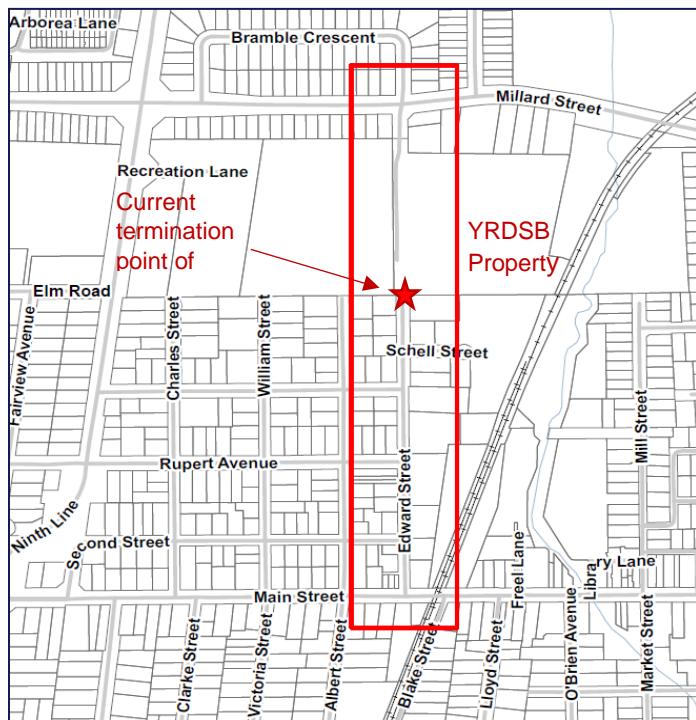
There is settlement of the existing sidewalk in localized areas that is causing uneven surfaces.

3.1.3 Servicing Deficiencies

The existing stormwater and water servicing infrastructure within the study limits are aging with some segments approximately 64 years old. The proposed reconstruction will replace the aging infrastructure and will add new infrastructure from the current termination point of Edward Street up to Millard Street. This would be installed to the Town's current standards.

As identified in Figure 7, the existing termination location of Edward Street is just south of the York Region District School Boards (YRDSB) property. There is on-going consultation as a separate conversation with the Town of Whitchurch-Stouffville and the YRDSB to determine the appropriate way to allow the Town to proceed through their current property. The improvements to Edward Street provide an opportunity to extend Edward Street to Millard through the existing York Region District School Board Property allowing for additional access to the downtown core of Whitchurch-Stouffville.

Figure 7: Existing Termination of Edward Street



3.2 Problem / Opportunity Statement

The Town of Whitchurch-Stouffville has initiated a Municipal Class Environmental Assessment (Class EA) to facilitate improvements to Edward Street, including an extension to Millard Street. The project study area includes Edward Street from Main Street to Millard Street for a distance of approximately 680m. The purpose of this project is to enhance traffic operations, improve pavement condition, promote active transportation (walking, cycling, etc.). Addressing the problems noted above will also provide the opportunity to provide additional direct access and continuity to Stouffville's downtown businesses.

4.0 TRAFFIC REQUIREMENTS

A Traffic Analysis (Ainley Group, 2018) was completed as part of this Class EA to assess the transportation requirements for the subject study area under existing conditions (2018) and in the future for the horizon years of 2021 and 2031. Consideration was given to general background growth and specific developments proposed within the area. As per the Town's Transportation Master Plan an annual general background growth rate of 3.24 % was applied. A copy of the Traffic Analysis is included in its entirety in Appendix 'A' of this report.

4.1 Future Development Areas

In developing future traffic projections, consideration has been given to general background growth in addition to specific development growth. Based on the Town's Official Plan, for the Stouffville Secondary Plan area, population will grow at a rate of 3.11% per annum till 2031. Although no specific developments are known at this time, the Town would like to include a development at the old school site at the end of Edward Street given that the land is currently vacant and will be developed sooner or later. The Community of Stouffville Secondary Plan identifies the area as Activity Node Area. The York Region District School Board indicated that potentially a new school could be built on the site if there is a need in the future. If a school is not built, residential use would be the potential use. As per the Town's Official Plan, both institutional and residential uses are permitted in an Activity Node Area. Therefore, both institutional and residential uses have been considered.

4.1.1 **Intersection Operations Analysis (Existing, 2021 & 2031)**

The existing roadway was analyzed based on current configurations and control for current peak hour traffic volumes. Since the Class EA considered the extension of Edward Street to Millard Street, the traffic analysis reviewed future traffic operations for 2021 and 2031 for both the high school development and without the high school development scenarios.

Consideration was also given to signalization, the use active transportation and public transit. Table 1 illustrates the existing intersection operations (2018) and Table 2 illustrates future 2031 peak hour operations with the future extension of Edward Street and the high school development. Each intersection was assigned a Level of Service (LOS) ranging from 'A' through 'F' with 'A' indicating an acceptable LOS and 'F' indicating a poor LOS.

The LOS classifications are further explained below:

- LOS 'A': Describes operations with a control delay of 10 seconds/vehicle or less. This level is typically assigned when either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
- LOS 'B': Describes operations with control delay between 10 and 20 seconds/vehicle. This level is typically assigned when either progression is highly favorable or cycle length is short. More vehicles stop than with LOS A.

- LOS 'C': Describes operations with control delay between 20 and 35 seconds/vehicle. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
- LOS 'D': Describes operations with control delay between 35 and 55 seconds/vehicle. This level is typically assigned when either progression is ineffective or the cycle length is long. Many vehicles stop, and individual cycle failures become noticeable.
- LOS 'E': Describes operations with control delay between 55 and 80 seconds/vehicle. This level is typically assigned when progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
- LOS 'F': Describes operations with control delay exceeding 80 seconds/vehicle. This level is typically assigned when progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

As shown in Table 1 the analysis determined that under existing conditions (2018) all intersections currently operate with an acceptable LOS, except for the stop-controlled Edward Street and Main Street intersection. Based on TAC (Transportation Association of Canada) Geometric Design Guide for Canadian Roads MTO Design Supplement, a design speed of 60 km/h, a 15 m eastbound left turn lane storage length is warranted on Main Street at Edward Street. However, the traffic analysis suggested that given the relatively low volumes on Edward Street, all intersections are operating acceptably. No improvements are required from a traffic operation perspective.

Table 2 also provides a comparison of what the LOS would be in 2031 if Edward Street continued to operate and extend to Millard Street with a future development of the high school. As shown in Table 2, if the Town continues to utilize the current two-lane design with stop control at the Millard Street and Bramble Crescent intersection it would result in a poor LOS 'F' on the westbound approach of the intersections during the AM peak hour. Traffic Operations would continue to be monitored and intersection signalization would be provided when warranted. The intersection of Edward Street and Main Street on the southbound approach would also result in poor LOS 'F' during AM and PM peak hours. The analysis determined that all other intersections would operate acceptably in 2031.

Table 3 indicates that all the intersections operate acceptably except for the intersection of Edward Street at Main Street where a poor level of service F occurs during both the AM and PM peak hours. Traffic Operations would continue to be monitored and intersection signalization would be provided when warranted.

Table 1: 2018 Existing Operations

Legend: EB = eastbound, WB = westbound, NB = northbound, SB = southbound, T = through, L = left, R = right.

Intersection	Control	AM Peak Hour			PM Peak Hour			
		Delays(s)	LOS	v/c	Delays(s)	LOS	v/c	
Millard St & Bramble Cres	NB	all-way stop	9.0	A	0.02	8.2	A	0.02
	EB		8.7	A	0.21	11.1	B	0.50
	WB		12.4	B	0.51	8.9	A	0.27
	SB		8.1	A	0.01	8.3	A	0.01
Edward St & Main St	EBL	free	9.0	A	0.03	8.8	A	0.02
	SB	stop	17.9	C	0.19	19.5	C	0.14
Edward St & Schell St	WB	stop	8.6	A	0.01	8.6	A	0.00
	SBL	free	0	A	-	0	A	-
Edward St & Rupert Ave	NBL	free	7.3	A	0.00	7.4	A	0.01
	EB	stop	8.8	A	0.03	8.8	A	0.02
	WB		8.9	A	0.00	8.9	A	0.00
	SBL	free	7.3	A	0.00	0	A	-
Edward St & GO Parking Lot Entrance	WB	stop	8.9	A	0.01	8.8	A	0.06
	SBL	free	7.3	A	0.01	7.3	A	0.00
Edward St & Second St	NBL	free	7.3	A	0.01	7.3	A	0.00
	EB	stop	8.8	A	0.01	8.8	A	0.00
Edward St & Harold Ave	NB	all-way stop	7.1	A	0.01	7.2	A	0.04
	EB		6.6	A	0.05	6.6	A	0.01
	WB		6.4	A	0.00	7.2	A	0.00
	SB		7.6	A	0.02	6.7	A	0.01

Table 2: 2031 Intersection Operations – with Future Road Connection and High School Development

Intersection	Control	AM Peak Hour			PM Peak Hour			
		Delays(s)	LOS	v/c	Delays(s)	LOS	v/c	
Millard St & Bramble Cres	NB	all-way stop	14.0	B	0.34	11.0	B	0.23
	EB		16.2	C	0.62	33.5	D	0.88
	WB		152.9	F	1.25	14.4	B	0.55
	SB		10.6	B	0.02	9.9	A	0.02
Edward St & Main St	EBL	free	10.7	B	0.07	10.0	A	0.05
	SB	stop	139.2	F	1.03	128.7	F	0.87
Edward St & Schell St	WB	stop	9.7	A	0.03	9.1	A	0.01
	SBL	free	7.7	A	0.00	7.4	A	0.00
Edward St & Rupert Ave	NBL	free	7.5	A	0.00	7.5	A	0.01
	EB	stop	9.6	A	0.05	9.3	A	0.04
	WB		10.1	B	0.01	9.4	A	0.01
	SBL	free	7.5	A	0.00	0	A	-
Edward St & GO Parking Lot Entrance	WB	stop	10.1	B	0.02	9.4	A	0.11
	SBL	free	7.6	A	0.02	7.4	A	0.00
Edward St & Second St	NBL	free	7.5	A	0.01	7.5	A	0.00
	EB	stop	9.5	A	0.02	9.3	A	0.01
Edward St & Harold Ave	NBL	free	7.4	A	0.00	7.3	A	0.01
	EB	stop	9.2	A	0.05	8.8	A	0.01
	WB		9.9	A	0.00	9.5	A	0.00
	SBL	free	0	A	-	0	A	-
Edward St & High School entrance	WB	stop	12.1	B	0.24	9.3	A	0.08
	SBL	free	8.1	A	0.21	7.5	A	0.05

Legend: EB = eastbound, WB = westbound, NB = northbound, SB = southbound, T = through, L = left, R= right

Table 3: 2031 Intersection Operations – with Future Road Connection without High School Development

Intersection	Control	AM Peak Hour			PM Peak Hour			
		Delays(s)	LOS	v/c	Delays(s)	LOS	v/c	
Millard St & Bramble Cres	NB	all-way stop	10.1	B	0.06	9.0	A	0.03
	EB		10.6	B	0.37	21.1	C	0.78
	WB		26.2	D	0.81	11.1	B	0.43
	SB		9.0	A	0.01	9.1	A	0.01
Edward St & Main St	EBL	free	10.3	B	0.07	9.9	A	0.05
	SB	stop	61.0	F	0.70	75.2	F	0.64
Edward St & Schell St	WB	stop	9.0	A	0.02	9.0	A	0.01
	SBL	free	0	A	-	0	A	-
Edward St & Rupert Ave	NBL	free	7.4	A	0.00	7.5	A	0.01
	EB	stop	9.2	A	0.04	9.2	A	0.03
	WB		9.4	A	0.01	9.3	A	0.01
	SBL	free	7.3	A	0.00	0	A	-
Edward St & GO Parking Lot Entrance	WB	stop	9.4	A	0.01	9.3	A	0.10
	SBL	free	7.4	A	0.02	7.3	A	0.00
Edward St & Second St	NBL	free	7.5	A	0.01	7.4	A	0.00
	EB	stop	9.2	A	0.02	9.1	A	0.01
Edward St & Harold Ave	NBL	free	7.4	A	0.00	7.3	A	0.01
	EB	stop	9.0	A	0.05	8.7	A	0.01
	WB		9.4	A	0.00	9.3	A	0.00
	SBL	free	0	A	-	0	A	-

4.1.2 Queue Length Analysis for Edward Street

Queue lengths were reviewed for the ultimate 2031 horizon to determine the recommended eastbound left turn lane length on Main Street at Edward Street and to review the critical queue lengths for the proposed Edward Street extension scenario, queue lengths were reviewed for the ultimate 2031 horizon with and without the High School development. The assumption that the improvements including 2031 horizon without the High school development would have an eastbound left turn lane on Main Street at Edward Street and the 2031 horizon with the High school development would convert the all-way stop intersection of Millard Street at Bramble Crescent to stop controlled on Bramble Crescent the northbound and southbound approaches with a westbound left turn lane. Signalize the intersection of Main Street at Edward Street with an eastbound left turn lane.

The analysis determined that without a high school all queue lengths can be accommodated within the road network with the Edward Street extension assuming an eastbound left turn lane on Main Street at Edward Street. While with the high school development a 30 m westbound left turn lane on Millard Street at Bramble Crescent and a 25 m eastbound left turn lane on Main Street at Edward Street are sufficient to accommodate the 2031 95th percentile queue lengths.

Figures 8 and 9 provide a comparison of the Average Annual Daily Traffic (AADT) for current conditions in 2018 and in the future (2031).

Figure 8: Existing 2018 Annual Average Daily Traffic

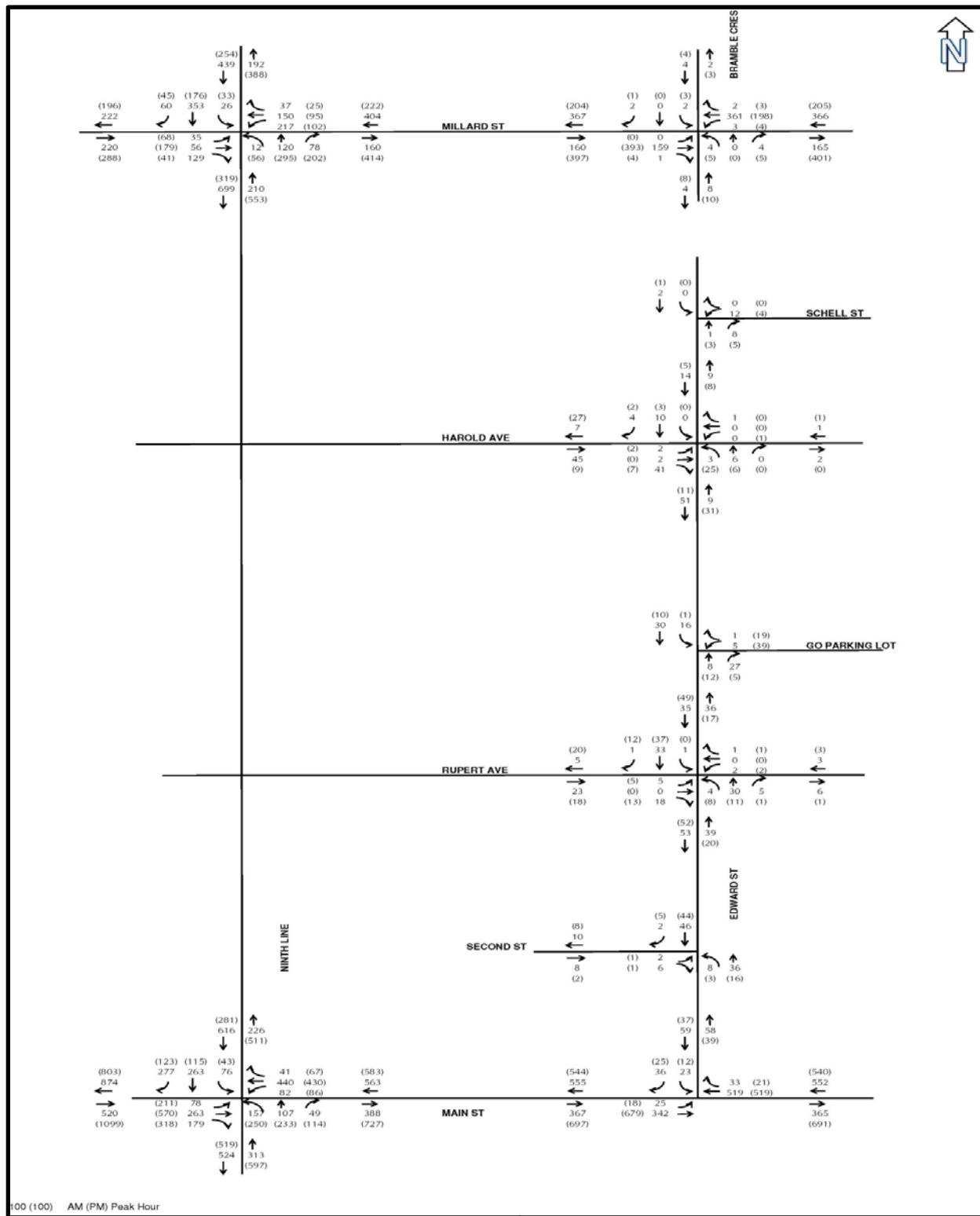
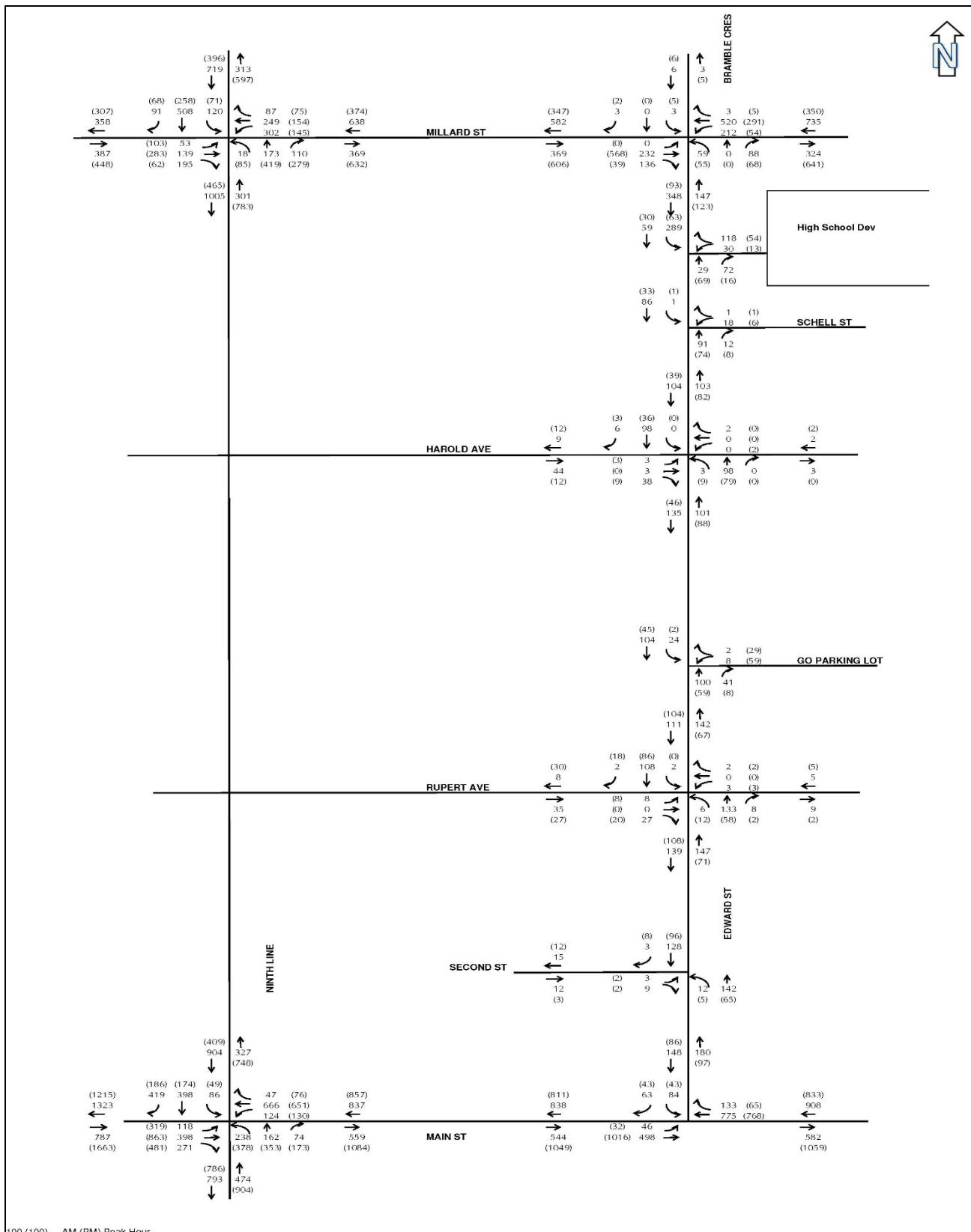


Figure 9: Future 2031 Annual Average Daily Traffic



100 (100) AM (PM) Peak Hour

4.1.3 Traffic Analysis Conclusions

The Traffic Analysis completed for this Class EA concluded the following:

2021 horizon:

- Add a 15m eastbound left turn lane on Main Street at Edward Street through pavement marking;
- Sidewalks on both sides of Edward Street; and
- On-road signed bicycle route on Edward Street.

2031 horizon without the High School development:

- Monitor traffic at the intersection of Main Street with Edward Street and assess the need for a traffic signal in the 2031 horizon.

2031 horizon with the High School development:

- Convert the all-way stop control to two-way stop control on the north and south approach at the intersection of Millard Street with Bramble Crescent;
- Add a 30 m westbound left turn lane on Millard Street at Bramble Crescent;
- Add a traffic signal at the intersection of Edward Street with Main Street;
- Extend the eastbound left turn lane on Main Street at Edward Street to 25 m through partially removal of the eastbound parking lane on Main Street west of Edward Street; and
- Add on-road bike lanes on Edward Street.

5.0 EXISTING CONDITIONS

This section provides an inventory of the existing physical, natural, socio-economic and cultural environment associated with the project study area. This inventory was established through the completion of field visits, a review of existing engineering drawings and completion of the following investigations:

▪ Stage 1 Archaeological Assessment	ASI
▪ Natural Heritage Assessment	Azimuth Environmental
▪ Phase I ESA	Cambium
▪ Geotechnical – Technical Memo	Golder Associates Ltd.
▪ Noise Assessment	RWDI
▪ Air Assessment	RWDI

5.1 Physical Environment

5.1.1 Existing Road Cross-Section

Edward Street is classified as a Local Road in the Town's Official Plan. The existing corridor is designed as follows:

- Road Cross-section: Edward Street is a semi-urban road from the current termination point until Second Street where Edward Street turns into an urban cross-section south to Main Street. The lane widths slightly change throughout the existing corridor however they are approximately 3.5 m wide in a 15 m right of way and are identified as a minor local road. All intersecting streets including Bramble Crescent are identified as local roads. Main Street is an arterial road whereas Millard Street is a collector road. Edward Street has two lanes with one lane in each direction.
- Active Transportation: An approximate 1 m sidewalk is provided on the west side of Edward Street, on the north side of Millard Street, and on both sides of Main Street. A parking lane is on both sides of Main Street except for the location near the train track. There are no existing bicycle lanes or multi-use trails present within the limits of the project.
- Speed Limit: No speed limit is posted on the sections Edward Street, Main Street and Millard Street. A 50 km/h speed limit is assumed on all roads in the study area.
- Intersection Control: The intersection of Millard Street with Bramble Crescent is a 4-leg intersection with an all-way stop control on each approach. Most intersections on Edward Street are “T” intersections with stop control on minor streets except for the Harold Avenue intersection which is an all-way stop controlled intersection. Each approach has a single shared lane with no left/right turn lanes/tapers provided. Harold Avenue intersection and Rupert Avenue intersection have a private entrance on the westbound approach to form the 4th leg.

5.1.2 Municipal Servicing Infrastructure

All properties within the subject study area are on municipal water and sanitary services. Existing municipal servicing consists of the following:

- Storm Sewers: Existing storm sewer ranges between 300 mm to 600 mm in diameter and are located along the existing corridor of Edward Street. The extension of Edward Street will require new infrastructure, to be determined during detailed design. The existing storm sewer crosses Edward Street at Rupert Street was built in 1999 and the section on Edward Street from Harold Ave south to Rupert Street was constructed in 2005.
- Watermain: The existing watermain south of Harold Avenue was constructed in 1966 and the watermain north of Harold Avenue was installed in 1989. New infrastructure will be confirmed during detailed design including possible looping of the distribution system to Millard Street.
- Sanitary Sewer: The existing sanitary sewers along Edward Street were installed in 1955. New infrastructure will be required for the extension to Millard Street. This will be confirmed during detailed design.

5.1.3 Utilities

There is aerial utility servicing within the project study area that includes Hydro One, Bell and Rogers. Street lighting, where provided, is independent of hydro poles. A buried gas main is located on the east side of Edward Street which then transfers to the west side of Edward

Street at Harold Street and again switches to the east side of Edward Street heading south after Rupert Avenue. Area utilities that included Hydro One, Enbridge Gas, Bell and Rogers Cable were consulted as part of this process.

5.2 Natural Environment

To assist in the development of the environmental inventory, Azimuth Environmental Consulting Inc. (Azimuth), on behalf of Ainley Group, completed a natural heritage review of the subject study area that included a Species at Risk screening. As the study area is primarily urbanized, the Azimuth assessment involved a general review of any natural and regenerating areas within the study area. All relevant background material was reviewed which included information from the Natural Heritage Information Centre (NHIC) as well as data provided by the Ministry of Natural Resources & Forestry (MNRF). The sub-sections that follow provide an inventory of the existing natural environment associated with the project study area. The assessment was documented in the *Edward Street Class EA Natural Heritage Assessment* (July, 2019). Please refer to Appendix 'C' for a copy of this document. Figure 14 identifies the Environmental Features.

The study area is within the Oak Ridge's Moraine Conservation Plan (2017). The policies of which are applied through the Community of Stouffville Secondary Plan. There are no Provincially Significant Wetlands (PSW) or Areas of Natural & Scientific Interest (ANSI) within or adjacent to the subject study area.

5.2.1 Vegetation (Including Species at Risk)

The study area is present within highly urbanized setting, comprising anthropogenic vegetation communities associated with residential properties, sports fields, and municipal right-of-way. There are no natural/naturalized vegetation communities associated with the study area, rather all lands therein are characterized as maintained lands. A Cultural Woodland is located approximately 200 m east of Edward Street on the south side of Millard Street, beyond the study area limits.

5.2.2 Wetlands

The Stouffville Marsh (Evaluated Wetland – Other) is located approximately 200 m northeast of Edward Street at its closest point, and Stouffville Creek is located approximately 150 m east of Edward Street at its closest point. As such, records indicate the study area is beyond both Minimum Protection Zones and Areas of Influence for wetlands and streams described in the Stouffville Secondary Plan.

5.2.3 Wildlife (Including Species at Risk)

Given that the study area is urbanized with minimal vegetation and no watercourses, there is limited wildlife habitat available. Area wildlife is limited to those species which have become

accustomed to an urbanized environment. A Species at Risk (SAR) screening was completed for the project study area. A review was made of the Ontario Breeding Bird Atlas and consultation was completed with the Ministry of Natural Resources & Forestry (MNRF). The Azimuth review included a search for potential habitat for species listed under Ontario's Endangered Species Act, 2007 (ESA), as well as candidate Significant Wildlife Habitat (SWH). Consideration was given to the habitat requirements of SAR protected under the ESA with potential to occur in the general area, including Eastern Meadowlark (Threatened), Bobolink (Threatened), Butternut (Endangered), Barn Swallow (Threatened), and Endangered Bat Species (Little Brown Myotis, Northern Myotis, and Tri-coloured Bat).

One mammalian species, Eastern Chipmunk, was observed during the course of the site investigation, however it is expected the following other mammals could conceivably be encountered within the study area in an urbanized setting:

- small mammal species (various mice, voles, and shrews), Grey Squirrel, Red Squirrel, Striped Skunk, Eastern Cottontail, Virginia Opossum, Raccoon.

No herpetofaunal species were observed during the course of the site investigation. The study area provides limited opportunities to support amphibian and reptile life processes, however based on an evaluation of suitable habitats, the following species have potential to occur:

- Anurans: American Toad (foraging habitat), Gray Treefrog (foraging habitat);
- Snakes: Dekay's Brownsnake, Red-bellied Snake, Eastern Gartersnake, Eastern Milksnake, Smooth Greensnake.

A total of seven bird species were documented incidentally during the site investigation on May 30, 2018, as follows: European Starling, American Crow, Common Grackle, Chimney Swift, American Goldfinch, Song Sparrow, Northern Cardinal.

Based on the assessment in combination with vegetation communities observed during the site investigation, the following species are considered based on confirmed or potential occurrence within the study area: Common Nighthawk, Monarch, Barn Swallow, Chimney Swift, Eastern Smallfooted Bat, Little Brown Myotis, and Tri-colored Bat.

Figure 10: Environmental Features



5.2.4 Fish and Fish Habitat

No natural watercourses or water bodies are located within the study area limits. Stouffville Creek, a permanent coldwater stream, is located approximately 150 m east of the existing limits of Edward Street at its closest point, and occurs outside the study area. The affected corridor has some ditches however they are connected to municipal storm drainage and therefore

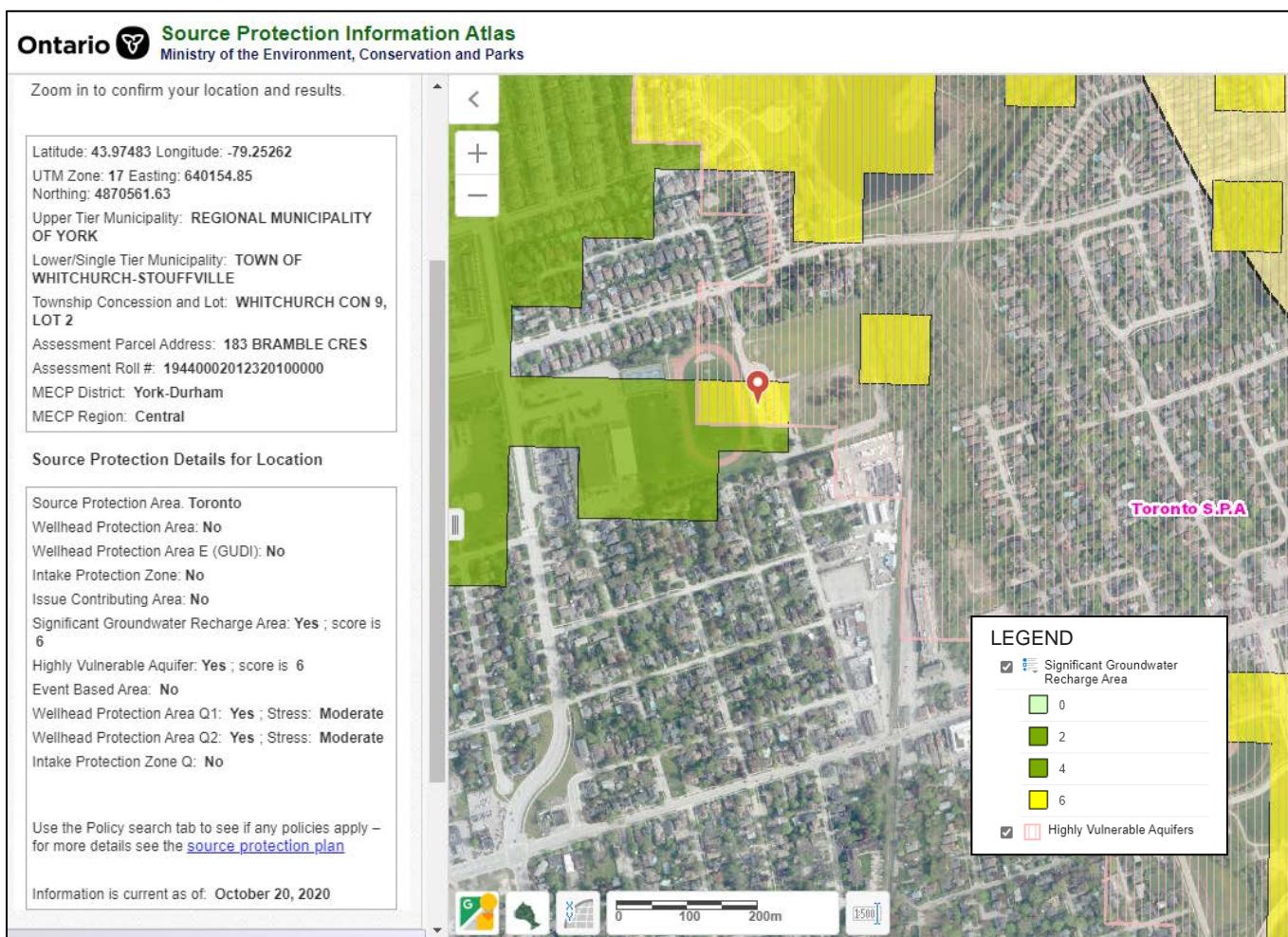
there is no expectation that these features function as fish habitat. There are no fish and fish habitat concerns within the area of study.

5.2.5 Groundwater

As indicated, this project is subject to the Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Plan and is within the Toronto Source Protection Area. Figure 11 illustrates the source protection details. Consideration was given to whether the works proposed have the potential to adversely affect the quality or quantity of a drinking water source. When a Class EA undertaking proposes an activity that is a threat to drinking water it must conform to the policies in the CTC-SPP that address significant risks to drinking water and must have regard for policies that address moderate or low risks. CTC-SPP Policy SAL-11 applies to this project; Application of Road Salt Moderate/Low Threat within a Significant Groundwater Recharge Area with a score ≥ 6 and a Highly Vulnerable Aquifer. Where the application of road salt is, or would be, a moderate or low drinking water threat best management practices for the application of road salt will be implemented to protect sources of municipal drinking water.

As indicated in that memo, additional assessments are required such as a hydro geological investigation and bore hole investigation along Edward Street will be completed during detailed design. Based on the local topography, the inferred regional groundwater flow is southerly to the southeasterly toward Stouffville Creek, though it is noted that local disruptions in the groundwater flow direction could result from the presence of buried utility conduits beneath adjacent roadways.

Figure 11: Source Protection Information Atlas



5.2.6 Soils and Topography

A geotechnical technical memorandum was completed for this project in accordance with the procedures listed in the Ministry of Transportation's *Flexible Pavement Condition Rating Guidelines for Municipalities (SP-022)*. The results of the pavement condition survey indicated that the pavement on Edward Street between Main Street and about 120m north of Main Street is generally in excellent condition and appears to be recently rehabilitated. Between 120m north of Main Street and the end of the road, Edward Street is in poor condition. Based on the visual survey completed, a full reconstruction of Edward Street including drainage improvement is suggested for the section 120m north of Main Street to the end of the road. Additional explorations of subsurface conditions will need to be carried out as part of the detailed design to better define the local geologic stratigraphy, groundwater levels, and the engineering properties of the subsurface materials for further design activities. Please refer to Appendix 'E' for a copy of this document.

5.2.7 Contamination / Waste Management

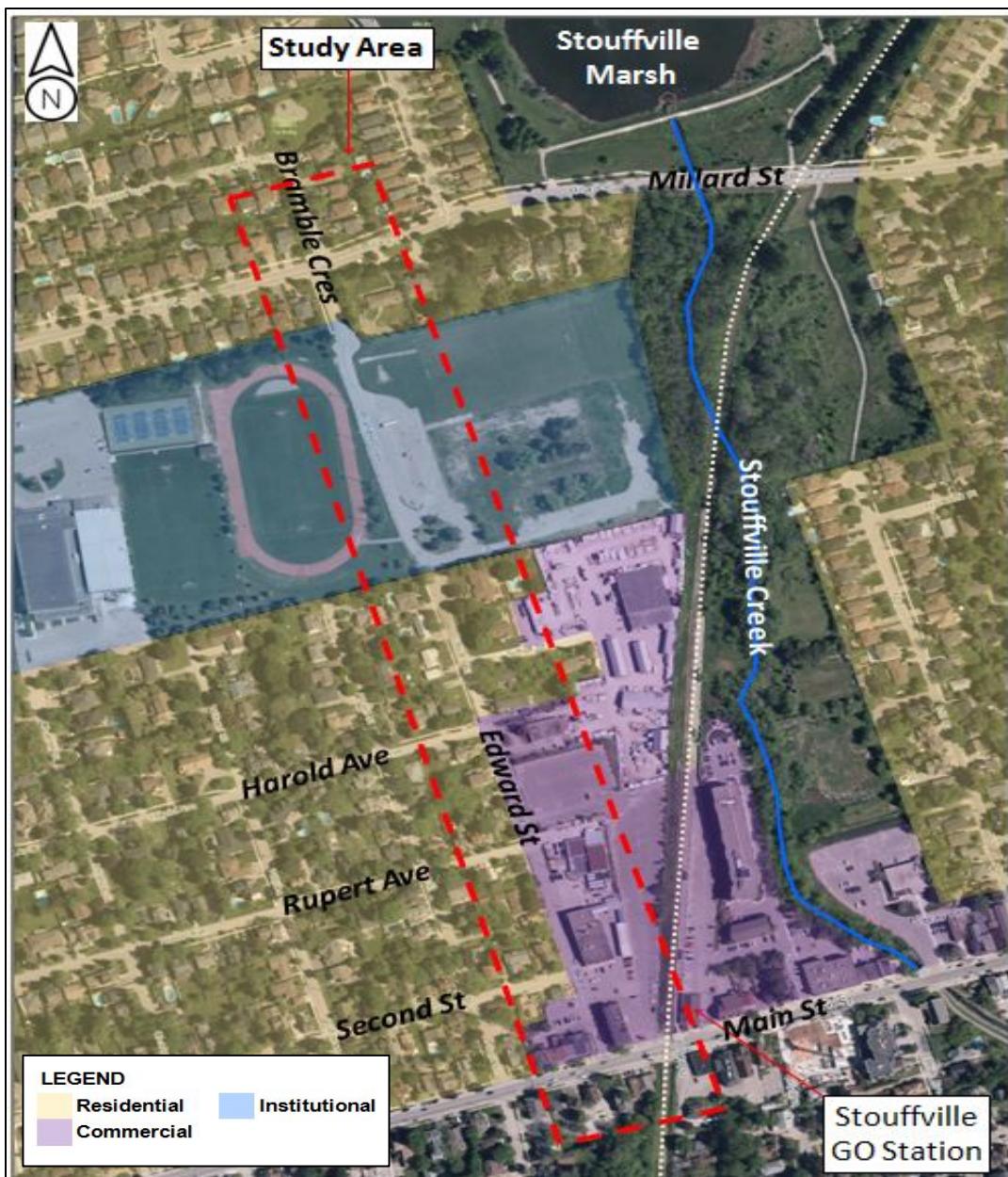
A Phase 1 Environmental Site Assessment (ESA) was conducted of the property known as 183 Bramble Cres. The purpose of the Phase 1 ESA was to summarize the existing site condition and identify any areas of potential environmental concern (APECs). The results of the Phase 1 ESA identified no on-site potentially contaminating activities (PCAs). Four off-site PCAs were identified related to historical uses. However, based on the local topography, inferred groundwater flow direction, and distance from the site, none of these PCAs are contributing to an APEC and a Phase 2 ESA is not required at this time. Please refer to Appendix 'F' for a copy of this document.

5.3 Socio-Economic Environment

5.3.1 Area Land Use

As illustrated in Figure 12, Area land use is commercial and residential scattered throughout the corridor. The study area is located within the 'Community of Stouffville Secondary Plan' area. The northern portion of the study area consists primarily of residential & institutional land uses. The York Region District School Board (YRDSB) currently owns the existing vacant institutional lands within the study area. The southern portion of study area currently supports a mixture of residential and commercial related land uses. Lands east of the study area are comprised primarily of open space & parkland, and also support a portion of the Stouffville Marsh, Stouffville Creek and GO Rail Line corridor.

Figure 12: Land Use Mapping



5.3.2 Noise

The main noise sensitive areas are the residential properties located on the corridor of Edward Street. There are no hospitals, nursing homes, hotels, churches or other noise sensitive land uses within the study area or in proximity. The potential environmental noise impacts of the proposed undertaking have been assessed. Both operational and construction noise impacts have been considered. The following conclusions and recommendations result:

- Operational noise impacts resulting from the proposed Edward Street extension do not meet the mitigation requirements of MTO/MECP Joint Protocol. Changes in sound levels resulting from the project do not trigger noise mitigation analysis.

- Construction noise impacts are temporary in nature but may be noticeable at times at residential receptors. Methods to minimize construction noise impacts should be included in the Construction Code of Practice.

Please refer to Appendix 'F' for a copy of this document.

5.3.3 Air Quality

An Air Quality Assessment was completed to qualitatively addresses air quality impacts and considers both impacts from operation of the project after construction is complete, and impacts during construction. The study area consists mainly of residential, institutional, and downtown mixed commercial. Of these uses, the residential and institutional uses can include sensitive receptors. To assess how local air quality conditions will change due to the preferred alternative design and configuration of the road as well as the increased traffic, RWDI examined data from a previous roadway modelling study. It was further determined that the train traffic on Stouffville GO corridor is not expected to be a source of air emissions that would affect background air quality in the vicinity of Edward Street in the future, as the Stouffville GO corridor is anticipated to be 100% electric by the year 2025.

The project is not expected to cause undesirable levels of air pollutants at any nearby sensitive/critical receptors, and no mitigation measures are recommended for the operational phase of the project. It is recommended that to minimize potential air quality impacts during construction, the construction tendering process should include requirements for implementation of an emissions management plan. Please refer to Appendix 'F' for a copy of this document.

5.4 Cultural Environment

5.4.1 Archaeological Resources

A Stage 1 property inspection was conducted on April 24, 2018 that noted the Study Area is located along Edward Street from Main Street to Millard Street in the historic centre of Stouffville. The Stage 1 background study determined that two previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection completed under the Stage 1 Assessment went beyond the road right of way which is why the results of the assessment determined that parts of the Study Area exhibit archaeological potential due to the proximity of heritage structures and would require Stage 2 archaeological assessment prior to any development.

As per Section 1.3.2 of the Standards and Guidelines for Consultant Archaeologists (MTCS, 2011), areas that have been subject to previous disturbance do not retain archaeological potential. The project study area is located within an urbanized environment and has clearly been subject to disturbance on prior occasions. The proposed reconstruction will be contained within the existing right-of-way. The Town of Whitchurch-Stouffville confirmed that their GIS data and capital reconstruction information provided the install date of the infrastructure on

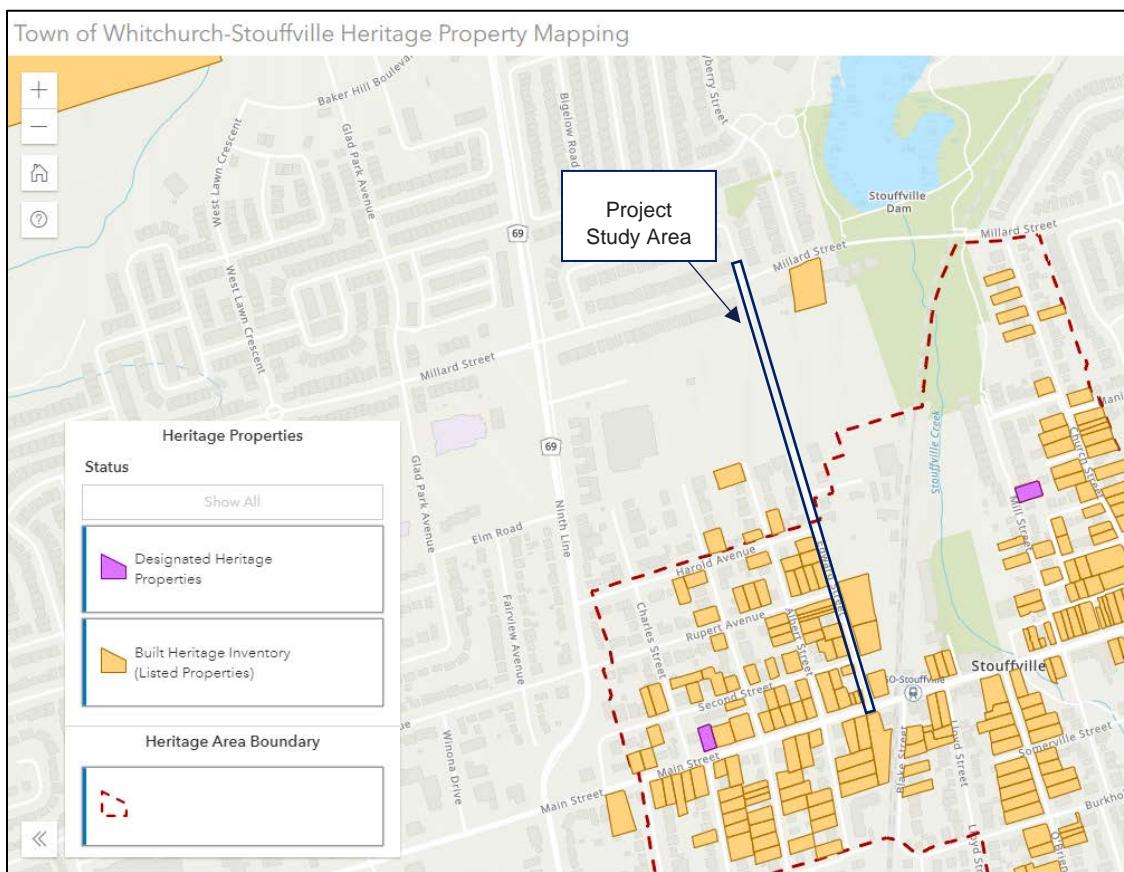
Edward Street subject to recent disturbance (i.e. after 1960). The disturbance was associated with the road in 1980 - 1981.

Should the proposed work extend beyond the current road right-of-way, a Stage 2 archaeological assessment will be conducted prior to any development. A copy of the Stage 1 Archaeological Assessment can be found in Appendix 'B'.

5.5 Built Heritage and Cultural Heritage Landscapes

The *Ministry of Heritage, Sport, Tourism and Cultural Criteria for Evaluating Potential for Built Heritage Resources and Cultural Landscapes Checklist* was completed for the Project study area. None of the properties along the project segment are listed under the *Ontario Heritage Act* however some may be older than 40 years. All work for this Project is remaining within the right of way and there is no work proposed to the actual structures or their property. The Town's Built Heritage Inventory, which identifies the historical features of each house on Edward Street and Main Street that represent cultural heritage features, was also reviewed for this Project. Although there are 13 listed heritage properties adjacent to the Project Study Area, there are no designated heritage properties within the study area, see Figure 13, a copy of the Checklist can be found in Appendix 'D'.

Figure 13: Built Heritage Inventory



6.0 PHASE 2 ALTERNATIVE SOLUTIONS

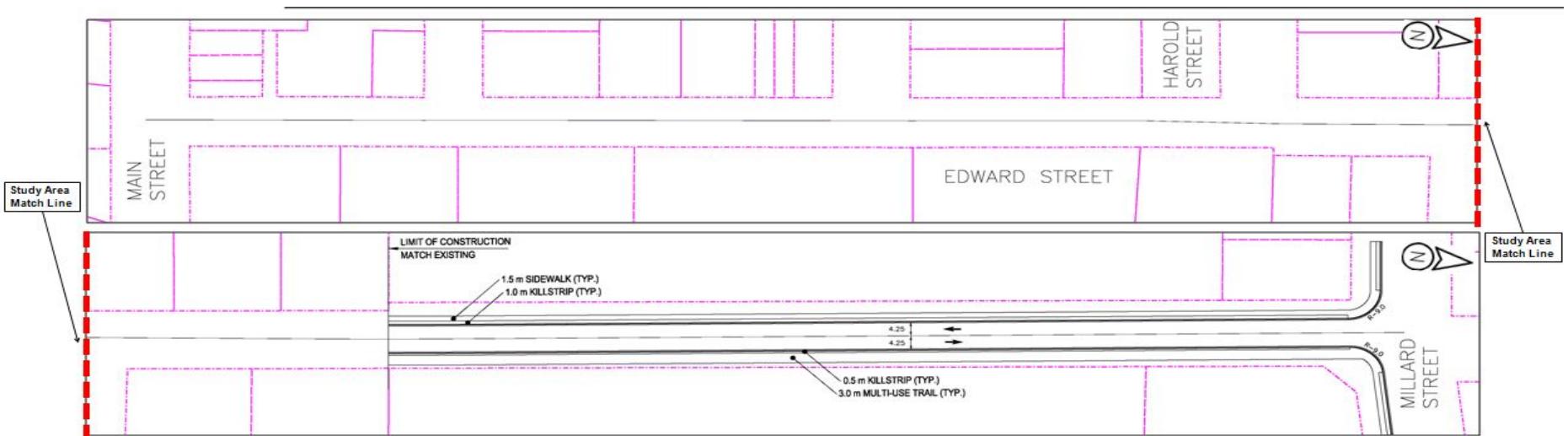
6.1 Description of Alternative Solutions

As part of Phase 2 of the Class EA process, a number of alternative solutions were developed to address the aforementioned deficiencies affecting Edward Street and were presented to the public at Public Information Centre (PIC) No. 1 on Thursday, May 3rd, 2018. The alternative solutions included the following:

- Alternative 1: The 'Do Nothing' alternative proposes no changes or modifications. The existing corridor would function 'as is' with no improvements.
- Alternative 2: As illustrated in Figure 14, this alternative proposes to extend Edward Street with an urban cross-section to Millard Street. This alternative provides for a 1.5 m wide sidewalk on the west side of the corridor and a 3.0 m wide multi-use path on the east side of the corridor from just south of the current termination point to Millard Street.
- Alternative 3: As illustrated in Figure 15, this alternate proposed the Reconstruction of Edward Street and extend to Millard Street with an urban cross-section. This would consist of two 4.25 m wide travel lanes and servicing improvements. There would be a 3.0 m wide multi-use path on the east side of the corridor for the entire project length and a 1.5 m wide sidewalk on the west side of the corridor for the entire project length.
- Alternative 4: As illustrated in Figure 16, this alternative proposes to reconstruct Edward Street from Harold Avenue and extend Edward Street to Millard Street as an urban cross-section. This would be developed as two 4.25 m wide travel lanes with servicing improvements. A 3.0m wide multi-use path would be on the east side of corridor from Harold Avenue to Millard Street and a 1.5m wide sidewalk would be on the west side of corridor from Harold Avenue to Millard Street.

Alternatives 2 to 4 also propose improvements to the water, sanitary and storm sewer as well as provisions for active transportation.

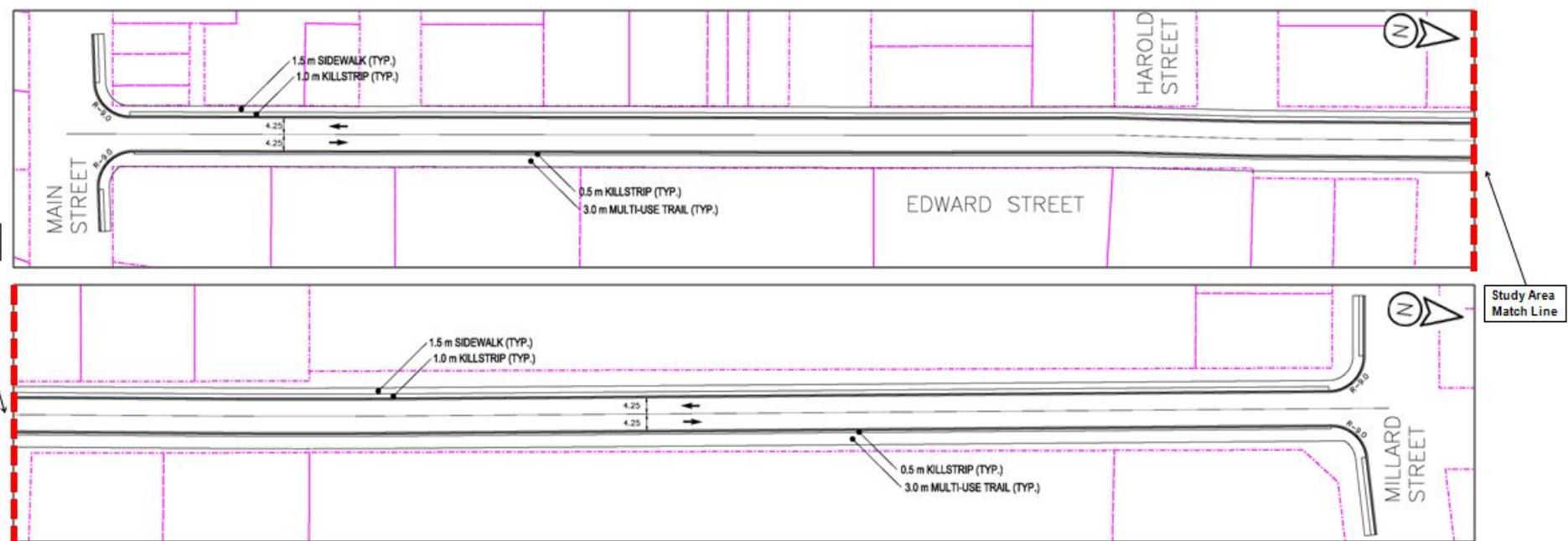
Figure 14: Alternative 2



Alternative 2 – Extend Edward Street to Millard Street (with the following urban cross-section):

- Two 4.25 m wide travel lanes
- 3.0 m wide multi-use path on the east side of corridor from south of current termination point to Millard Street
- 1.5 m wide sidewalk on the west side of corridor from south of current termination point to Millard Street
- Servicing Improvements

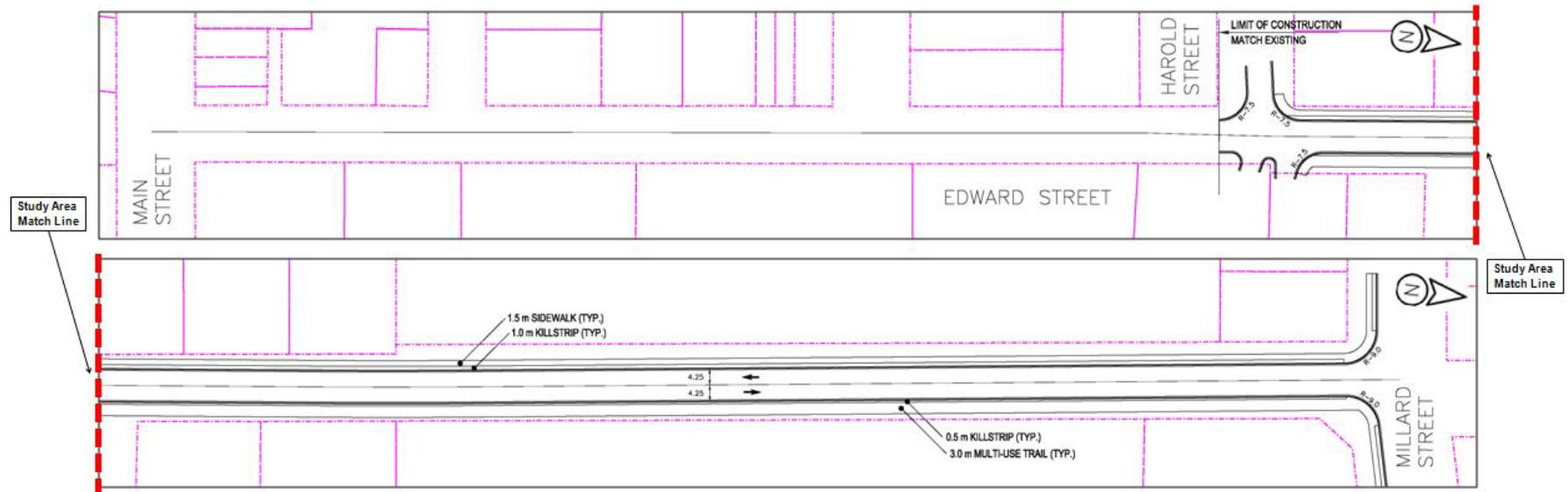
Figure 15: Alternative 3



Alternative 3 – Reconstruct Edward Street and Extend to Millard Street (with the following urban cross-section):

- Two 4.25 m wide travel lanes
- 3.0 m wide multi-use path on the east side of corridor for the entire project length
- 1.5 m wide sidewalk on the west side of corridor for the entire project length
- Servicing Improvements

Figure 16: Alternative 4



Alternative 4 – Reconstruct Edward Street from Harold Avenue & Extend Edward Street to Millard Street (with the following urban cross-section):

- Two 4.25 m wide travel lanes
- 3.0m wide multi-use path on the east side of corridor from Harold Avenue to Millard Street
- 1.5m wide sidewalk on the west side of corridor from Harold Avenue to Millard Street
- Servicing Improvements

6.2 Evaluation of Alternative Solutions

To assist in the selection of the preferred solution, an evaluation matrix was developed using criteria considered key to this project. The evaluation matrix provides a means of comparing the effects that each alternative will generate on the area environment (physical, natural, socio-economic, and cultural). Table 4 identifies the criteria used for this evaluation as presented at PIC No. 1.

Table 4: Phase 2 Evaluation Criteria

PHASE 2 EVALUATION CRITERIA	
Physical Environment	Cultural Environment
Future Traffic Capacity	Archaeological Resources
Pedestrians	Built Heritage & Cultural Heritage Landscapes
Cyclists	
Safety	
Municipal Services (sanitary, water, storm)	
Utilities	
Natural Environment	Economic Environment
Terrestrial Vegetation (including Species at Risk)	Property Acquisition Costs
Fisheries / Aquatic	Construction Costs
Vegetation	Operation/Maintenance Costs
Surface Water / Drainage	
Groundwater	
Social Environment	
Land Use Planning Objectives	
Tourism	
Aesthetics	
Residential	
Area Businesses	
Noise and Vibration	
Air Quality	

The matrix utilized to evaluate the alternative solutions as presented at PIC No. 1 is shown in Tables 5 and 6. The evaluation matrix used a simplified, visual comparison to illustrate the positive and negative impacts associated with each alternative. A small circle indicates that the proposed alternative creates a more negative impact and is therefore a least preferred option. Conversely, a large circle indicates a more positive impact and therefore a more preferred option. A square was used to demonstrate that an alternative would result in no impacts. A star was used to show that the problem would not be addressed. An alternative with an increased number of larger circles indicates that it is more preferable in that it addresses deficiencies, but minimizes negative impacts to the area environment.

a) Alternative 1:

The 'Do Nothing' alternative proposes no changes or modifications. With this alternative the existing corridor would function 'as is' with no improvements. While it may appear to be advantageous because it will not impact natural heritage features, cultural heritage resources or negatively impact residential / commercial land use it does not address key deficiencies that must be addressed nor will it improve safety or assist the Town in providing the necessary infrastructure improvements to accommodate growth and improve the downtown area. Since no improvements are proposed the corridor will deteriorate further over time and could negatively impact area aesthetics and incur increasing operating / maintenance costs. Since no construction is proposed with this alternative there are no construction costs.

b) Alternative 2:

This alternative proposes the inclusion of a 3.0 m wide multi-use trail, but for only select segments of the study area. It also proposes improvements to services, but are limited to select segments of the study area. Construction activities are anticipated to have minimal/moderate impact on existing utilities within the study area

c) Alternative 3:

This alternative proposes the inclusion of a 3.0 m wide multi-use trail along the east side of Edward Street from Main Street to Millard Street, the total length of the study area and it is anticipated to have the highest positive impact on active transportation. It also proposes improvements to municipal services throughout the total length of study area and is anticipated to have the greatest overall positive impact. Due to the length of construction activities, it is expected to have a moderate/high impact on existing utilities within the project study area and will have the highest construction related costs.

d) Alternative 4:

This alternative proposes improvements to services and the inclusion of a 3.0 m wide multi-use trail, but is limited to select segments of the study area. Construction activities are anticipated to have minimal/moderate impact on existing utilities within the study area.

Table 5: PIC 1 Evaluation Matrix Part A

EVALUATION CRITERIA	ALT 1 Do Nothing	ALT 2 Extend Edward St. to Millard St.	ALT 3 Reconstruct and extend to Millard St.	ALT 4 Reconstruct from Harold Ave. and extend to Millard St.	DESCRIPTION OF EFFECTS
TECHNICAL ENVIRONMENT					
Future Traffic Capacity Will the alternative address capacity requirements?	★	●	●	●	Alt 2-4 are all expected to equally address future traffic capacity requirements of the community until 2031.
Active Transportation Will the alternative provide for pedestrians and cyclists	★	●	●	●	Construction activities associated with Alt 3 propose the inclusion of a 3.0 m wide multi-use trail along the east side of Edward Street, the total length of the study area. Alt 3 is anticipated to have the highest positive impact on active transportation. Alt 2 & 4 also propose the inclusion of a 3.0 m wide multi-use trail, but for only select segments of the study area. Alt 1 does not provide for active transportation improvements within the study area.
Improved Connectivity Will the alternative provide for improved connectivity	★	●	●	●	The extension of Edward Street proposed as part of Alt 2-4, all provide improved vehicular connectivity within the community. Alt 1 does not improve connectivity within the community.
Municipal Services (sanitary, water, storm) Will the alternative accommodate servicing requirements.	□	●	●	●	Alt 2-4 all propose improvements to existing municipal services within the study area. Alt 3 proposes improvements to municipal services throughout the total length of study area and is anticipated to have the greatest overall positive impact. Alt 2 & 4 also propose improvements to services, but are limited to select segments of the study area. Alt 1 does not propose servicing improvements within the study area.
Utilities Will the alternative impact existing utilities (i.e. relocation)	□	●	●	●	No impacts to existing utilities are associated with Alt 1. Construction activities associated with Alt 2 & 4 are anticipated to have minimal/moderate impact on existing utilities within the study area. Due to the length of construction activities associated with Alt 3, it is expected to have a moderate/high impact on existing utilities within the project study area.
NATURAL ENVIRONMENT					
Terrestrial Wildlife (including Species at Risk) Potential to impact area wildlife and SAR	□	●	●	●	Temporary impacts during construction. Given the scope of work and species present, any impacts are anticipated to be minimal.
Fisheries / Aquatic Potential to impact fish habitat and aquatic features	□	□	□	□	No water courses are located within the study area. No direct impacts are anticipated.
Vegetation Potential to impact existing vegetation	□	●	●	●	Alt 2-4 are anticipated to have minimal impact on existing vegetation within the study area, given the scope of the work and species present.
Surface Water / Drainage Potential to impact surface water and area drainage	□	●	●	●	Construction activities associated with Alt 2-4 are anticipated to improve existing surface drainage within the study area. Alt 3 is anticipated to have the greatest overall positive impact on surface drainage.
Groundwater Potential to impact area groundwater resources	□	●	●	●	No direct impacts to groundwater is anticipated as part of all the proposed alternatives. During construction there is a potential for spills, but overall impacts are expected to be low. Standard mitigation measures can also be utilized to minimize potential impacts.

Table 6: PIC 1 Evaluation Matrix Part B

EVALUATION CRITERIA	ALT 1 Do Nothing	ALT 2 Extend Edward St. to Millard St.	ALT 3 Reconstruct and extend to Millard St.	ALT 4 Reconstruct from Harold Ave. and extend to Millard St.	DESCRIPTION OF EFFECTS
SOCIAL ENVIRONMENT					
Residential / Business Impacts The potential to impact adjacent properties and access	<input type="checkbox"/>				There will be temporary impacts during the construction period relating to property access; however, measures can be implemented to minimize impacts. The potential for impact is expected to be similar for all alternatives. However, due to the scope of Alt 3, it is expected to have a slightly greater impact. The extension of Edward Street as proposed under Alt 2-4 will improve accessibility to Main Street and area businesses.
Noise and Vibration Will the alternative impact noise levels during construction and the long term	<input type="checkbox"/>				No noise or vibration related impacts are anticipated as part of Alt 1. Alt 2-4 are anticipated to produce a similar level of moderate noise related impacts, however any impacts would be temporary in nature and limited to the period of construction. This to be confirmed through the completion of a Noise & Air Assessment study currently being undertaken as part of the study.
Air Quality Will the alternative impact air quality	<input type="checkbox"/>				At this time no significant impact to existing air quality within the study area is anticipated as a part of any of the proposed alternatives. This to be confirmed through the completion of a Noise & Air Assessment study currently being undertaken as part of the study.
Climate Change How does climate change impact the Project? How does the Project impact Climate Change	<input type="checkbox"/>				Alt 2-4 are expected to have a similarly low potential to impact climate change. While the improvements proposed will address capacity and connectivity deficiencies, the increase in vehicle emissions is not expected to be significant or result in substantial increases in green house gases over existing conditions. Alt 2-4 also support the inclusion of a 3.0 m wide multi-use trail, promoting active transportation within the community.
CULTURAL ENVIRONMENT					
Archaeological Will the alternative impact area archaeological resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All proposed construction activities associated with Alt 2-4 are to take place within the existing road right-of-way an area previously disturbed by development. Alt 2-4 are anticipated to have a low potential to impact archaeological resources within the study area. This to be confirmed through the completion of a Stage 1 Archaeological Assessment currently being undertaken as part of the study.
Built Heritage & Cultural Heritage Landscapes Will the alternative impact area built heritage resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Based upon the scope of proposed construction activities associated with Alt 2-4, no impacts to existing structures located immediately adjacent to the study area are anticipated. No direct impacts to existing built heritage resources are anticipated.
ECONOMIC ENVIRONMENT					
Property Acquisition Costs Will the alternative require property acquisition	<input type="checkbox"/>				At this time no property requirements have been identified for any of the proposed alternatives.
Construction Costs Will the alternative be expensive to construct	<input type="checkbox"/>				Due to the scope of the construction activities associated with Alt 3, it is anticipated to have the highest construction related costs. Alt 4 followed by Alt 2 are anticipated to have the next highest costs associated with their respective construction activities. No construction costs are associated with Alt 1.
Operating & Maintenance Costs Will the alternative be expensive to maintain					Alt 2-4 are anticipated to have a similar level of operating and maintenance costs.

6.3 Phase 2 Input Received

This section provides a brief summary of comments received following PIC No. 1 as it pertains to the evaluation of the alternatives and in selection of the Preferred Solution. For a more complete summary of the consultation program completed for this project and additional details pertaining to comments received, please refer to Section 9.0.

There were a number of comments received in support of Alternative 3 given that it proposes the extension of Edward Street. However, there were also comments received from area residents who did not see the need to extend Edward Street since it will create a through road for heavy trucks. Below is a brief summary of the key concerns raised by the public following PIC No. 1:

- Increase Traffic Volumes & Vehicular Movements: Comments were raised with concern that an increase in traffic volumes could impact the quiet residential character of the existing neighborhood and increase potential noise and pedestrian conflicts.
- Existing Condition of Edward Street & Motorist Behaviour: Many comments related to the behaviour of current motorists was also flagged as a common concern, with many residents indicating that they presently witness drivers habitually disobeying stop signs and speed limits to and from the existing GO Station parking area.
- Intersection Improvements: Several commenter's inquired as to the type of intersection improvements being proposed at both the Main Street & Edward Street and Millard Street & Bramble Crescent intersection(s), should Edward Street be extended.
- Noise Impact: Local residents were concerned with the increase in noise level with and adjacent to the study area.
- Improvements for Pedestrian Safety/Movement: A Comment related to the potential for impacts to pedestrian safety/movements along Edward Street as well as to the adjacent Stouffville Arena and vacant York Region District School Board (YRDSB) lands.
- Timing of Work and Anticipated Costs: Comments received related to the anticipated timeline of the proposed construction activities and the associated costs.

6.4 Selection of the Preferred Solution

Following PIC No. 1, a presentation to Council was completed and in reviewing the comments received, it was determined that Alternative 3 was the most viable option moving forward. The Preferred Solution involves the reconstruction of Edward Street and extends to Millard Street with an urban cross-section consisting of active transportation and servicing improvements.

7.0 PHASE 3 DESIGN OPTIONS

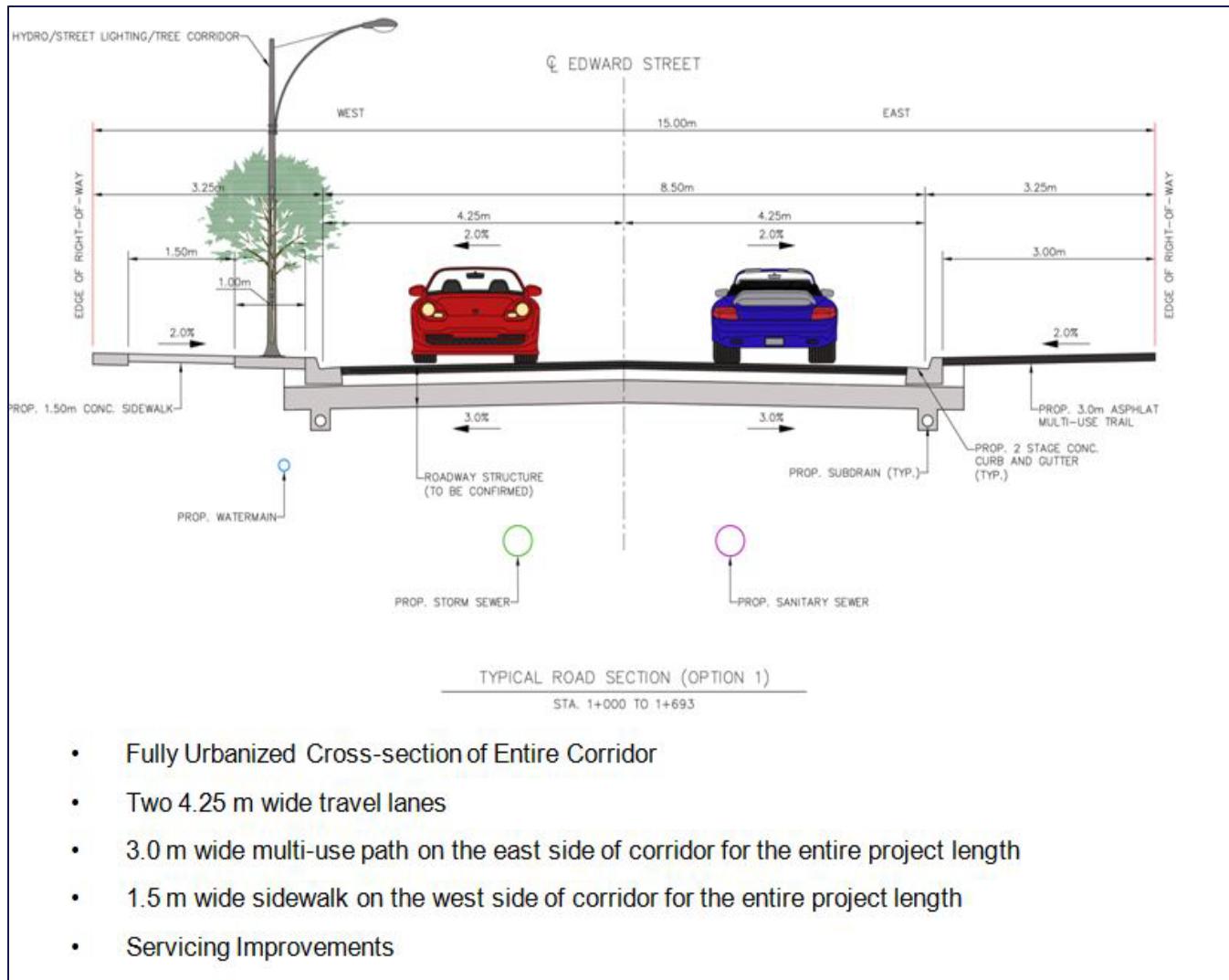
7.1 Description of Design Options

As part of Phase 3 of the Class EA process two design options were developed to implement the Preferred Solution selected at the close of Phase 2 (i.e. reconstruct Edward Street and extend to Millard Street). Two design variations were presented to the public at PIC No. 2 on November 25th, 2019. The key difference included is a shared lane on the road.

7.1.1 Design Option 1

Figure 17 illustrates the typical section for reconstruction of Edward Street and extend to Millard Street. This option proposes lane widths that are 4.25 m and includes a 1.5 m wide sidewalk and a 3.0 m wide multi-use path.

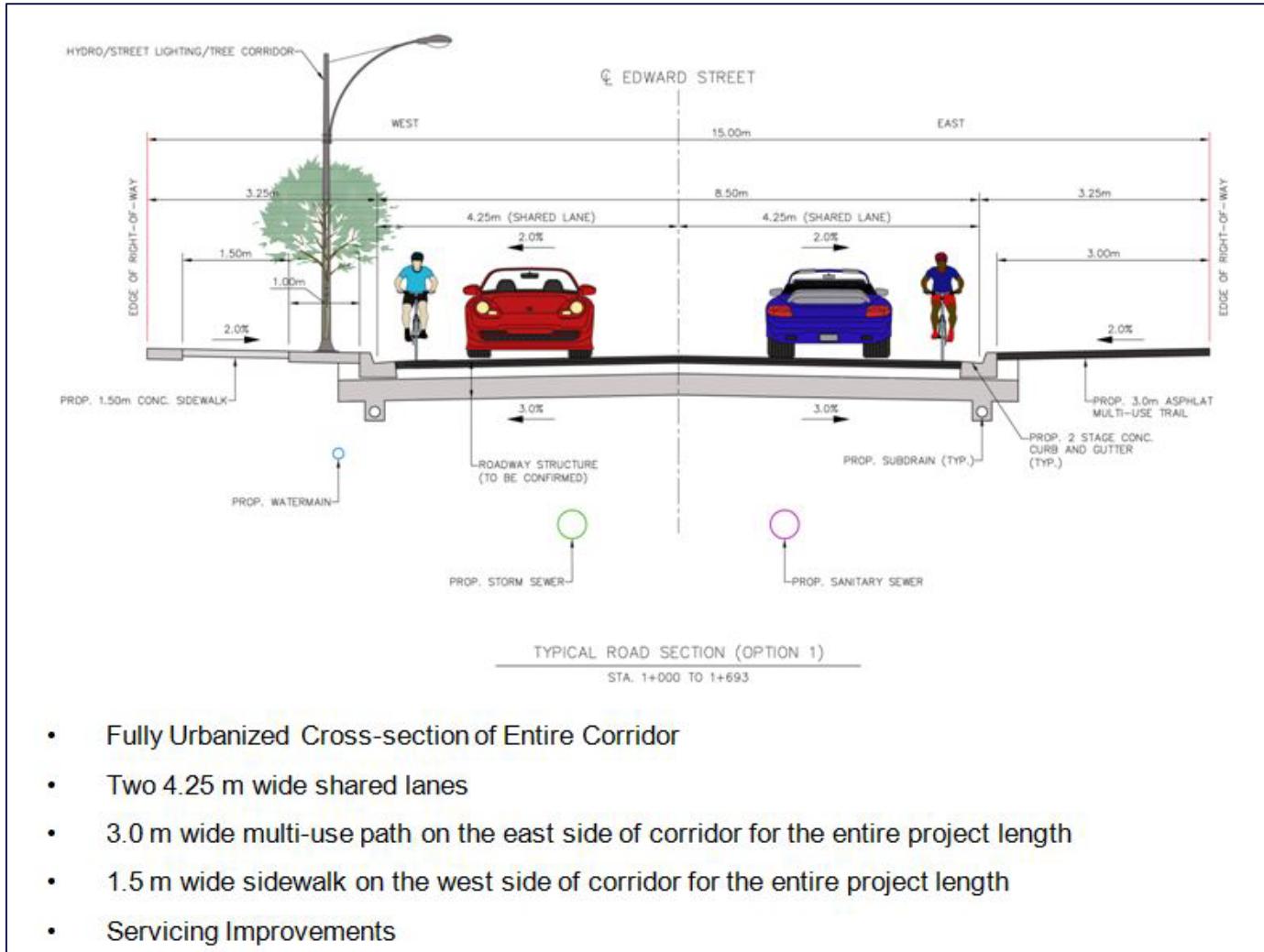
Figure 17: Design Option 1



7.1.2 Design Option 2

Figure 18 shows Design Option 2 proposes the reconstruction of Edward Street and extend to Millard Street with two 4.25 m wide shared lanes. A 3.0 m wide multi-use path on the east side of the corridor for the entire project length along with a 1.5 m wide sidewalk on the west side for the entire corridor. This would incorporate servicing improvements as well.

Figure 18: Design Option 2



7.2 Public Information Centre No. 2 Evaluation of Design Options

To assist in the selection of the Preferred Design during Phase 3 of the Class EA process the aforementioned design options were evaluated to assess their potential to impact the area environment (physical, natural, social, cultural and economic) so as to obtain an understanding of the advantages and disadvantages associated with each option. An evaluation matrix was

developed to compare each alternative using criteria considered relevant to the project. The evaluation criteria were updated slightly from that used in the Phase 2 evaluation.

Similar to the Phase 2 evaluation a visual comparison was used to illustrate the positive and negative impacts associated with each alternative as illustrated in Tables 7 and 8. A small circle indicates that an alternative will create a negative impact and is therefore a least preferred option. Conversely, a large circle indicates a positive effect and is therefore a more preferred option. A square was used to demonstrate that there would be no impact from an alternative. An alternative with an increased number of large circles indicates a more preferable alternative that addresses deficiencies, but minimizes negative impacts.

As illustrated in Table 7 both design options will equally address future traffic capacity requirements provide for pedestrians and accommodate servicing requirements. While both options will provide improvements to safety with the added active transportation, Option 2 scored slightly higher in this regard since this option has the ability to have shared lanes along the entire project corridor.

With regard to the natural environment, the study area is urbanized with limited vegetation and wildlife with no watercourses in proximity. Both alternatives are expected to have a similar potential to impact the natural environment as illustrated in Table 8. Option 2 is anticipated to have a higher potential to not impact climate change as it does have the shared lane.

As illustrated in Table 8, both options will have a similar positive impact on land use planning objectives and tourism and a similar moderate potential to impact area residents and businesses during the construction period. Noise and air quality impacts are not expected to be significant with either option.

Neither Design Option is expected to significantly impact the cultural environment given that work is to be confined to the existing right-of-way.

Since no property acquisition are required to accommodate either option there will be no costs in this regard.

Table 7: PIC 2 Evaluation Matrix Part A

EVALUATION CRITERIA	Design Option 1	Design Option 2	DESCRIPTION OF EFFECTS
TECHNICAL ENVIRONMENT			
Future Traffic Capacity Will the alternative address capacity requirements?			Design 1 and 2 are expected to equally address future traffic capacity requirements of the community until 2031.
Active Transportation Will the alternative provide for pedestrians and cyclists			The proposed 3.0 m wide multi-use trail along the east side of Edward Street, the total length of the study area is anticipated to have the highest positive impact on active transportation. Design Option 2 has a shared road width that allows cyclists to travel along with vehicles.
Improved Connectivity Will the alternative provide for improved connectivity			Both options provide improved vehicular connectivity within the community.
Municipal Services (sanitary, water, storm) Will the alternative accommodate servicing requirements.			Both options propose improvements to municipal services throughout the total length of study area.
Utilities Will the alternative impact existing utilities (i.e. relocation)			Both option are anticipated to have moderate/high impact on existing utilities within the project study area due to the length of the study area.
NATURAL ENVIRONMENT			
Terrestrial Wildlife (including Species at Risk) Potential to impact area wildlife and SAR			Temporary impacts during construction. Given the scope of work and species present, any impacts are anticipated to be minimal.
Fisheries / Aquatic Potential to impact fish habitat and aquatic features			No water courses are located within the study area. No direct impacts are anticipated.
Vegetation Potential to impact existing vegetation			Both Designs are anticipated to have minimal impact on existing vegetation within the study area, give the scope of the work and species present.
Surface Water / Drainage Potential to impact surface water and area drainage			Construction activities will have a positive impact on improving surface drainage.
Groundwater Potential to impact area groundwater resources			No direct impacts to groundwater is anticipated as part of all the proposed alternatives. During construction there is a potential for spills, but overall impacts are expected to be low. Standard mitigation measures can also be utilized to minimize potential impacts.

Table 8: PIC 2 Evaluation Matrix Part B

EVALUATION CRITERIA	Design Option 1	Design Option 2	DESCRIPTION OF EFFECTS
SOCIAL ENVIRONMENT			
Residential / Business Impacts The potential to impact adjacent properties and access			There will be temporary impacts during the construction period relating to property access; however, measures can be implemented to minimize impacts. The extension of Edward Street as proposed will improve accessibility to Main Street and area businesses.
Noise and Vibration Will the alternative impact noise levels during construction and the long term			Any impacts would be temporary in nature and limited to the period of construction. The operational noise impact does not require any mitigation measures
Air Quality Will the alternative impact air quality			Construction activities are expected to be temporary in nature, and can be mitigated through implementation of an emissions management plan. During the operation phase of the project, vehicle emissions on the proposed roadway are not expected to cause undesirable cumulative air pollutants levels.
Climate Change How does climate change impact the Project? How does the Project impact Climate Change			While the improvements proposed will address capacity and connectivity deficiencies, the increase in vehicle emissions is not expected to be significant or result in substantial increases in green house gases over existing conditions. Both designs support the inclusion of a 3.0 m wide multi-use trail, promoting active transportation within the community. Design Option 2 allows for a Shared lane which will also promote active transportation.
CULTURAL ENVIRONMENT			
Archaeological Will the alternative impact area archaeological resources			All construction activities are to take place within the existing road right-of-way, an area previously distributed by development. There is low potential to impact archaeological resources within the study area. The Stage 1 Archaeological Assessment identified areas that would require additional analyses if they were to be disturbed, however the Project will not interfere with these areas at this time.
Built Heritage & Cultural Heritage Landscapes Will the alternative impact area built heritage resources			No impacts to existing structures located immediately adjacent to the study area are anticipated. No direct impacts to existing built heritage resources are anticipated.
ECONOMIC ENVIRONMENT			
Property Acquisition Costs Will the alternative require property acquisition			No property requirements have been identified for the preferred alternative, however this will be confirmed during the detailed design process
Construction Costs Will the alternative be expensive to construct			Due to the scope of the construction activities associated with the preferred alternative, it is anticipated to have the highest construction related costs.
Operating & Maintenance Costs Will the alternative be expensive to maintain			Both designs are anticipated to have a similar level of operating and maintenance costs.

7.2.1 Phase 3 Public Information Centre No. 2 Input Received

This section provides a brief summary of comments received following PIC No. 2 as it pertains to the evaluation of the alternatives and in selection of the Preferred Design. For a more complete summary of the consultation program completed for this project and additional details pertaining to comments received, please refer to Section 9.0. Comments received following PIC No. 2 focused on following key items:

- Pedestrian Safety: Some residents felt that there should be a pedestrian crossing between the Recreation Centre and the school board soccer fields.
- Traffic Management: Respondents expressed concern that traffic from the GO Station current speed through the residential area west of Edward Street and do not stop at the current stop signs.
- Traffic Signals: Some felt that there should be lights at Edward Street and Main Street.
- Business Impacts: The potential for construction to impact area businesses and the need to maintain traffic during the construction period.
- Consultation: Residents were appreciative of the Town's efforts to provide a thorough response to comments.
- Drainage: A comment was received pertaining to area drainage and the potential for flooding.

The project team gave consideration to the above comments and re-visited certain aspects of design to determine if improvements could be made and / or if site specific mitigation was warranted to address other issues.

7.3 Selection of the Preferred Design

Following the completion of Public Information Centre No. 2 (November 25, 2019) and the receipt of input from interested parties, the Town of Whitchurch-Stouffville selected Design Option 2 as the Preferred Design for the following reason:

- Proposes additional active transportation with the shared lanes. Active Transportation is very important in the Project area as this will allow more viable ways for the public to access the GO station and to have a link to the downtown core of Stouffville.

8.0 DETAILS OF THE RECOMMENDED PLAN

This section provides additional details regarding the Preferred Design Option 2 which is the Town's Recommended Plan for moving forward to address the deficiencies affecting Edward Street. Copies of the preliminary drawings are included in Appendix 'H'.

8.1.1 Road Cross-section

The reconstruction of Edward Street and extend to Millard Street with two 4.25 m wide shared lanes. A 3.0 m wide multi-use path on the east side of the corridor for the entire project length along with a 1.5 m wide sidewalk on the west side for the entire corridor. This would incorporate servicing improvements as well. The final design will be detailed during detailed design.

8.1.2 Landscaping Elements

Landscaping elements will include concrete sidewalks, streetlight fixtures and the planting of street trees where the boulevard width permits. The exact specification will be confirmed during detailed design. Landscaping improvements will include the following:

- **Concrete Sidewalks:** Sidewalks will be constructed with concrete. This type of construction material is not subject to the differential movement that affects interlocking concrete paving stones and concrete sidewalks are compliant with Accessibility for Ontarians with Disabilities Act, 2005 (AODA) standards.
- **Streetlights:** Streetlight fixtures will be implemented on Edward Street. Selection of the actual make and model of the streetlight itself will be completed during detailed design.
- **Street Trees:** Trees will be implemented along Edward Street where the boulevard permits. Selection of location and type of tree will be completed during the detailed design phase.

8.1.3 Intersection Improvements

As per the recommendations of the Traffic Analysis (Ainley Group, 2018) modifications will be required in the future for Edward Street and Main Street (2021) and Edward Street and Millard Street (2031). Traffic monitoring will be required to determine if the installation of signals or other improvements are warranted.

8.1.4 Traffic Safety

The implementation of traffic calming measures will be further explored during the detailed design phase.

8.1.5 Stormwater Management

Edward Street will be reconstructed with an urbanized cross-section with curb and gutter and storm sewer. Aging stormwater infrastructure will be replaced to meet the requirement of post construction hydrologic flows and hydraulic capacity based on current agency and town design standards and guidelines, and stormwater management policies. The stormwater management for this project will need to address both quality and quantity control. Proposed storm sewer will range between 300 mm to 600 mm in diameter.

a) Water Quality

Storm water currently flows toward Main Street where it is diverted into the Main Street storm sewer. From there it would follow the Town's sewers to an outlet. Water quality can be improved through the use of Low Impact Development (LID) features. This project does not intend to have any issues with water quality. To determine what type of LID features may be applicable, the detailed design phase will explore pending on the further geotechnical investigation.

b) Water Quantity

Given the established urban cross section along Edward Street, the existing hydrologic conditions (impervious pavement areas) are not expected to change significantly under post construction. Opportunities to increase pervious surface areas will be investigated, such as increased green space in the boulevard. As such, no water quantity increase is anticipated and no water quantity control will be required.

c) Low Impact Development Measures

The traditional strategy of managing stormwater is to collect and convey runoff via storm sewer infrastructure to a centralized facility (i.e. pond) where it is stored and treated before discharging to a water body. The implementation of Low Impact Development (LID) features is a more modern approach to stormwater management that attempts to manage runoff at the source instead of conveying it to an alternate location as is traditionally done. It employs various methods of design to minimize the amount of runoff and to simulate natural hydrologic processes to allow runoff to infiltrate, filter, store, evaporate, and be detained at the lot level. It assists in removing contaminants from the runoff and also in reducing the volume and intensity of flows from runoff.

This Class EA recommends that detailed design give consideration to Low Impact Development (LID) measures and that these be included, where feasible. These measures can be used to treat and reduce road right-of-way runoff from storm events and increase infiltration to assist in meeting water quality and water quantity requirements. Some examples of LID measures include the following:

- Subsurface infiltration enhancements
- Water quality control of runoff from paved surfaces through a treatment train approach, using catch-basin inserts at curb & gutter prior to directing runoff to underground detention chambers/pipes to encourage particle settlement, followed by end-of-pipe Oil Grit Separator (OGS) devices prior to discharging to suitable outlets. The catch basins would also include sumps and catch basin shields to collect sediment and debris.

Typically for urban cross-sections, the preferred retrofit configuration would include LID measures such as compact bio-retention planters, and perforated pipe systems, where space is insufficient for bio-retention/bioswale systems. However, given the high-density downtown core nature of Edward Street, LID measures are most likely not feasible due to limited surface space and potential utility conflicts based on the primarily commercial land use. Further review will be required during detailed design.

8.1.6 Utility Relocations

Further coordination with Hydro One, Enbridge Gas, and Rogers will be carried out during the detailed design phase regarding minor relocation requirements.

8.1.7 Servicing Improvements

Existing storm sewer and sanitary sewer servicing infrastructure will be removed and replaced. There will be new infrastructure required from the current termination point on Edward Street up to Millard Street. The exact sizing of pipe and location will be determined during detailed design.

There is an existing watermain that runs along the current Edward Street corridor. This watermain will need to be fully reviewed during detailed design.

8.1.8 Property Acquisition / Easements

Construction can be contained within the existing right-of-way. Property acquisition is not required to accommodate construction.

8.1.9 Traffic Management

During construction, interruptions to through traffic will be minimized where feasible. Property access during construction will be maintained except for short durations where construction is taking place in front of entrance. Consultation with Metrolinx will be required for the GO Station. This will be completed during detailed design.

8.1.10 Preliminary Construction Cost Estimate

The preliminary construction cost estimate for the reconstruction and extension of Edward Street is estimated to be approximately \$ 3.4 M. A detailed estimate will be completed during the detail design phase. A high-level cost breakdown is provided in Figure 19.

Figure 19: Construction Cost Estimate

<u>CONSTRUCTION COST ESTIMATE</u>		
Edward Street from Main Street to Millard Street		
Section	Component	Cost Estimate
A	Removals	\$ 154,500.00
B	Roadworks	\$ 1,038,925.00
C	Waterworks	\$ 25,000.00
D	Sanitary Sewage Works	\$ 25,000.00
E	Storm Sewer Works	\$ 409,150.00
F	Streetlighting	\$ 250,000.00
H	Utility Relocation (Town's 50% Share)	\$ 500,000.00
	Sub-Total	\$ 2,402,575.00
	Detail Design (7.5%)	\$ 180,193.13
	Construction Administration (7.5%)	\$ 180,193.13
	Total	\$ 2,762,961.25
	Contingency including Town's Administration Cost (25%)	\$ 690,740.31
	Total (Excl. HST)	\$ 3,453,701.56

8.1.11 Next Steps

It is anticipated that detailed design will commence in late spring or summer of 2021 depending on the additional items that have to be included in the Request for Proposal (RFP) scope. Once the consultant is under contract, the construction timeline will be determined. In the RFP a comprehensive Preliminary Design Report, Drainage Study and additional hydrogeological investigations (including groundwater monitoring) will be included. There will be opportunity for public consultation early in the preliminary design process.

9.0 CONSULTATION

9.1 Points of Contact

As per Section A.3.5.3 of the Municipal Class EA, a minimum of three points of contact are required for a Schedule 'C' project. For this undertaking three points of contact were completed as follows:

- Contact Point No. 1 - Notice of Commencement
- Contact Point No. 2 - Notice of Public Information Centre No. 1

- Contact Point No. 3 - Notice of Public Information Centre No. 2
- Contact Point No. 4 - Notice of Completion

During each point of contact notification was provided to the public, relevant agencies and Indigenous communities as summarized in Table 9.

Table 9: Key Consultation Points

Contact Point	Notification Issued
Notice of Commencement	<ul style="list-style-type: none"> ▪ The purpose of this notice was to introduce the project, provide background information on the improvements required, identify the Class EA process, and define the project study area and to advise of the scheduling of a Public Information Centre. ▪ Notice published in the local newspaper <i>On the Road</i> in the January 2018 and February 2018 addition. ▪ Notice posted on the Town of Whitchurch-Stouffville's website. ▪ Copy of notice was mailed to area residents within the notification area on January 15th, 2018 by the Town of Whitchurch-Stouffville. ▪ A letter and copy of the notice were issued by the Ainley Group on February 2nd, 2018 to relevant agencies and Indigenous communities. ▪ A copy of all correspondence is included in Appendix 'I' of this report.
Notice of Public Information Centre No. 1	<ul style="list-style-type: none"> ▪ The purpose of this notice was to provide background information on the improvements required, define the project study area and to provide the Alternative Solution ▪ Public Information Centre No. 1 was held Thursday May 3rd, 2018 at the Stouffville Area located at 12483 Ninth Line, Stouffville, ON ▪ Notice published in the local newspaper <i>On The Road</i> ▪ Notice posted on the Town of Whitchurch-Stouffville's website. ▪ Copy of notice was mailed to area residents within the notification area on April 16th, 2018 by the Town of Whitchurch-Stouffville. ▪ A letter and copy of the notice were issued by the Ainley Group on April 16th, 2019 to relevant agencies and Indigenous communities. ▪ A copy of all correspondence is included in Appendix 'J' of this report.

Contact Point	Notification Issued
Notice of Public Information Centre No. 2	<ul style="list-style-type: none"> ▪ This notice identified the Preferred Solution that was selected following PIC No. 1 and advised of the scheduling of a second Public Information Centre to present the alternative design concepts under consideration to implement the Preferred Solution. ▪ Public Information Centre No. 2 was held Monday November 25th, 2018 at the Stouffville Sports Complex from 6:00 p.m. to 8:00 p.m. in the Multipurpose Room I. ▪ Notice published in the local newspaper The Sun Tribune in the November 14th, 2018 and November 21st, 2019 editions. ▪ Notice posted on the Town of Whitchurch-Stouffville's website. ▪ Copy of notice was mailed to area residents within the notification area on November 14th, 2019 by the Town of Whitchurch-Stouffville. ▪ A letter and copy of the notice were issued by the Ainley Group on November 14th, 2019 to relevant agencies and Indigenous communities by the Ainley Group. ▪ A copy of all correspondence is included in Appendix 'K' of this report.
Notice of Completion	<ul style="list-style-type: none"> ▪ This notice announced the completion of the Class EA process and identified the locations available to review the Environmental Study Report. ▪ The notice also provided direction for the submission of a Part II Order request. ▪ Notice published in the local newspaper <i>The Sun Tribune</i> on November 26, 2020 and December 3, 2020. ▪ Notice posted on the Town of Whitchurch-Stouffville website. ▪ Copy of notice was mailed to area residents within the notification area on November 23, 2020 by the Town of Whitchurch-Stouffville. ▪ A letter and copy of the notice were issued by the Ainley Group on November 23, 2020 to relevant agencies and Indigenous communities. ▪ A copy of all correspondence is included in Appendix 'L' of this report.

9.2 Consultation Contact List

At the start of the project a consultation contact list was developed by identifying stakeholders. A review of associated government agencies, special community groups, adjacent land owners, and Indigenous communities was completed.

The Ministry of Environment, Conservation and Parks (MECP) was contacted to confirm which Indigenous communities should be contacted as part of this project as per the current protocol. In accordance with the MECP direction the following communities were consulted as part of this process:

- Hiawatha First Nation
- Alderville First Nation
- Curve Lake First Nation

- Mississauga of Scugog First Nation
- With a copy to Karry Sandy-McKenzie, Williams Treaty Claims Coordinator

A complete list of the Agencies and Indigenous Communities included in the contact list is provided in Table 10.

Table 10: External Agency and Indigenous Community List of Contacts

Government Agencies	Local Government and Other Agencies	Utilities	Indigenous Communities
<ul style="list-style-type: none"> ▪ Environment Canada ▪ Ministry of Environment, Conservation and Parks, Central Region ▪ Ministry of Environment, Conservation and Parks, York-Durham District Office ▪ Ministry of Tourism, Culture & Sport ▪ Ministry of Natural Resources & Forestry ▪ Metrolinx ▪ Ministry of Municipal Affairs and Housing ▪ Ministry of Indigenous Relations & Reconciliation ▪ Infrastructure Ontario 	<ul style="list-style-type: none"> ▪ Toronto Region Conservation Authority ▪ York Region ▪ York Catholic District School Board ▪ York Region District School Board ▪ Student Transportation Services ▪ York Region EMS ▪ York Region Police ▪ Town of Whitchurch-Stouffville, Fire Department ▪ Chamber of Commerce ▪ Downtown Stouffville Working Group ▪ Whitchurch Stouffville Soccer club ▪ Field Gate Developments 	<ul style="list-style-type: none"> ▪ Union Gas ▪ Rogers Communications Inc. ▪ Bell Canada ▪ Hydro One 	<ul style="list-style-type: none"> ▪ Hiawatha First Nation ▪ Alderville First Nation ▪ Curve Lake First Nation ▪ Mississauga of Scugog First Nation ▪ With a copy to Karry Sandy-McKenzie, Williams Treaty Claims Coordinator

The public mailing list was provided by the municipality and derived from the Municipal Property Assessment Corporation (MPAC) data extracted from the Municipality's Geographical Information System database. As indicated, two public meetings were hosted by the Town during the course of this Class EA.

9.3 Notice of Study Commencement / Public Information Centre No. 1

This notice was issued early in the process in January 2018 all agency, Indigenous and public members on the contact list. The notice was intended to introduce the project, specify the Class EA Schedule, identify the problem / opportunity and define the project study area. The notice also advised of the scheduling of a Public Information Centre in the future. Public input was encouraged and direction was provided for the submission of comments.

All notification issued to Indigenous agencies and communities were sent by registered mail so as to confirm receipt. There were no comments received during the Notice of Commencement/PIC NO.1 from Indigenous Communities.

During Phase 2 of the Class EA process, an informal drop-in style Public Information Centre (PIC) was held Thursday May 3rd, 2018 at the Stouffville Area from 6:30 p.m. to 8:30 p.m. to provide details regarding the project. A total of 22 exhibits were displayed that provided information pertaining to the Class EA process, project background, the problem / opportunity, the alternative solutions under consideration and the evaluation completed. Plan view drawings of each alternative were also displayed on tables. Comment sheets were made available at the PIC and the public was advised that the PIC material was available on the Town's website. The following members of the Project Team were in attendance and available to answer questions:

Tim Hayward	Town of Whitchurch-Stouffville
Nick Ainley	Ainley Group, Environmental Planner

A total of 28 people signed in; however, it is assumed that some attendees did not sign-in. Attendees included property owners in the area of the project.

A copy of the PIC exhibits, the public comments submitted during this period and the municipal responses are included in Appendix 'I' and 'J' of this report.

Following the completion of PIC No. 1 and a review of all comments received, a staff report regarding the project was submitted for consideration at the February 19th, 2019 Council Committee meeting. The report summarized the alternative solutions under consideration, the advantages and disadvantages of the alternatives, and also identified a recommended Preferred Solution. Town Council reviewed the material and selected a Preferred Solution that included reconstructing Edward Street and extending to Millard Street.

Given the number of public comments submitted the project team prepared an itemized summary in letter format that identified comments (excluding personal information) and the associated municipal response. As some comments were the same, they were paraphrased to include key points and then grouped by topic.

Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response. The letter

identified that a second Public Information Centre will be planned and notification would be given via a separate letter.

Table 11 provides the summary all comments received throughout the points of consultation during this Class EA. Please note that the contact information column has been removed under the category of 'Public Comments'

9.4 Public Information Centre No. 2

The municipality hosted a second Public Information Centre on Monday November 25th, 2019 at the Stouffville Clippers Sports Complex from 6:00 p.m. to 8:00 p.m. using the same informal, drop-in style format as the first PIC. While the twenty exhibits presented similar background information as shown at PIC No. 1, the focus of the meeting was on the selection of the Preferred Solution and the presentation and evaluation of the design options developed to implement the Preferred Solution. Plan view drawings of the project corridor were also displayed on a table in the center of the room. Comment sheets were made available at the PIC and the public was advised that the PIC material was available on the Town's website. The following members of the Project Team were in attendance and available to answer questions:

Tim Hayward	Town of Whitchurch-Stouffville, Policy Planner II
Meaghan Craven	Town of Whitchurch-Stouffville, Manager, Planning Policy
Nimit Mittal	Ainley Group, Project Manager
Jodi Moore	Ainley Group, Environmental Planner

The meeting was well attended with a total of 15 people signing-in. Attendees included property owners in the area of the project and City staff.

There were a few public comments that were submitted following PIC No. 2. Similar to PIC No. 1 all comments received were summarized in a letter format and categorized by topic. As some comments were similar they were paraphrased to include key points.

Following the completion of PIC No. 2 and a review of all comments received, staff prepared a January 2020 Council Information Package Memo. The memo provided an update on the project and identified the Preferred Design.

Following PIC NO.2 comments were received through email and the Town's internal website. The Town had provided an opportunity for the Public to respond. Responses were issued by e-mail that included the original email summarizing the comment(s) received and the associated municipal response.

A copy of the PIC No. 2 exhibits, the public comments submitted during this period and the municipal responses are included in Appendix 'K' of this report.

Two comments were received after PIC No.2 from the Curve Lake First Nations and Alderville First Nations. At the present time, there remain no outstanding Indigenous issues or concerns relating to this project. All items are considered to be addressed.

Table 11 provides the summary all comments received throughout the points of consultation during this Class EA. Please note that the contact information column has been removed under the category of 'Public Comments'.

Table 11: Summary of Comments Received

No.	RESPONDENT INFORMATION	COMMENTS RECEIVED	RESPONSE PROVIDED
AGENCY COMMENTS			
NOTICE OF COMMENCEMENT/PIC No. 1 – January 16, 2018			
1	GAFFOOR, BRANDON B.E.S. Intern - Rail Corridor Management Office Metrolinx 335 Judson Street Toronto, Ontario M8Z 1B2 T: 416.202.7294 C: 647.289.1958	<p>Comment received via email March 9, 2018:</p> <p>“Please see Metrolinx’s comments below regarding the Edward Street Improvements Project;</p> <ul style="list-style-type: none"> • GO station operations and customer access will be impacted, please discuss design elements with Metrolinx • Metrolinx 2016 GO Rail Station Access Plan recommends improvements to Stouffville GO Station including a 30-vehicle waiting area, 6 vehicle loading area and an additional 50 parking spaces. • Metrolinx also wants a created dedicated pedestrian and cycling path connecting station site to Edward Street, along Rupert Avenue <p>*GO Transit has a parking lot entrance/exit off of Edward Street within the Project’s area (just north of Rupert Avenue). This entrance/exit is the main point of access to Stouffville GO station’s northwest parking lot and access shall be maintained. As GO station operations and customer access will be impacted, the design elements should be discussed with Metrolinx. Please contact Phil Pengelly, Senior Manager of Station Operations (Phil.Pengelly@Metrolinx.com) in this regard.</p> <p>*The Metrolinx 2016 GO Rail Station Access Plan recommends improvements to Stouffville GO station that include; creation of a 30 vehicle waiting area, 6 vehicle loading area, and an additional 50 parking spaces. The Access Plan also recommended, pending feasibility, the creation of a dedicated pedestrian and cycling path that connects the station site to Edward Street, along the alignment of Rupert Avenue. The final design of Edward Street should protect and account for the future improvements of Stouffville GO that the Access Plan sets out. For more information regarding the Access Plan, please contact Nadine Navarro, Manager of RER Project Planning (Nadine.Navarro@Metrolinx.com).</p> <p>Going forward, please add Caroline Daza Ortiz, Manager of Environmental Programs and Assessments and myself to the stakeholder list to received project updates.</p> <p>Here is the link to the 2016 GO Rail Station Access Plan http://www.metrolinx.com/en/regionalplanning/projectevaluation/studies/GO_Rail_Station_Access_Plan_EN.pdf.”</p>	
2	Varganzi, Shirin MIP, MES (PI.) Planner II Toronto and Region Conservation Authority svarsgani@trca.on.ca	<p>Comment received via email May 9, 2018:</p> <p>“Toronto and Region Conservation Authority (TRCA) staff received the Notice of Study Commencement for the above noted Environmental Assessment on January 22, 2018. Staff has reviewed the study area associated with this Environmental Assessment and advises that there are no TRCA areas of interest within the identified study limits. As such, staff has no concerns with the project. Please remove TRCA staff from the project mailing list. If the nature or scope of the study changes, please contact staff to confirm TRCA interests. Please note that a screening fee of \$295.00 applies to this file, please send this fee to my attention at your earliest convenience.”</p>	
3	Hickling, Brad Area Distribution Engineering Technician trainee (ADET) Hydro One Networks Inc. Brad.Hickling@hydroone.com	<p>Comment received via email April 24, 2018:</p> <ul style="list-style-type: none"> • Hydro One Staff noted that the project study area has been revised and confirmed that Hydro One overhead and underground circuits are located on Edward Street. Further noting that Hydro One has an underground circuit crossing the Edward Street Extension which may require relocation. • Indicates that all further correspondence should be sent to CentralFBCPlanning@HydroOne.com. • Mark ups and line relocate request are also to be sent to this email as well. 	

4	<p>Szymczak, Sarah ADET Trainee Hydro One Provincial Lines – Newmarket Sarah.Szymczak@hydroone.com</p>	<p>Comment received via email April 13, 2018:</p> <ul style="list-style-type: none"> Hydro One Staff noted three phase lines run along the west side of Edward Street for the length of the project study area provided to them. Requests that once the scope of the work is confirmed, Hydro One will need to be advised so that we can review the proposed changes and identify any potential conflicts with our equipment. Notes to feel free to contact them if you require any additional information. 	
5	<p>O'Leary, Emilee Environmental Planner/Environmental Assessment Coordinator Ministry of the Environment and Climate Change Technical Support Section, Central Region, 5775 Yonge Street, 8th floor, Toronto ON, M2M 4J1 emilee.oleary@ontario.ca</p>	<p>Comment received via email February 7, 2018:</p> <ul style="list-style-type: none"> MOECC Staff provided a formal commenting letter with respect to notification of the pending Schedule 'C' Municipal Class EA process. Provide contact information for Aboriginal communities to be consulted throughout the EA process. Identified several Area of Interested that should be reviewed and incorporated into the study as a part of the EA process; <ul style="list-style-type: none"> Source Water Protection Climate Change Planning & Policy Air Quality, Dust & Noise Ecosystem protection and Restoration Surface Water Ground Water Contaminated Soils Excess Material Management Servicing and Facilities Mitigation and Monitoring Consultation Class EA Process Indicated that a draft copy of the ESR should be provided to MOECC Staff a minimum of thirty (30) day prior to filing the final report. A complete copy of the MOECC response letter can be found with the Environmental Study Report (ESR). 	
6	<p>Hatcher, Laura Heritage Planner Ministry of Tourism, Culture and Sport 401 Bay Street Suite 1700 Toronto ON M7A 0A7 laura.e.hatcher@ontario.ca</p>	<p>Comment received via email March 26, 2018:</p> <ul style="list-style-type: none"> MTCS Staff provided a formal commenting letter with respect to notification of the pending Schedule 'C' Municipal Class EA process. Notes that the following areas are of interest to the MTCS and should be incorporated into the EA process; <ul style="list-style-type: none"> Archaeological Resources Built Heritage and Cultural Heritage Landscapes Notes that all related technical studies should be provided to MTSC prior to filing of ESR. 	

NOTICE OF PIC No. 2 – November 2019

1.	<p>Elizabeth Terrell-Tracey York Region District School Board Trustee</p>	<p>Comment received through Town's website "Dear Tim, I have been advised that YRDSB owns the through-way land and also the adjacent old high-school land. Please make sure I am invited to all town meetings regarding this land with YRDSB."</p>	<p>Tim Hayward responded via by webpage – Feb13 2020 The School Board has been kept informed throughout the process of the Environmental Assessment. We will keep you informed as it continues.</p>
----	---	---	---

2.	Jeremy Parson Heritage Planner Town of Whitchurch-Stouffville 111 Sandiford Drive Stouffville, ON L4A 0Z8	<u>Comment submitted through Email</u> "Although no directs impacts are anticipated to the existing building stock located along Edward Street, indirect impacts are anticipated to the Heritage Area as a result of the extension of paved surfaces. Staff have some concerns that the proposed modifications may impact the historic character of the streetscape by removing landscaping, trees, and character-supporting lawn frontage. Staff request that the consultant work with Planning and Public Works staff on road design to explore design solutions to minimize impacts on the character of the neighbourhood, including shifting street components or width. Further, it should be noted that if any building impacts are expected as a result of road improvements or widening, staff will require the submission of a comprehensive Cultural Heritage Impact Assessment (CHIA). The CHIA will focus on impacts to individual heritage buildings as well as the overall character of the streetscape and offer mitigative strategies and alternatives. The CHIA will be submitted in accordance with the municipality's Guidelines for Cultural Heritage Impact Assessments to the satisfaction of municipal staff."	<ul style="list-style-type: none"> • NO RESPONSE REQUIRED
3.	Ryan Windsor Area Distribution Engineering Technician Ryan.Windsor@HydroOne.com	<u>Comment submitted through Email</u> "Hydro One has no further comments on the alternative design options for Edward St. If a mark-up of Hydro One owned equipment in this area is required, please request to CentralFBCplanning@HydroOne.com"	<ul style="list-style-type: none"> • NO RESPONSE REQUIRED
4.	Terri Cowan Third Party Projects Officer Third Party Projects Review/ Capital Projects Group Metrolinx 20 Bay Street, Suite 600 Toronto, Ontario M5J 2W3 T: 416-202-3903	<u>Comment submitted through Email</u> "Further to the Notice of Public information Centre for Edward Street improvements dated November 11th, 2019, I note the subject site is within 300 metres of Metrolinx's Uxbridge Subdivision which carries Stouffville GO Train service, I further note that the subject Environment Assessment (Class EA) is facilitate street improvements, which may have impact on our Stouffville GO station access. Metrolinx should be engaged throughout detailed design for coordination purposes and once the final design is completed, coordination with Metrolinx in the implementation stage will be required to ensure that our station access is not adversely affected. We have the following comments that should be considered in your design: <ul style="list-style-type: none"> • The 2016 GO Rail Station Access Plan (SAP) calls for improves to wayfinding and signage along Edward Street, directing pedestrians towards Stouffville GO Station. • The SAP also promotes east-west pedestrian and cycling connectivity to facilitate active transportation connections to the Station, for example off of Rupert Avenue connecting to Edward Street. Where and if possible, the Town may consider protecting for this future improvement. • The SAP also continues to promote intensification in proximity to the GO Station, consistent with the "Core Area – Mixed Use" and "Core Area – Main Street" land use designations in accordance with the Community of Stouffville Secondary Plan. 	<ul style="list-style-type: none"> • NO RESPONSE REQUIRED

INDIGENOUS COMMUNITY COMMENTS

NOTICE OF COMMENCEMENT/PIC No. 1 – January 16, 2018

		No Comments were received.	
--	--	----------------------------	--

NOTICE OF PIC No. 2 – November 2019

1.	Curve Lake First Nations	<u>Letter Received</u> I would like to acknowledge receipt of your correspondence, which was received on 10/18/2019 regarding the above noted project. As you may be aware, the area in which your project proposed is situated with the Traditional Territory of Curve Lake First Nation. Our First Nation's Territory is incorporated with the Williams Treaties Territory and was the subject of a claim under Canada's specific Claims Policy, which has now been settled. All 7 First Nation's with the Williams Treaties have had their hare=vesting rights legally re-affirmed and recognized through this settlement. We strongly suggest that you provide Karry Sandy-Mackenzie, Williams Treaty First Nations Claims Coordinator, 8 Creswick Court Barrie, ON L4M 2S7, with a copy of your proposal as your obligation to consult may also extend to the other First Nations of the Williams Treaties.	<u>Jodi Moore Responded on December 20, 2019 by Email:</u> We thank you for your interest in the Edward Street improvements Class Environmental Assessment (Class EA) project currently being undertaken by the Town of Whitchurch-Stouffville. The final preferred solution proposes the reconstruction of Edward Street from Main Street to the current termination point and extend the corridor to Millard Street. The Project is proposed to stay within the existing Right-of-way. For ease of discussion, we have highlighted your main concern/comment below and provide an associated municipal response:
----	--------------------------	---	--

	<p>Curve Lake First Nation is requiring a File Fee for this project in the amount of \$250.00 as outlined in the Consultation and Accommodations Standards. This Fee includes project updates as well as review of standard material and project overviews. Depending on the amount of documents to be reviewed by the Consultation Department, additional fees may apply. Please make this payment to Curve Lake First Nation Consultation Department and please indicate the project name or number on the cheque.</p> <p>If you do not have a copy of Curve Lake First Nation's Consultation and Accommodation Standards they are available at http://www.curvelakefirstnation.ca/services-department/lands-rights-resources/consultation/. Hard copies are available upon request.</p> <p>Based on the information that you have provided us with respect to Edward Street Improvements. Schedule C Municipal Class EA Curve Lake First Nation may require a Special Consultation Framework for the Project. Information on this Framework can be Found on Page 9 of out Consultation and Accommodations Standards. In Order to assist us in providing you with timely input, it would be appreciated if you could provide a summary statement indicating how the project will address the following areas that are a concern to our First Nation within our Traditional and Treaty Territory; possible environmental impact to our drinking water; endangerment to fish and wild game; impact on Aboriginal Heritage and cultural values and to endangered species, lands, savannas etc.</p> <p>After the information is reviewed it is expected that you or a representative will be in contact to make arrangements to discuss this matter in more detail and possibly set up a date and time to meet with Curve Lake First Nation in person.</p> <p>Although we have not conducted exhaustive research nor have we the resources to do so, there may be the presence of burial or archaeological sites in your proposed area. Please note that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains, or other such evidence of a native burial site or any other archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the Cemeteries Act to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is need before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately.</p> <p>Furthermore, Curve Lake First Nation also has available, trained Cultural Heritage Liaisons who are able to actively participate in the archaeological assessment process as a member of a field crew, the cost of which will be borne by the proponent. Curve Lake First Nation expects engagement at Stage 1 AA so that we may include Indigenous Knowledge of the land in the process. We insist that at least one of our Cultural Heritage Liaisons be involved in any Stage 2-4 assessments, including test-pitting, and/or pedestrian surveys to full excavation.</p> <p>Although we may not always have representation at all stakeholder meetings, it is our wish to be kept apprised throughout all phases of this Project. Should you have further questions or if you wish to hire a liaison for the Project, please feel free to contact Julie Kapyrka or Kaitlin Hil, Lands and Resources Consultation Liaisons at 705 657 8045 or via email at juliek@curvelake.ca and kaitlinH@curvelake.ca</p>	<p>As part of the Class EA process, consultation with the Ministry of Environmental, Conservation and Parks (MECP) was conducted to determine which communities have potential to be affected by the proposed project. As part of this process Karry Sandy-McKenzie, Williams Treaty First Nation Claims Coordinator was identified in the list provided by MECP. The Notice of Commencement was sent on February 5th, 2018, Notice of PIC NO.1 was sent on April 18th, 2018 and PIC NO.2 was sent on November 12th, 2019.</p> <p>A Phase I Environmental Site Assessment was completed for this Project which determined there are no drinking water wells in the Project Area. The drinking water in the Project area is supplied by the Town of Whitchurch-Stouffville. Therefore, this Project does not propose any negative effects to Drinking water.</p> <p>A Natural Heritage Assessment was conducted to determine the natural environmental features present within the study area. The Stouffville Creek is located approximately 150m east of out Edward Street at its closest point, outside of the study area. Therefore, the Project does not propose any negative effects to fish. Wild game is not likely to be affected as the Project is located in the downtown Community of Stouffville.</p> <p>A Stage 1 Archaeological Assessment was completed that did identify areas outside of the Study Area which would require a Stage 2 Archaeological Assessment if disturbed. A Cultural Heritage check list was completed that did identify buildings older than 40 years old, however all of these are outside of the Study Area. Therefore, this Project does not propose any negative effects on Aboriginal Heritage and Cultural values.</p> <p>The Ministry of Natural Resources, Forestry was contacted to obtain Species at Risk (SAR) information relevant to the study area. It was determined that no SAR or rare species records exist in the area.</p> <p>The next stage for this project is to complete the Environmental Screening Report (ESR) A Notice of Completion will be sent out to inform interested parties that the report will be posted for a 30-day review period.</p> <p>As per the Consultation and Accommodation Standards, a fee of \$250.00 payable to Curve Lake First Nation Consultation Department will be sent from the Town of Whitchurch-Stouffville, identifying the Project name and number. However, the Town would like to request further discussion prior to any additional fees being charged to the Town for the review of documents by the Consultation Department. Please contact Mr. Tim Hayward of the Town of Whitchurch-Stouffville, at 905-640-1910 ext. 2234 or via email at tim.hayward@townofws.ca, in order to facilitate a discussion regarding additional review fees.</p>
<p>Dave Simpson Alderville First Nation PH – 905 352 2011 consultation@alderville.ca</p>	<p>Thank you for the notice of the upcoming public information centre to facilitate corridor improvements to Edward St. from Main to Millard street. We have no input at this phase of the project however when the project moves to the construction phase we would like to be notified of any environmental or archeological studies in relation to the project.</p>	<ul style="list-style-type: none"> • NO RESPONSE REQUIRED

PUBLIC COMMENTS	
NOTICE OF COMMENCEMENT/PIC No. 1 – January 16, 2018	
1	<p><u>Comment received via email January 24, 2018:</u></p> <ul style="list-style-type: none"> Noted that their family lives on Second St and received the notice about the Edward St improvements. Understands that they can be a part of the consultation process and requests to be notified of when/how this can be done. <p><u>H.Xu (Town of WS) replies via email on Jan. 24, 2018:</u></p> <p>Thank you for your email with regard to the Town's ongoing environmental assessment for Edward Street. I have asked the Town's consultant to include your email in the circulation list for all future activities. If you have any question or require further clarification, please contact me or our consultant Catherine Jin.</p>
2	<p><u>Comment received via email January 24, 2018:</u></p> <ul style="list-style-type: none"> Strongly opposes the proposed EA, indicating that they live in a very quiet, low traffic, active neighborhood. Suggesting that each of those aforementioned aspects of our neighbourhood would change with implementation of the proposed improvements. This is not why we chose to live in this neighborhood. <p><u>H.Xu (Town of WS) replies via email on Jan. 24, 2018:</u></p> <p>Thank you for your email with regard to the Town's ongoing environmental assessment for Edward Street. I can understand your concerns. Under the Environmental Assessment Act, all comments submitted will be documented and receive full consideration in the study. Since the study has just started, it is hard to guess what it will eventually recommend. We encourage all interested members of the public to participate in this study, and will endeavor to make sure the process is always kept open, fair and transparent.</p> <p><u>H.Xu (Town of WS) replies via email on Jan. 24, 2018:</u></p> <p>By copying Catherine Jin, the Consultant Project Manager of this Study, I am asking her to respond to your question.</p> <p><u>C.Jin (Ainley) replies via email on Jan. 24, 2018:</u></p> <p>As the Study progresses, the project team will hold Public Information Centres (PICs) to present information and invite public comments. Notification of the PICs will be sent to the public well in advance.</p>
3	<p><u>Comment received via phone January 22, 2018:</u></p> <ul style="list-style-type: none"> In a phone conservation with project team staff, [REDACTED] inquired; <ul style="list-style-type: none"> Will Edward Street be opened through? When will construction be? <p><u>C.Jin (Ainley) replies via phone on Jan. 24, 2018:</u></p> <p>I informed him that I don't have answers to his questions at this time since the EA has just been initiated and PICs will be held.</p> <p><u>C.Jin (Ainley) replies via phone on Mar 6, 2018:</u></p> <p>Tried calling [REDACTED] both yesterday and today and only got his voicemail. I spoke to him in January in regards to the EA process (please see attached email record). I left him a voicemail just now reiterating my last conversation with him and welcomed him to join us at the next PIC. Noted that date is to be determined and he will receive notice.</p>
4	<p><u>Comment received via phone March 6, 2018:</u></p> <ul style="list-style-type: none"> Requested that the gate located at Schell Lumber be opened up <p><u>C.Jin (Ainley) replies via phone on Mar 6, 2018:</u></p> <p>I had thanked him for his input and informed him that we will be following the Class EA process to hold PICs and welcome public input.</p>
5	<p><u>Comment received via email March 5, 2018:</u></p> <ul style="list-style-type: none"> Appreciates the Town soliciting input form property owners adjacent to Edward Street who may be potentially impact by the outcome of the pending EA study. Noted that he objects to Edward Street being "opened-up" from Main Street to Millard Street, allowing heavy commercial traffic which currently accesses businesses on Edward Street to enter via Main Street. Notes his objection for the following reasons; <ul style="list-style-type: none"> Has live on south side of Millard Street for over 30 years, which has backed onto recreation facility owned by the Town. Is an active member in the local soccer organizations that extensively utilizes these facilities. Indicated that he has witnessed firsthand that the facilities are being fully leveraged and now form an integral part of the Town's recreation program, especially since the Town recently invested in upgrading the tennis courts. Notes that while he does not believe the property on the east side of Edward Street (where the old Stouffville High School was previously located) is owned by the Town, it is nevertheless used extensively by children when there are "overflow" conditions such as school board track-and-field events held at these facilities. Further noting his concerns for the safety of recreational facility participants, particularly children during what I <p><u>C.Jin (Ainley) replies via phone on Mar 6, 2018:</u></p> <p>We understand your concerns. Under the Environmental Assessment Act, all comments submitted will be documented and receive full consideration in the study. Since the study has just started, it is hard to guess what the final recommendation will be. We encourage all interested members of the public to participate in this EA study, and will endeavor to make sure the process is always kept open, fair and transparent. As the study progresses, the project team will hold Public Information Centres (PICs) to present information and invite public comments. Notification of the PICs will be sent to the public well in advance.</p> <p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>

	<p>call "overflow" conditions when large track meets are held at this facility as well as during summer evening soccer programs.</p> <ul style="list-style-type: none"> Under no condition should a potentially busy commercial thoroughfare either dissect or run parallel to a Town sponsored recreational facility. This would introduce both a danger to participants and a liability to the Town. One of the safety benefits we currently enjoy is that there is no through traffic either around the perimeter or cutting through this green space. Why in the world would anyone want to change that. <p>Requested that his inquiry be responded to and also be kept informed of the project.</p>	
6	<p>Comment received via email January 30, 2018:</p> <ul style="list-style-type: none"> Indicates that he and his wife (member of the Heritage Committee) currently live on Church Street and that his their mother lives on Edward Street and had a few comments/questions regarding the possible opening of Edward Street While he believes that opening Edward Street is likely inevitable, he does not know why it's being opened now? Noting that based on recent Council presentations and subsequent budgets, his understanding is that Capital funds are depleting and suggest that projects should be done by priority Indicates that intensification is going to be a major factor to increase these funds moving into the future. Suggests that Schell Lumber is very close to needing to relocating and opening those lands up for development. Further suggesting that the Town should wait until that happens and have the developers pay for the upgrades to water, sewer and road improvements at that time. Notes that Edward Street is very busy with traffic from Schell Lumber customers as well as the Go transit riders. Opening this street is going to make the intersection at Main Street very difficult as well as possibly add heavy truck traffic into a residential area on Millard Street. Noting that Schell Lumber uses Edward to transport stock up and down this street using fork lifts taking up the whole road. This will need to be addressed or will most likely cause an accident at some point. Makes that suggests that; Since Edward Street is in the Downtown Community Improvement Plan (Schedule F4, of the Town's Official plan). Would it be possible to have the West Side of Edward St. zoning changed to CM1. Further indicating that it would be ideal for the Town, School Board, GO transit and Schell's to develop all these lands together. 	<p>C.Jin (Ainley) replies via email on Jan 30, 2018:</p> <p>All comments will be documented and given full considered in the EA Study. Please continue to forward these comments to me in future, if any. We strive to ensure the process is always kept open, fair and transparent.</p> <p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
7	<p>Comment received via phone March 7, 2018:</p> <ul style="list-style-type: none"> Noted that he is a member of the Chamber of Commerce and inquired as to what future traffic will be like on Edward Street if the roadway is opened up. 	<p>C.Jin (Ainley) replies via phone on Mar 6, 2018:</p> <p>I had informed him that the project has just started and we will be following the Class EA process to hold PICs and welcome public input.</p>
8	<p>Comment received via comment sheet at PIC May 3, 2018:</p> <ul style="list-style-type: none"> Indicated that Edward Street needs to be opened to provide additional access to Main Street, as well as to improve truck access to Schell Lumber. Notes that multi-use lanes and sidewalks need to be intergrated into the overall design of Edward Street. Cross-walks and safe areas to cross recreational areas 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
9	<p>Comment received via comment sheet at PIC May 3, 2018:</p> <ul style="list-style-type: none"> Supports opening Edward Street to Millard Street. Notes that traffic flows need to be improved to the downtown core. Opening Edward Street would spread the amount of traffic currently accessing the Go Station over a greater number of streets. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
10	<p>Comment received via comment sheet at PIC May 3, 2018:</p> <ul style="list-style-type: none"> In their opinion Edward Street should have been opened from north to south 30 years ago. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
11	<p>Comment received via comment sheet at PIC May 3, 2018:</p> <ul style="list-style-type: none"> Asks that the project team move forward with Alternative 2, as it will be the most economical approach to complete the necessary improvements and access demands. Notes that opening Edward Street will allow for greater access to businesses along Main Street, Go Station and Schell Lumber. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>

12	<p><u>Comment received via comment sheet at PIC May 3, 2018:</u></p> <ul style="list-style-type: none"> • Open Edward Street to Millard Street. • Improve safety for people walking to downtown core. • Expansion for future condo development on Edward Street near train station. • Move traffic off Main Street from Go Station parking. • Pull heavy truck traffic off Main Street. • Help pull people from Edward Street & Millard Street to downtown core to help increase business (i.e., restaurants/bars/shops). 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
13	<p><u>Comment received via comment sheet at PIC May 3, 2018:</u></p> <ul style="list-style-type: none"> • Noted that opening Edward Street to Millard Street "need to be done". • Suggests that someone may be injured one day at Main & Edward, due to being too tight, too much traffic, and too many people parking incorrectly. • Millard Street was designed as a major road in the 1980's. Whereas Edward & Main Street was designed in the 1880's. • Notes that he would be will to sit on a committee to help the project if required. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
14	<p><u>Comment received via comment sheet at PIC May 3, 2018:</u></p> <ul style="list-style-type: none"> • Concerned regarding the potential increase of traffic at the intersection with Schell Lumber's day-to-day operation. • Notes that Schell shuttles lumber via forklift up and down Edward & Schell Street, concerned about the possibility of accidents. • Highlights the increase in heavy truck traffic through an 'Activity Node', where many children play. • Commercial customers are also a concern with speeding through the area, speed bumps should be installed within the right-of-way to limit speed through this area. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
15	<p><u>Comment received via comment sheet at PIC May 3, 2018:</u></p> <ul style="list-style-type: none"> • Opening Edward Street is a very important opening for downtown Stouffville. • Will be a positive impact on local business. • Notes that the road surface at the end of Edward Street is in poor condition and could use improvement through road resurfacing. • Edward Street is the only east end connecting to the Millard Street community. It will be a crucial ink during the reconstruction of Main Street. • Suggests that any Main Street requires auxiliary roads to maintain for residents and business alike. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
16	<p><u>Comment received via email April 16, 2018:</u></p> <ul style="list-style-type: none"> • Strongly objecting, people have been using Millard St during peak hours to try to avoid traffic lights, backing out of driveway is dangerous already. • Active transportation is already present through bollards at north end of Edward St, so this project is not fully needed. • No opposition to improvements of pavement conditions. • Property values will decrease and dangerous situations could arise with the new traffic. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
17	<p><u>Comment received via email May 1, 2018:</u></p> <ul style="list-style-type: none"> • Many families with children live here, their safety may be in jeopardy. Frequent speeding vehicles and more littering. Already a heavily used street due to Schell Lumber and its trucks. • Area shouldn't be turned into a heavy motorist location as the fields bordering GO rail tracks connect to a reservoir forest. • Downtown businesses close up early and there isn't usually a lot of activity so Edward St proposed wouldn't be a huge incentive for motorists to visit downtown. • There are no parks so walking to track and field is a popular family activity, and the safety of this activity would be reduced with the increase in motorist traffic. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>
18	<p><u>Comment received via email May 10, 2018:</u></p> <ul style="list-style-type: none"> • Expresses concern for the lack of safety in neighbourhood. • Commuter traffic always in a rush since GO Train expansion and its parking lot. 	<p>Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.</p>

	<ul style="list-style-type: none"> • Inconsistent stop signs, sidewalks not safe or existent for many streets, so greater motorist population couldn't be supported. • Suggested other changes to GO station such as paid parking, having a shuttle bus to the GO Train to save traffic. • Suggested one-way streets, hourly restrictions on streets to reduce traffic flow. 	
19	<p><u>Comment received via email May 11, 2018:</u></p> <ul style="list-style-type: none"> • Works and lives in Stouffville, believes she has been affected by GO commuter traffic • Concerned over how Edward St. opening will impact area • Strongly concerned for pedestrian safety in the north end 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.
20	<p><u>Comment received via phone May 11, 2018:</u></p> <ul style="list-style-type: none"> • Questioned Metrolinx's future plans for GO Station and noted Metrolinx was included in our Contact List and we did receive a response from them for their main contact persons • She noted her concern of public safety at the vacant land of the former school. • She emphasized that measures (traffic calming) must be put in place to ensure pedestrian safety. I noted that we are looking at multi-use paths, urbanized cross sections, and potential traffic calming measures to address such concerns as well as drainage issues • Commented that existing road users are not currently obeying the stop signs 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.
21	<p><u>Comment received via email May 13, 2018:</u></p> <ul style="list-style-type: none"> • The area is quiet and used for leisure, with all the passing cars, it will become busy and noisy. • This won't save time for drivers only lengthen their distance in exchange for less congested roads. • Questions if heavy trucks should be allowed in this area because this will take away the locations quiet and peaceful atmosphere. • Speed limit should be 40 km/h instead of 50 km/h in order to reduce speeding vehicles and discourage congestion. • Stop signs not obeyed/present already, it will become worse with this project. • Option one preferred. 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.
22	<p><u>Comment received via email May 16, 2018:</u></p> <ul style="list-style-type: none"> • Agrees that the road improvements are necessary. • Believes that the extension of Edward St. from Main St. to Millard St. is unnecessary because the Ninth Line is enough to direct traffic as it never has any bottlenecks or issues. • To help with downtown's business Church St. can be opened up and it will be much less expensive and would bring more people downtown. • Active Transportation is present greatly already and no promotion is necessary for it to continue, increasing traffic in the area would only have a negative effect. • Opening Edward St. would only benefit Schell Lumber, not many other businesses • Adding a traffic light at Main St and Edward St. will only create traffic, not alleviate it • 'Do nothing' is the best option 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.
23	<p><u>Comment received via email April 23, 2018:</u></p> <ul style="list-style-type: none"> • Edward St. and the history behind the habitants and its importance on Stouffville recorded with facts and consensus results dating back over many decades • Maps and Plot layouts also recorded over 1900's 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.
24	<p><u>Comment received via email May 23, 2018:</u></p> <ul style="list-style-type: none"> • Understands the need to progress general development • Noted an increase of traffic along Millard and Ninth Line through Glad Park school zone, feels that it has made the area too noisy and polluted • Noted Vehicles speed often to get past traffic and yellow lights • Uneasy about extra traffic • New LED streetlights are uncomfortable as they leak into home and property in the evenings • A close by bus stop will cause more congestion near property 	Respondent letters were issued August 27, 2019 and included the aforementioned letter summarizing of all comments received and the associated municipal response.

<ul style="list-style-type: none"> • Wants Speed Bumps near traffic light • Wants old trees at boulevard between sidewalk and Millard St. to be replaced • Wants a fence for privacy similar to one on Millard at Main St when Ninth Line Jog was fixed • Wants a restriction on trucks through subdivision on Millard and South on Ninth Line through school zone. 	
NOTICE OF PIC No. 2 – November 2019	
Comment submitted through Email 1. "In looking at the map that covers the area affected by this expansion, the red line outlining the area...is that just a general line or is it very specific in exactly what area will be affected? Reason for the question is that in looking at the map, my house is the extreme northwest house enclosed in that red lined box. Other than construction and the inevitable increased traffic, is there anything physical that will affect my property?"	Jodi Moore Responded on November 20 2019 by Email: The outer red line is a general line to show the Project location (Edward Street). The area that you mentioned will not be physically affected by this project. Please let me know if you have any other questions.
Comment received through Town's website 2. "I think they should keep Edward Street closed."	Tim Hayward to respond via Town's internal website Feb 13 2020: Thank you for your comments regarding the Town's ongoing environmental assessment for Edward Street. I understand your concerns and your comments have been noted. Under the Environmental Assessment Act, all comments submitted will be documented and receive full consideration in the study.
Comment received through email 3. "Tim / Nimit ... it was a pleasure meeting you earlier this evening. Based on what was presented tonight, I had two observations and more importantly two concerns which I would like included in the final proposal. Observation: <ul style="list-style-type: none"> • The PIC #2 presentation was well put together and easy to follow for those that attended and interested in the project. • While one of the project goals is to "promote active transportation (walking, cycling, etc.)", there is no improvement whatsoever over the existing landscape. For clarification, the corridor between Millard currently provides a safe thoroughfare for both walking and cycling. The proposed solution will simply share that same thoroughfare by adding vehicular traffic and if anything, may deter cyclists and walkers from continuing to use that same roadway. Concerns: <ul style="list-style-type: none"> • All proposals MUST consider and address the additional traffic expected to be diverted onto Millard Street. Millard Street is currently made up of residential dwellings with a 40km speed limit and no trucks permitted. Opening up Edward to join Millard should only be permitted as long as existing traffic controls remain, namely the speed limit and NO TRUCKS permitted. Lumber deliveries are currently made by accessing Edward Street via Main Street. This should continue so that heavy trucks do not pass through any residential areas of Millard Street. • The proposed road to connect Edward to Millard will dissect two recreational facilities (Recreation Centre track & fields to the west and school board soccer fields to the east). For safety reasons, some provision will have to be made for children who regularly cross the road between these two facilities. This is a major concern during the summer months when outdoor sports activities are underway and given the excessive speed at which cars typically enter and exit the Go-station parking facility on Edward Street. The final solution MUST address this concern. Futures: <ul style="list-style-type: none"> • Although not directly related to this project, the Town should consider opening all streets that intersect with Main Street i.e. Church Street so as to improve the overall traffic flow into the downtown." 	Tim Hayward responded by email Feb 14th 2020 I'm going through my correspondence regarding the Edward St. EA and although we had received and noted your comments I noticed we had not responded. I received the following comments from our consultant (whom I've cc'd on this email): Promoting active transportation is essential for Edward Street as its location is close to the Downtown area and the Go Train. Having multiple transportation ways to access these areas creates a safe environment for everyone. This Project suggests 3 different active transportation routes the entire corridor from Millard Street to Main Street, including a sidewalk, multi-use path and shared bike lanes. The existing traffic in the area will be able to take a more direct route to Millard Street or Main Street. This will not increase traffic however disperse the existing traffic. At this time there is no requirements to change the existing controls on Millard Street. Safety concerns regarding crossing Edward Street near the Recreation Centre will be addressed by proper crossing at the intersection of Edward Street and Millard Street and the Town can further review during the Detailed Design phase to ensure safety is a priority.
Comment received through Town's website 4. "Just open Edward St. It's an important route to the downtown."	Tim Hayward to respond via website Feb 13 2020: Thank you for your comments regarding the Town's ongoing environmental assessment for Edward Street. I understand your concerns and your comments have been noted. Under the Environmental Assessment Act, all comments submitted will be documented and receive full consideration in the study.
Comment received through Town's website 5.	Tim Hayward to respond via website Feb 13 2020: A review of the key intersections within the project study area was undertaken as part of the overall traffic analysis completed for this Environmental Assessment. The purpose of which was to

	Traffic would certainly increase along Edward Street and exiting from Edward to Main is hazardous already. Would the current proposal include traffic lights at this intersection? This would provide added safety for vehicles using the station AND a much needed pedestrian crosswalk!	determine if any improvements are presently required or would be warranted at a future date, should it be extended to Milliard Street. By the 2031 horizon it is also assumed that an eastbound left turn lane on Main Street at Edward Street. However, this can be further reviewed with traffic monitoring and public consultation.
6.	<u>Comment received through Town's website</u> "This would have been helpful 20 years ago, but more so now, with the increase in population"	<u>Tim Hayward to respond via website Feb 13 2020:</u> Thank you for your comment, your input is appreciated and will be considered as part of the Environmental Assessment process.
7.	<u>Comment received through Town's website</u> "Would love to see the opening of Edward Street up to Millard. Great idea!! Hope its soon!"	<u>Tim Hayward to respond via Email Feb 13 2020:</u> Thank you for your comment, your input is appreciated and will be considered as part of the Environmental Assessment process
8.	<u>Comment received through Town's website</u> "This is my view I have lived on Millard St. [REDACTED] for 12 years .I can't tell you how many times myself ,wife, son , or visitors have almost been smoked by a vehicle either coming through the lights or making a right off 9th and then proceed to accelerate well over the speed limit to the stop sign at the entrance to the proposed Edward St and Millard St. This will just add more speeders and inconsiderate drivers that come up your rear end and honk because you need to slow down to make a right turn into your driveway ,it is pathetic .I suggest a speed bump or two be installed between these intersections if the plan gets approved before some child gets killed or someone / family get t-boned trying to get out of there driveway."	<u>Tim Hayward to respond via webpage Feb 13 2020:</u> Thank you for your comments. We appreciate your concerns, and your input is appreciated and will be considered as part of the Environmental Assessment process."
9.	<u>Comment received through Town's website</u> "I am concerned about traffic calming areas as Edward St. leads to the track and tennis courts that are busy with children. It should not be used as a race to get to the Go station or Main Street. The homes on Edward Street are very close to the road as it is the neighborhood of Harold, Rupert and Second Street due to older homes. I assume lights must be at Edward and Main due to the extra traffic expected. When will the town purchase the land owned by the Board of Education, and what is the time line expected for construction? I do agree that Edward Street needs to be improved as there is very poor drainage and the Harold/Edward corner is constantly covered in mud and puddles. The water does not drain well and trucks drive on the grass and ditch. They do not stay on the road. Thanks."	<u>Tim Hayward to respond via website Feb 13 2020:</u> Thank you for your email, your comment has been documented. The Town will be able to look at safety measures due to traffic in the area and will review what will be the best option going forward.
10.	<u>Comment received through Town's website</u> "Speed should be at a maximum of 40 km, I would also like to have No Left Turn signs on Edward Street from Main to Harold between the hours of 3pm-7pm. The rush hour traffic from the GO Station that speeds across these little side streets is dangerous. GO Station traffic should be made to exit Edward Street from either Main Street or go north to Millard. Also, no left turns should be allowed off the Ninth Line between Rupert and Harold during the morning rush hour 5am-9am, this traffic should enter Edward Street from Main or Millard. Again, the speeds of the traffic of people trying to make the train are dangerous. I would also like to see some sort of traffic calming implemented for the section of Edward Street that will run through the park area to reduce the speeds."	<u>Tim Hayward to respond via website Feb 13 2020:</u> Thank you for your email, your comments have been documented. The Town will be able to look at safety measures due to traffic in the area and will review what will be the best option going forward.
11.	<u>Comment received through Town's website</u> "Given the many young families on and around Edward St., the already serious traffic concerns (drivers blast through Stop signs, speed etc.) in the surrounding blocks, the popularity of the track and attached green space for children (in an area seriously lacking any other options) and concerns for the environment, I don't know why we would even consider increasing traffic and endangering lives simply to save people a minute or two and encourage even more aggressive traffic patterns. Perhaps a campaign towards car-sharing, walking and mindful driving OR a crack-down by police presence would do more to improve things. Happy to help."	<u>Tim Hayward to respond via Email early Jan 2020:</u> Thank you for your comments regarding the Town's ongoing environmental assessment for Edward Street. I understand your concerns and your comments have been noted. Under the Environmental Assessment Act, all comments submitted will be documented and receive full consideration in the study.
12.	<u>Comment received through Town's website</u> "My name is [REDACTED], I am the new landlord of [REDACTED] recently moved in just days ago. Am now trying to stay up to date on the surroundings of my property, recently realized that there is a Plan to Improve Edward Street. Am wondering if you can send me a copy of the plans as it directly affects me right on my street. Thanks will do. Looking forward to him email. I understand expanding and creating together network, just am concerns of the drainage system on the street as there's always puddles causing ice to form on the driveway and sidewalk and not flowing to the right direction. Extension to Millard adds convenience though will add traffic, hopefully is the right traffic."	<u>Haiqing Xu(Town of Whitchurch-Stouffville) Replied on December 2, 2019</u> Thank you for your email. By copying to Tim Hayward, Policy Planner and project lead for Edward Street Municipal Class Environmental Assessment, I am asking Tim to send you the requested document for your review. Reopening Edward Street is a Council direction in the interest of the broader community. Your understanding and support would be much appreciated. If you have any thoughts that could help the Town to improve both vehicular and pedestrian movements along Edward Street, please let Tim know.

		<p><u>Haiqing Xu (Town of Whitchurch-Stouffville) Replied on December 2, 2019</u> The Town may be able to help address the ice issue provided that it is within the Town's road right-of-way. Please let us know the details. For additional traffic as mentioned in your email, please be advised that re-opening Edward Street alone does not add/generate new traffic. It's the same volume of traffic that will be re-distributed, or Edward Street will receive its fair share of traffic after re-opening, which is likely similar to what you see presently along other parallel roads in the neighbourhood.</p> <p><u>Tim Hayward replied on December 3rd, 2019</u> Please see the link below which will take you to the Edward Street EA web page. This should provide you with some background, as well as information on the options that have been proposed for Edward Street. https://www.cometogetherws.ca/edward-street-improvements On the right hand side you can see a Document Library which provides some detailed information on the project. In particular if you look at the display boards from the two Public Information Centres, these should be helpful. If you have any additional questions, you're welcome to contact me.</p>
13.	<u>Comment received through Town's website</u> "Please open up Edward St from Millard to Main and put a light at Edward and Main."	<u>Tim Hayward to respond via webpage Feb13 2020:</u> Thank you for your comment, your input is appreciated and will be considered as part of the Environmental Assessment process
14.	<u>Comment received through Town's website</u> "Will there be restrictions put in place for truck traffic and moving of goods from Schell Lumber? Opening this St. will be a nightmare for residence and for traffic at Main St."	<u>Tim Hayward to respond– sent by webpage feb 13 2020</u> Thank you for your email, your comments have been documented. The Town will be able to look at truck traffic in the area and will review what will be the best option going forward.
15.	<u>Comment received through Town's website</u> "The go train station traffic sends a lot of vehicles through the adjacent neighborhood, and after a train arrives you can witness car driving at a high rate of speed down Second street, rupert avenue and harold. The cars speed and do not stop at the stop signs. I think that access should be blocked so cars cannot access second avenue, rupert or harold from Edward street once completed. There is a day care at the corner of second and Albert which cause even more concern for the traffic behavior from the train station. Negating traffic flow from Edward to Second, Rupert and harold would stop this traffic from entering the residential neighborhood and force traffic north or south on edward to larger roadways of main street and millard, leading to increased safety within the adjacent community."	<u>Tim Hayward responded– by webpage feb 13 2020</u> Thank you for your email, your comments have been documented. The Town will be able to look at safety measures due to traffic in the area and will review what will be the best option going forward.
16.	<u>Comment received through Town's website</u> "Please open Edward Street to Millard. This should have happened years ago."	<u>Tim Hayward responded via Town's internal website Feb13 2020:</u> Thank you for your comment, your input is appreciated and will be considered as part of the Environmental Assessment process.
17.	<u>Comment received through Town's website</u> "I much prefer option # 2. Shared lanes."	<u>Tim Hayward responded via Town's internal webpage Feb 13 2020:</u> Thank you for your comment, your input is appreciated and will be considered as part of the Environmental Assessment process.
18.	<u>Comment received at PIC NO. 2</u> "This should have happened years ago!! The Main and Edward Street intersection is deadly! There are 12 houses facing Edward Street verses all the homes on the side streets that have traffic driving to the store and yard. Should have been done years ago. Long time customer."	NO RESPONSE REQUIRED
19.	<u>Comment received at PIC NO. 2</u> "Opening of Edward to Millard will ease the flow of traffic off the side streets (Harold, Rupert, etc). It will also improve the access to Main Street from Millard. A positive move for the Town."	NO RESPONSE REQUIRED

10.0 MITIGATION

This section summarizes the potential for the Recommended Plan to generate negative effects and identifies the mitigation measures recommended to minimize these impacts. The mitigation measures as discussed are preliminary and may be refined or modified during the detailed design phase to reflect design changes made at that time.

10.1 Natural Environment

10.1.1 Fish and Fish Habitat

As indicated, there are no watercourses within the subject study area however, the Stouffville Creek is a fish-bearing watercourse. Proper mitigation measure should be followed during construction. There are no direct impacts to fish and fish habitat. This project requires no in-water work. During construction there is a potential for indirect impacts resulting from accidental spills or from sediment and erosion; however, implementation of the following standard mitigation measures will assist in reducing the potential for impact:

- proper sediment and erosion control installation, monitoring and maintenance to ensure that site runoff is contained
- Ensure no washout or sediment transport to any natural system including Stouffville Creek.
- Erosion & Sediment Control Guideline for Urban Construction should be used as a planning guide in this regard (Greater Golden Horseshoe Area Conservation Authorities, 2006).
- Silt controls are to be installed and monitored to ensure that exposed soils are not susceptible to erosion following precipitation events.
- Erosion and sediment control measures must be maintained throughout construction and until vegetation is reestablished post construction.
- Stockpiled material should be stored a minimum of 30 m from a waterbody with adequate sediment and erosion controls installed.
- Ontario Provincial Standard Specification (OPSS) 805 Construction Specification for Temporary Erosion and Sediment Control Measures.

10.1.2 Vegetation

Given that the study area is of a developed nature, there is limited existing vegetation. Given that construction will be confined to the existing right-of-way, there is a low potential to impact existing vegetation. The following measures will assist in keeping impacts to a minimum:

- All areas disturbed during construction should be restored as soon as possible following the completion of earthworks.
- The limits of construction should be defined with fencing to minimize intrusion into unnecessary areas.

10.1.3 Wildlife and Species at Risk (SAR)

As the study area is within a downtown area there is limited habitat available for wildlife, including Species at Risk (SAR). The species present are primarily those that have become accustomed to an urbanized environment. There is a low potential to impact area wildlife and SAR. Any potential for impact will be temporary and limited to the period of construction. The following mitigation measures will assist in the protection of area wildlife and SAR during construction:

- The Contractor shall avoid destroying nests of migratory birds. To avoid impacts to birds (including SAR birds), the removal of vegetation (including clearing and grubbing) shall be avoided between April 1st and August 31st. If vegetation removal is required within this period a screening by an ecologist with knowledge of bird species present in the area should be undertaken within 48-hours of the planned vegetation removals to ensure that the affected vegetation is free of nests prior to clearing. Should vegetation clearance activities be delayed and not occur within the 48-hour period, an additional screening shall be completed by an ecologist to confirm that there are no nests present.
- The contractor shall make certain that personnel working on the site are aware of potential SAR that could be encountered and that the species are protected by law. Individuals working on site shall ensure that SAR are not harmed during construction or killed by heavy machinery, vehicles, or other equipment.
- If a SAR is encountered during construction, all works in the immediate area must cease. The Contract Administrator must contact the MECP at SAROntario@ontario.ca. Harassment to SAR should not occur during construction activities.

10.1.4 Surface Water

The proposed undertaking will provide improvements to area drainage and alleviate flooding. However, during construction there is the potential to impact surface water through the accidental spillage of harmful substances from refueling and/or equipment maintenance. It is anticipated that impacts to surface water during construction will be minimal provided the standard measures for working in and around water are followed. The following mitigation measures will assist in minimizing impacts:

- It is recommended that detailed design give consideration to implementing Low Impact Development measures, where possible, to assist in improving water quality.
- Silt controls are to be installed and monitored to ensure that exposed soils are not susceptible to erosion following precipitation events.
- Erosion and sediment control measures must be maintained throughout construction and until vegetation is reestablished post construction.
- Stockpiled material should be stored a minimum of 30 m from a waterbody with adequate sediment and erosion controls installed.
- OPSS 805 Construction Specification for Temporary Erosion and Sediment Control Measures.

10.1.5 **Groundwater**

During detailed design a hydro geological investigation may be completed to determine existing water usage in the area and determine if there are any water supply wells, surface water bodies or environmentally sensitive features within the construction dewatering zone of influence. Groundwater quality sampling and analysis will be completed during detailed design and be in accordance with the Town of Whitchurch-Stouffville's Sewer Use By-law's. Provided that proper mitigation is implemented during construction, this project is not expected to significantly impact groundwater.

A licensed, specialist dewatering contractor must be retained to install, operate and manage any dewatering wells/arrays in accordance with applicable legislation. The dewatering system shall be designed and managed by the dewatering contractor.

To ensure compliance with CTC-SPP Policy SAL-11 regarding the application of road salt, best management practices will be implemented by the Town Operation's Staff.

10.1.6 **Air Quality**

As this project involves a reconstruction of an existing corridor with the extension, the potential to impact air quality is not expected to be significant. It is recommended that to minimize potential air quality impacts during construction, the construction tendering process should include requirements for implementation of an emissions management plan. Such a plan would set out established best management practices for dust and other emissions. Some of the best practices include the following:

- Use of reformulated fuels, emulsified fuels, exhaust catalyst and filtration technologies, cleaner engine repowers, and new alternative-fueled trucks to reduce emissions from construction equipment.
- Regular cleaning of construction sites and access roads to remove construction-caused debris and dust.
- Non-chloride dust suppression on unpaved haul roads and other traffic areas susceptible to dust, subject to the area being free of sensitive plant, water or other ecosystems that may be affected by dust suppression chemicals.
- Covered loads when hauling fine-grained materials.
- Prompt cleaning of paved streets/roads where tracking of soil, mud or dust has occurred.
- Tire washes and other methods to prevent trucks and other vehicles from tracking soil, mud or dust onto paved streets or roads.
- Covered stockpiles of soil, sand and aggregate as necessary.
- Compliance with posted speed limits and as appropriate further reductions in speeds when travelling sites on unpaved surface.

10.2 Socio-Economic Environment

10.2.1 Land Use & Property Impacts

As the project is located in a developed, downtown area, land use is commercial at the south limits and residential along the length of the existing Edward Street. There is access to the Go Station off of Edward Street as well. It will be important to minimize impacts to area residences and businesses during construction by maintaining traffic flow and property access. Consultation with Metrolinx will be required during detailed design. The following measures will assist in keeping impacts to a minimum:

- Construction shall utilize measures to minimize impacts to local traffic to the extent feasible and to maintain access during construction.
- Entrances are to be kept open except when construction activities are taking place in front of the entrance.

10.2.2 Noise

The main noise sensitive areas are the residential properties located along the existing Edward Street corridor. There is the potential for increased noise during the construction period; however, this will be temporary and can be minimized through implementation of the mitigation measures. It is recommended that provisions be written into the contract documentation for the contractor, as outlined below:

- Construction should be limited to the time periods allowed by the locally applicable bylaws. If construction activities are required outside of these hours, the Contractor must seek permits / exemptions directly from the municipality in advance.
- There should be explicit indication that Contractors are expected to comply with all applicable requirements of the contract and local noise by-laws. Enforcement of noise control by-laws is the responsibility of the Municipality for all work done by Contractors.
- All equipment should be properly maintained to limit noise emissions. As such, all construction equipment should be operated with effective muffling devices that are in good working order.
- The Contract documents should contain a provision that any initial noise complaint will trigger verification that the general noise control measures agreed to are in effect.
- In the presence of persistent noise complaints, all construction equipment should be verified to comply with MECP NPC-115 guidelines, as outlined above.
- In the presence of persistent complaints and subject to the results of a field investigation, alternative noise control measures may be required, where reasonably available. In selecting appropriate noise control and mitigation measures, consideration should be given.

10.2.3 Servicing and Utilities

The reconstruction and extension of Edward Street has the potential to impact both municipal services and utilities during construction. During detailed design additional discussions with affected utilities will be required to confirm the location of existing utility infrastructure and to

ensure that service can be maintained during the construction period. Consultation with Metrolinx will be required to ensure access to the GO Station.

10.2.4 Contamination and Waste Management

All work will be in accordance with Town of Whitchurch-Stouffville's standards for disposal, if required. The following measures will assist in addressing contamination and waste management during the period of construction:

- The removal and management will be completed in accordance with Ontario Regulation 406/19 and the MECP's current guidance document titled *Management of Excess Soil – a Guide for Best Management Practices* 2014.
- If potential contamination is encountered the appropriate tests will need to be undertaken to confirm the contaminant present and its levels. If the soils are contaminated, disposal will need to be consistent with Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the requirements related to site assessment and clean up.
- Where the Contractor manages excess earth as disposable fill, the Contractor shall take into account the possibility of salt impacts and ensure that the material is managed responsibly and in an environmentally appropriate manner. Should any contaminated materials be encountered during the undertaking, caution will be exercised while handling and disposing of contaminated materials in accordance with provincial regulations, and Ministry of Transportation (MTO) practices (as governed by OPSS 180 or the most current standard at the time of construction).
- If asbestos or lead are identified and determined to require abatement, appropriate handing, health and safety abatement and waste disposal protocols will be followed according to the Ontario Environmental Protection Act. – R.R.O 1990 Regulation 347: General – Waste Management and the Ontario Occupational Health and Safety Act – O. Regulation 278/05: Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations and the Ontario Occupational Health and Safety Act – O. Regulation 490/09: Designated Substance – Lead.

10.3 Cultural Environment

10.3.1 Archaeological Resources

While the project study area has been subject to previous extensive disturbance the following should be incorporated into the Contract Documents to provide direction in the event that deeply buried archaeological material is encountered during construction:

- In the event that previously unknown or unassessed deeply buried archaeological resources are uncovered during construction, the contractor shall immediately notify the Contract Administrator. Work shall remain suspended within the subject area until otherwise directed by the Contract Administrator in writing. The CA will contact the Town of Whitchurch-Stouffville representative who will confirm the need to engage a

licensed consultant archaeologist to carry out any archaeological fieldwork, in compliance with Section 48 (1) of the Ontario Heritage Act.

- In the event that human remains are encountered during construction, the contractor shall immediately notify the Contract Administrator. Work shall remain suspended within the subject area until otherwise directed by the Contract Administrator in writing. The CA will contact the Municipal representative who will notify the police, coroner and the Registrar of the Bereavement Authority of Ontario.

10.3.2 Built Heritage Resources

Since construction will be confined to within the existing right-of-way there will be no direct impacts. There is a low potential to impact existing cultural heritage resources. Town Heritage Planner has clarified that no Cultural Heritage Impact Assessment required for this project, provided no demolition or removal of any buildings or structures are proposed. Public works staff has indicated that they would keep the Town Heritage Planner informed as the detailed design phase gets started. The following mitigation will assist in keeping impacts to a minimum.

- Staging and construction activities should be suitably planned to avoid impacts to an adjacent identified resource.
- Establish no-go zones adjacent to all identified cultural heritage resources and issue instructions to construction crews in order to prevent impacts to existing resources.

11.0 CLIMATE CHANGE

Climate change concerns relate to the increased concentration of greenhouse gases in the atmosphere which can result in a rise in the global mean surface temperature. Increased temperatures worldwide are creating changes in climate that is resulting in extreme weather events. The rise of greenhouse gas emissions is influencing climate patterns, hydrology, ecosystems and ocean chemistry. There are two approaches to address climate change. These include reducing a project's impact on climate change (climate change mitigation) and increasing the local ecosystem's resilience to climate change (climate change adaptation). However, before a mitigation or adaptation strategy can be established, the potential for the project to impact climate change and the potential impact that climate change may have on a project must be considered. This section of the report will discuss the aforementioned aspects in relation to this project utilizing a qualitative approach.

11.1 Potential for Project to Impact Climate Change

The current undertaking is a small scale project involving the reconstruction of an existing corridor. As it is a transportation project the impacts to climate change relate to vehicular greenhouse gas emissions. The reconstruction will maintain an adequate level of service post construction with minimal delays and it is not expected that the emission of greenhouse gases will significantly increase over existing conditions. This project will complete improvements that

will make the Downtown Area more pedestrian friendly which could potentially decrease vehicular use and result in a reduction in vehicular greenhouse gas emissions.

One tool to assist in reducing greenhouse gas levels is through carbon sequestration. Vegetation can assist in removing carbon dioxide from the atmosphere. Edward Street and the extension are being reconstructed with a new planting of street trees where the boulevard permits. While it is not a significant amount of vegetation, it is a positive step forward in this regard and will be an improvement over existing conditions. This will be determined during detailed design.

11.2 Potential for Climate Change to Impact this Project

Climate change has the potential to result in increased storm events that can lead to flooding. The aging stormwater infrastructure is going to be replaced as part of this project and Low Impact Development measures for increased infiltration may be considered in the new design which will assist in reducing impacts. This undertaking is expected to make the area less vulnerable to climate change. The project is not expected to result in a disruption to lands or waters associated with Indigenous cultural resources.

12.0 PERMITS AND APPROVALS

During detailed design permits and approvals will need to be acquired from the following agencies:

- Ministry of Environment, Conservation and Parks (MECP): An Environmental Compliance Approval (ECA) will be required for the infrastructure works. An MECP EASR registration or a Permit to Take Water (PTTW) may be required for groundwater dewatering. (To be confirmed during detailed design).
- Town of Whitchurch-Stouffville: A permit will be required from the Town to permit dewatering to discharge to Town sewers.

13.0 MONITORING

Information pertaining to required mitigation and monitoring will be incorporated into the Construction Documents once the detailed design has been finalized. Monitoring will be conducted by on-site construction staff to make certain that environmental protection measures are being implemented and are effective. The Contract Administrator will make certain that environmental protection measures and monitoring as identified are implemented during construction and that any repairs to protection measures will be made in a timely fashion. Monitoring following construction will be completed, as required.

14.0 REFERENCES

Ainley Group, April 2018. Edward Street EA Traffic Analysis.

ASI. May 2018. Stage 1 Archaeological Assessment

Azimuth Environmental. July 2019. Natural Heritage Assessment

Town of Whitchurch-Stouffville, 2019. Built Heritage Inventory

Cambium. April 2018, Phase One Environmental Site Assessment

Golder. October 2018. Technical Memorandum

RWDI. August 2018. Qualitative Air Quality Assessment and Noise Assessment

Town of Whitchurch-Stouffville. 2000. Official Plan

Town of Whitchurch-Stouffville. 2017. Community of Stouffville Secondary Plan

Town of Whitchurch-Stouffville. 2017. Active Transportation Servicing Plan

Ministry of Environment, Conservation and Parks. 2020. Source Protection Information Atlas

Ministry of Environment, Conservation and Parks. 2003. Stormwater Management Planning
Ministry of Environment, Conservation and Park and Design Manual.

Ministry of Environment, Conservation and Parks. 2017. Considering Climate Change in the Environmental Assessment Process.

Ministry of Environment and Climate Change. (2017). Low Impact Development (LID) Stormwater Management Guidance Manual.

Ministry of Municipal Affairs and Housing. 2020. Provincial Policy Statement.

Ministry of Municipal Affairs and Housing. 2019. The Growth Plan for the Greater Golden Horseshoe.

Toronto Region Conservation Authority. 2018. Regulation Mapping