

**Date:** December 17, 2018 **File:** 20185301.PM.04.01

**Time:** 9:30 am **Page:** 1 of 7

Project: Denison Avenue Extension Class EA Study

Subject: Project Initiation Meeting – City of Brampton

Client: City of Brampton (City)

**Location:** City of Brampton - Williams Parkway Operations Centre,

Bdrm WPOC Admin-2A

Present: Marko Paranosic AE – Project Manager MP

AE - Project Coordinator Jacky Ho JH AE - Traffic Lead JS Jeff Suggett SN Soheil Nejatian City - Project Manager Carmen Caruso City - Planner, Development CC Cassie Jasinki City - Planner, Heritage CJ John Fantin City - CADD Supervisor JF Julia Zalecki JΖ City – Design Coordinator Lisa Lieu City - Traffic Modelling Lead LL Henrik Zbogar City - Transportation Planning HΖ Adam Davidson City - Transportation Planning AD Bishnu Parajuli City - Infrastructure Planning BP

City - Infrastructure Planning

MG

**Distribution:** Those Present

Mario Goolsarran

Hank Wang

Loui Pastor

City – Surveys & Mapping

Muhammad Imran

City – Traffic Operations

Kevin Minaker

City – Traffic Operations

City – Traffic Operations

City – Traffic Operation Planning

Linda Wu City – Transportation Planning

David Monaghan City – Traffic Planning
Mark Burkholder City – Real Estate

#### **RECORD OF MEETING**

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

#### Action By: Discussion:

#### 1 INTRODUCTION

Meeting attendees introduced themselves.

INFO The City of Brampton Project Manager is Soheil Nejatian and the AE Project Manager is Marko Paranosic.

#### 2 PROJECT OVERVIEW

#### 2.1 BACKGROUND

The City reviewed the background of the project.





December 17, 2018

- 2 -

#### Action By: Discussion:

The project is a Schedule "B" Municipal Class Environmental Assessment (EA) study for the extension of Denison Avenue, from Park Street to Mill Street. This project is identified in the City of Brampton Transportation Master Plan (2015) as a "short-term" network improvement targeted for implementation by 2021.

The City of Brampton has retained Associated Engineering (AE) to carry out the study.

Denison Avenue currently terminates at Park Street at the easterly end. It is a 2-lane urban cross-section with 50km/hr posted speed limit and a 23-26m ROW.

The extension of Denison Avenue is expected to improve local network transportation capacity as well as provide added connectivity for pedestrians and cyclists. As such the extension has been identified as a candidate for on-road cycle lanes.

#### 2.2 SCOPE OF WORK

The City confirmed the scope of work is as stated in the RFP with consideration to issues as discussed (and outlined below) during the meeting.

As part of Phase I of the study, AE will undertake a transportation and traffic analysis, including a multimodal approach. Subsequent to the transportation and traffic analysis being completed and reviewed with the City, a Problem Statement for the EA study will be developed.

AE The study will then review alternative solutions and perform technical studies and preliminary designs for the preferred solution before completing the environmental study report.

#### 2.3 KEY CONSIDERATIONS

The following was discussed as anticipated key considerations for the duration of the study.

#### 2.3.1 Official Plan Amendment for Future Sheridan-Ryerson University Campus

AE identified that the City is currently considering/studying an official plan amendment for an area that includes Denison Avenue as being re-zoned for university use.

The City confirmed that it is studying the amendment and the proposed campus would most likely be located near the northeast corner of Mill Street and Railroad Street.

AE/City Further to future discussions regarding City or AE responsibility for EMME modeling and traffic data, the proposed land use change within the study area and future trip generations will need to be

#### 2.3.2 45 Railroad Street Condominium Development

considered in the transportation/traffic assessment.

AE identified that the City has a development application for a condominium development on the 45 Railroad Street property.

The City confirmed the development application and indicated that the development has already received site plan approval for two (2) condominium buildings. Grading works have already begun on



December 17, 2018

- 3 -

#### Action By: Discussion:

site. A hard copy of the site plan was circulated at the meeting showing a proposed Denison Street extension (26m ROW) at the south end, through the current 36 Park Street and 47 Mill Street properties, connecting Park Street and Mill Street. The alignment for the extension was not continuous with Denison Avenue to the west of Park Street.

AE expressed concern that the alignment for Denison Avenue had already been established as part of site plan approval and not the EA study. As such, the EA study would be confined to examining alternatives for realigning Denison Avenue west of Park Street, if warranted, because the alignment between Park Street and Mill Street was set.

- City The City confirmed that the developer had completed a Traffic Impact Study for the project. The City will forward this study to AE for reference and use in the preparation of the transportation/traffic assessment.
- City The City also agreed to forward any site plans (in Cadd) and/or other technical studies and reports done for the site development to AE for reference and use in the Denison EA study.

#### 2.3.3 Heritage Buildings

City City confirmed 45 Railroad Street and 44 Mill Street are heritage buildings, and City will provide AE with the heritage information link.

#### 2.3.4 Real Estate

The City requested that any alignments and/or proposed solutions avoid residential property impacts to the extent possible.

#### 2.3.5 Orangeville-Brampton Railway Crossing

As part of the extension of Denison Avenue between Park Street and Mill Street, consideration will need to be given to the existing at-grade rail crossing of Denison, just west of Park Street. Realignment (if required) of Denison Avenue will require a relocated at-grade crossing.

Currently the railway has very light use with only approximately two train trips per week.

The City informed the meeting that there have been some discussions with regards to the City acquiring the Orangeville-Brampton Rail line for conversion to a trail, however those discussions are very preliminary, and the study should proceed as though an active rail crossing will be present for the foreseeable future.

- AE AE indicated that the at-grade crossing would be considered during the transportation and traffic analysis and any traffic, safety and/or design requirements for the crossing will be identified.
- City AE inquired whether the City had any board orders for the crossing. The City will investigate and provide any board orders to AE for review and use in the study.



December 17, 2018

- 4 -

#### Action By: Discussion:

ΑE

The Orangeville-Brampton Railway Corporation (OBRC) will be notified of the study as part of the Notice of Commencement mail-out and publication. AE will ensure that OBRC is regularly consulted with as the study and preliminary design progresses.

#### 2.3.6 Railroad Street Closure

The City described traffic back-ups on Railroad Street being a problem whenever a train is crossing the road just west of Mill Street.

The City indicated that they would like AE to include the closure of Railroad Street at Mill Street as a potential alternative for review as part of the transportation/traffic assessment. City staff suggested the closure as an idea that might help facilitate pedestrian and cyclist movements from the south to the existing GO Station north of Railroad Street.

AE AE will review the request and provide a response with regards to scope and feasibility at a transportation/traffic scoping meeting to be scheduled in January 2019.

#### 2.3.7 CADD Deliverables

The City advised AE that they will be moving to full use of the Bentley OpenRoads CADD/design software for all design projects in 2019. The Denison Avenue project can still be delivered using InRoads per the requirements in the RFP.

The City also advised AE that they are currently using the Bentley ProjectWise software for file sharing and collaboration on study/design projects. Again, it is left to AE's discretion on whether or not to utilize ProjectWise for the Denison Avenue study. If so the City would coordinate getting AE set up on the City's protocols and hosting.

AE AE will review internally and notify the City as soon as possible on whether they will adopt one or both new software programs for this study.

#### 3 PROJECT COMMUNICATION

#### 3.1 NOTICE OF STUDY COMMENCEMENT

AE anticipates the Notice of Study Commencement will be ready for publication in early January 2019. A Project Information Form will be submitted to the MECP in accordance with the streamlined EA guidelines (May 2018) with the Notice of Commencement attached.

#### 3.2 COMMUNICATION AND ISSUES MANAGEMENT PLAN

AE will prepare a Communications and Issues Management Plan as part of the study for the City's review and approval. AE anticipates having the draft plan prepared by early January 2019. The Communication and Issues Management Plan will outline a framework for consultations with the public, review agencies and stakeholders throughout the course of the study ensuring that the study process and study objectives are met and that any issues and/or concerns are properly noted, catalogued for inclusion in the study report and dealt with appropriately.



December 17, 2018

- 5 -

#### Action By: Discussion:

#### 3.3 INDIGENOUS CONSULTATION

AE will use ATRIS to develop a preliminary list of Indigenous communities that the study will need to contact. This list will be verified with the MECP as part of the study initiation process with MECP.

#### 3.4 TECHNICAL AGENCIES COMMITTEE (TAC)

City The City will provide AE with a list of persons expected to be part of the TAC for this study.

AE anticipates one meeting in August 2019 with the TAC prior to the PIC tentatively scheduled for September 2019.

#### 3.5 STAKEHOLDER GROUP

AE Upon receiving City's list of stakeholders, AE will coordinate with MECP to complete the list of stakeholders required for this project.

AE anticipates one meeting with the Stakeholder Group prior to PIC in August 2019.

#### 3.6 PROJECT TEAM MEETINGS

Project Team meetings will form the core method for the communication of study progress, findings and recommendations. AE anticipates that the first Project Team meeting will be scheduled for March 2019 to review the findings of the Transportation/Traffic Study and to review and discuss the proposed Problem Statement.

After this, Project Team meetings will be regularly scheduled up to the conclusion of the study.

#### 4 DISCUSSION

#### 4.1 UPDATED SCHEDULE

AE reviewed an updated schedule outline with the meeting. It was as follows;

- Notice of Commencement early January, 2019
- Draft Transportation Study mid-February, 2019
- Problem Statement mid-March, 2019
- Project Team Meeting #1 late March, 2019
- Stakeholder Group Meeting June 2019
- Public Information Centre September 2019
- Draft Environmental Project Report October 2019
- Final EPR and Notice of Study Completion December 2019

AE provided the City with an updated project schedule prior to the meeting for review and approval.

#### 4.2 TRANSPORTATION STUDY TASKS

#### 4.2.1 Updated Active Transportation Plan

AE City mentioned that an updated Active Transportation Plan will be coming out in early 2019. The City believes that active transportation concerns in the area will be a key factor in the success of any



December 17, 2018

-6-

#### Action By: Discussion:

solution and asked that AE consider the latest ATP recommendations in the study and preliminary design.

#### 4.2.2 Transportation/Traffic Study Tasks

AE reviewed with the meeting a summary of upcoming tasks related to the Transportation and Traffic Study:

ΑE

- Review background information (traffic and collision data, EMME model output, railway info, etc.)
- Confirm methodology with Brampton transportation staff
- Collect turning movement counts
- Field review
- Determine multimodal LOS (existing vs. proposed options)
- Determine traffic/safety impacts (existing vs. proposed options
- Prepare Transportation Report

#### 4.2.3 Traffic Turning Movement Counts

AE discussed with the City the optimum timing for obtaining traffic counts. There is some concern that counts taken in January/February may not provide an accurate reflection of pedestrian activity because of the cold weather. However, delaying the counts would impact the study schedule.

AE asked whether the City had any historical pedestrian counts that could be utilized or adjustment factors that could be applied to counts taken in winter.

The City indicated that they do have TMC for some of the intersections in the project area which they will forward to AE for use and reference in the study. There is no adjustment factor.

ΑE

It was agreed that ideally traffic counts would be done in the second week of January 2019, weather permitting. Should there be inclement weather that would affect traffic those days would be avoided. The City also suggested that the last week of January was typically exam week for schools in the area and should be avoided as well as student pedestrian counts would be depressed during this time as well.

#### 4.2.4 EMME/2 Modeling

In the RFP it was identified that the Consultant (AE) would be responsible for EMME/2 model updates and data extraction for this study.

The City indicated however that the GTA model currently being used is relatively new and complex. As such the City would be amenable to handling the EMME/2 work in-house, provided AE revises their scope of work to reflect this change.

City/AE

It was agreed that the City would provide AE with EMME/2 results and outputs (including traffic forecast of 2031 and 2041) for the study area and AE will review the available data.





December 17, 2018

ΑE

- 7 -

#### Action By: Discussion:

AE intends the EMME/2 data for use with Synchro or other micro-simulation traffic software to provide more localized analysis and results versus the EMME models broader (macro) level analysis.

Subsequent to a review of the EMME data provided by the City and an internal discussion, AE will schedule a meeting with City staff to review the scope of work and approach for the transportation and traffic reporting going forward.

#### 4.3 OTHER

#### 4.3.1 Data Requirements

City AE provided a list of data requirements to the City prior to the meeting which the City indicated it will follow up on. There were also many additional data requests made during the course of this meeting's discussions that the City will follow up on.

Minutes prepared by, Associated Engineering (Ontario) Limited

Marko Paranosic, P.Eng. PE

Menho Parenoria

Project Manager, Infrastructure



Date: February 6, 2019 20185301.PM.04.01 File:

Time: 2:00PM Page:

Denison Avenue Extension Class EA Study Project:

Project Initiation Meeting - City of Brampton Subject:

Client: City of Brampton (City)

Location: City of Brampton - Williams Parkway Operations Centre,

Bdrm WPOC Admin-2A

Present: Marko Paranosic AE - Project Manager MP

> AE - Traffic Lead JS Jeff Suggett AE - Traffic Engineer Haytham Sadeq HS Soheil Nejatian City - Project Manager SN Mario Goolsarran City - Infrastructure Planning MG LW

Linda Wu

City – Transportation Planner

#### RECORD OF MEETING

Those Present Distribution:

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

#### Discussion: **Action By:**

#### 1 INTRODUCTION

**INFO** Meeting attendees introduced themselves.

#### 2 **MEETING OVERVIEW**

**INFO** This meeting was in follow-up to the City's response (Feb 4, 2019) to AE's proposed methodology and revised scope of work submission (Jan 29, 2019) and intended to review data requirements and discuss any outstanding methodology questions or concerns in advance of AE proceeding with the traffic analysis work for the Denison Avenue Extension study.

#### **EMME OUTPUTS**

EMME outputs will be provided by the City in pdf format (not excel) for years 2011, 2031 and 2041, AM/PM peaks.

2021 outputs will not be provided. 2021 is no longer considered a horizon year for modeling.

EMME outputs will include link volumes but not turning movement volumes at intersections.

ΑE AE was asked to provide the City with an email request detailing the exact outputs required. The email

request can be directed to LW, but with copy to SN.

AE asked if Park Street and/or Mill Street were coded in the current model. The City said they were

not.

City/AE

AE asked if the development at 45 Railroad Street had been incorporated into the current model for trip generation. The City will confirm whether it has or not. If it has not then AE will be required to account for additional trip generations in the Synchro model for the area.





Subject: Project Initiation Meeting February 6, 2019December 17, 2018

- 2 -

#### Action By: Discussion:

The City will provide AE with transit ridership data from the base model for public transportation consideration.

#### 4 TRAFFIC VOLUMES AND GROWTH RATES

Area Turning Movement Counts have already been conducted.

AE will review the EMME model and outputs to estimate the annual growth rates on major links in the area and use that annual growth rate for application to the 2019 turning movement counts at area intersections that was obtained recently.

Discussion regarding use of EMME model growth rates. It is possible that the 20-year separation for the two output years (2011 and 2031) would not provide ideal growth curves when extrapolated between data for the two years.

AE/City

AE will compare actual 2019 traffic count data received from sub-consultant to the 2019 traffic volumes that would be predicted using the 2011-2031 growth rates. If the 2019 data sets differ significantly a follow-up discussion will be had with the City regarding adjusting the growth rates for use with the Synchro model based on actual 2011-2019 growth rates.

Data will also be compared to 2015 traffic count data used in the 45 Railroad Street development TIS.

#### 5 TRAFFIC ANALYSIS

AE intends to do all traffic analysis for the local network using Synchro.

The updated network with 2019 as a base year will be sent to the City before proceeding to analysis of the future horizon years.

AE intends that trips will be manually distributed through the local network for scenarios wherein Denison Avenue is extended and area trips re-assigned to Denison Avenue.

ΑE

City asked that when presenting traffic data AE will need to look at existing conditions and ensure that the Do-Nothing scenario is captured for any reporting as a point of comparison.

Heavy truck traffic/movements are considered minimal for this area and heavy traffic percentages will be estimated from the conducted traffic counts 2019

MMLOS Ottawa guidelines for will be used in the analysis.

#### 6 SAFETY ASSESSMENT

JS confirmed that an area safety assessment was done on Monday, February 4, 2019. Of note, intersection of Mill Street/Railroad Street had heavy pedestrian traffic (related to GO Station). JS noted that the condition of the sidewalk in the area should be brought to the attention of City operations.

#### 7 DELIVERABLES



Subject: Project Initiation Meeting February 6, 2019December 17, 2018

- 3 -

Action By: Discussion:

City would prefer a separate stand-alone safety assessment report.

City would prefer a single report for traffic/transportation assessments of existing and future conditions

with suggested improvements.

CITY City will provide a sample traffic/transportation assessment report to be used as a template for AE's

reporting.

8 OTHER

AE SN asked if AE could provide a spreadsheet listing deliverables and expected delivery dates for

tracking purposes.

Minutes prepared by, Associated Engineering (Ontario) Limited

Marko Paranosic, P.Eng. PE

Menho Farenosia

Project Manager, Infrastructure



**Date:** July 23, 2019 **File:** 20185301.PM.04.01

**Time:** 10:30 am **Page:** 1 of 6

**Project:** Denison Avenue Extension Class EA Study

**Subject:** Project Team Meeting 02

**Client:** City of Brampton (City)

**Location:** City of Brampton - Williams Parkway Operations Centre,

Bdrm WPOC Admin-2A

**Present:** Marko Paranosic AE - Project Manager

AE - Traffic Lead Jeff Suggett Soheil Nejatian City - Project Manager City - Planner, Development Carmen Caruso **Erin Smith** City - Planner, Heritage Lisa Lieu City - Traffic Modelling Lead Bishnu Parajuli City - Infrastructure Planning Mario Goolsarran City - Infrastructure Planning Linda Wu City - Transportation Planning

David Monaghan City - Traffic Planning
Muhammad Imran City - Traffic Operations
Loui Pastor City - Surveys & Mapping

Tim Kocialek City - Engineering

Brian Lakeman City - Transportation Planning

**Distribution:** Those Present

Hank Wang City -Transit Planning
John Fantin City - CADD Supervisor

Henrik Zbogar City - Transportation Planning

Cengiz Cakmak City - Engineering

Maggie Liu City – Infrastructure Planning Cassandra Jasinksi City – Planner, Heritage

#### **RECORD OF MEETING**

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

#### Action By: Discussion:

A copy of the presentation made at the Project Team meeting is attached to these minutes for reference.

#### 1 INTRODUCTION

Meeting attendees introduced themselves.

INFO The City of Brampton Project Manager is Soheil Nejatian and the AE Project Manager is Marko Paranosic.

#### 2 REVIEW OF PROJECT STATUS

#### 2.1 DESCRIPTION





July 23, 2019

- 2 -

#### Action By: Discussion:

The City/AE provided an overview of the project scope as was described at the Project Initiation Meeting in December 2018.

The project is a Schedule "B" Municipal Class Environmental Assessment (EA) study for the extension of Denison Avenue, from Park Street to Mill Street. This project is identified in the City of Brampton Transportation Master Plan (2015) as a "short-term" network improvement targeted for implementation by 2021.

Denison Avenue currently terminates at Park Street at the easterly end. It is a 2-lane urban cross-section with 50km/hr posted speed limit and a 23-26m ROW.

#### 2.2 COMMUNICATIONS

AE provided an overview of communications to date, including but not limited to the following;

- Notice of Study Commencement with Project Initiation Letter and Response Form (MECP, stakeholders, residents); and
- First Nations (based on list of First Nations as provided by MECP);

Of the thirty-four letters sent to residents only eight residents responded to the project notice.

#### 2.3 BACKGROUND STUDIES COMPLETED TO DATE

#### 2.3.1 Transportation Analysis Report

AE reviewed the findings of the Transportation Analysis looking at Denison Avenue and the local transportation network.

Summarizing the main points;

- Existing vehicular traffic in the local area is relatively low and not expected to grow significantly despite accounting for future land developments;
- Only one area intersection (Nelson and Mill Street) was identified as having any existing operational problems for vehicular traffic;
- All area links were deficient (LOS F) when the pedestrian level of service (PLOS) was looked at, owing largely to the relative narrowness of the existing sidewalks;
- A traffic analysis was made for the horizon years 2031 and 2041 looking at scenarios with and without a hypothetical Denison Avenue Extension. The Extension provides no significant additional capacity to the local transportation network.

#### 2.3.2 Safety Assessment Report

AE reviewed the findings of the Safety Assessment for the Denison Avenue corridor.

Summarizing the main points;

There are concerns with the proximity of the proposed 45 Railroad Street development access
and the proposed GO Transit parking lot entrance, both onto Park Street and within 30m of the
Orangeville-Brampton Rail (OBR) line at-grade crossing of Denison Avenue west of Park Street;



July 23, 2019

- 3 -

#### Action By: Discussion:

- The existing OBR line at-grade crossing has identifiable deficiencies including, but not limited to, sightlines given the lack of signage, degradation of the existing pavement structure on the approaches, and uneven/broken sidewalks on approach to the crossing;
- Any new crossing of the OBR line must conform to Transport Canada guidelines for 70-110 deg angle.

#### 2.3.3 Stage I Archaeological Assessment

AE reviewed the findings of the Stage I Archaeological Assessment for the study area surrounding the Denison Avenue corridor.

No sites were identified as having significant concerns. A small number of properties were identified as candidates for Stage II investigations should the preferred alternative and design concepts impact them.

#### 2.3.4 Built Cultural Heritage Assessment

AE reviewed the findings of the Built Cultural Heritage Assessment for the study area surrounding the Denison Avenue corridor.

Three area properties were identified as being included in the City's registry for Cultural Heritage Resources and another seven were identified as Properties of Interest.

In addition the 45 Railroad Street façade is being preserved for incorporation into the final building architecture.

#### 2.3.5 Pending Technical Reports/Studies

The following reports are either in progress or have not been started pending decisions with regards to the preferred Design Concept;

- Natural Environment Assessment
- Geotechnical Investigation
- SWM/Drainage Report
- Socio-Economic Report

#### 3 REVIEW OF PROPOSED PROBLEM STATEMENT

The following draft Problem and Opportunity statement was discussed with the Project Team:

"To further explore the recommendation as provided in the City's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street with the following goals;

- Improving neighbourhood connectivity and moving people safely and efficiently through the Brampton downtown core, including new active transportation infrastructure;
- Accommodating existing and future area development and changes to land use;
- Meeting area transportation network demands of increasing population and growth; and,
- Improving the existing Denison Avenue at-grade crossing of the Orangeville-Brampton Rail line."



July 23, 2019

- 4 -

#### Action By: Discussion:

ΑE

AE was asked to amend the Problem Statement to include as one of the goals "the conservation of existing cultural resources in the local area".

#### 4 REVIEW OF ALTERNATIVE SOLUTIONS

The three alternative solutions to address the Problem Statement were reviewed for discussion;

- Alternative #1 "Do Nothing"
- Alternative #2 Improvements to Parallel Routes
- Alternative #3 Extension of Denison Avenue including Active Transportation Improvements

Copies of the Alternatives Solutions matrices were provided for Project Team members to review during the meeting.

There were no comments or concerns regarding the selection of <u>Alternative #3</u> as the <u>Preferred</u> Solution.

#### 5 REVIEW OF ALTERNATIVE DESIGN CONCEPTS FOR THE PREFERRED SOLUTION

- Option 1 Extension at South End of 45 Railroad Street
- Option 2 Extension at South End of 45 Railroad Street with Realignment west of Park Street
- Option 3 Extension through Middle of 45 Railroad Street
- Option 4 Extension at South End of 45 Railroad Street with Realignment west of Park Street and Rail Line Conversion to Multi-Use Trail

#### 5.1 TYPICAL CROSS-SECTION FOR DENISON AVENUE EXTENSION

The standard City of Brampton cross-section for a Minor Collector roadway with a 23m ROW was used in the development of all design options. Denison Avenue is designated as a "shared bike facility" in the Active Transportation Plan and as such on-road cycle lanes (1.5m width) have been included in the designs for each Option.

#### 5.2 45 RAILROAD STREET CONDOMINIUMS (BLADE DEVELOPMENT)

As revealed at the Project Initiation Meeting the 45 Railroad Street property is currently being developed with site plans already approved and including a future Denison Avenue extension shown at the south end of the property.

The Options as presented used the future Denison Avenue Extension layout that was provided to AE and assumed to be correct and representative of the latest designs that the site development will be tying into.

City The City will share all engineering drawings available for AE's use in preliminary design.

#### 5.3 IMPACTS TO 45 MILL STREET AND 34 PARK STREET

45 Mill Street is shown as a displacement in Options #1, #2 and #4 based on the current Blade Development road alignment and a standard Minor Collector roadway cross-section.



July 23, 2019

- 5 -

#### Action By: Discussion:

34 Park Street is shown as having direct property impacts in Options #1, #2 and #4 based on the current Blade Development road alignment and a standard Minor Collector roadway cross-section.

There is limited opportunity to shift the roadway north to mitigate impacts to 45 Mill Street property due to the design completed/construction in progress and the grade tie-ins and landscaping plans already established and approved.

There was discussion on whether sidewalk was warranted or needed on both sides of the extension roadway.

City The City will confirm if the Blade Development will be installing sidewalks on the north side of the future roadway as part of their site development work.

Based on pedestrian level of service (PLOS) concerns identified in the Transportation Study it was decided that sidewalks should be incorporated into the design on both sides if feasible with the mandated AODA compliant widths.

Some discussion amongst the Project Team regarding the need for a 23m ROW and whether Denison Avenue (at the connection to Hagger) is in fact a 20m ROW. There was consensus to show the 23m ROW but not to propose any imminent takings based on where the 23m limit lands.

Sharrow lanes for bikes/cars were ruled out to eliminate the on-road cycle lanes.

### 5.4 REVISIONS TO THE PROPOSED DENISON AVENUE CROSS-SECTION (FOR OPTIONS #1, #2 AND #4)

AE AE will revise the proposed cross-section to include the following;

- Curb-side sidewalk (0.5m offset from back of curb) along the south edge of the new roadway, thereby removing the 3.5m boulevard width
- Consideration of 3.0m wide lanes, thereby saving 1m of roadway (vs. the 3.5m standard lane widths used in the Options)
- 23m ROW width will be shown as per standard requirements, however any property takings to
  accommodate the 23m ROW will be labeled as "for future consideration" and be noted should
  any future development applications for properties to the south be brought forward

#### 5.5 MITIGATION FOR GO TRANSIT ENTRANCE - OPTION #1

The Project Team discussed mitigation measures for the proximity of the GO Transit entrance and rear entrance of the Blade Development to the existing OBR at-grade crossing that remains in Option #1.

A stop sign will be installed at the crossing within weeks as part of a Transport Canada board order for the City of Brampton.

AE Signalization of the OBR crossing can be proposed to mitigate the issues with proximity to the accesses. The acceptability of this measure will be confirmed with Transport Canada.

#### 5.6 POTENTIAL PHASING OR AMENDMENTS TO OPTION #4



July 23, 2019

- 6 -

#### Action By: Discussion:

Discussion regarding showing Option #4 as phases; the extension at the south end of the 45 Railroad Street property (short term) and the realignment west of Park Street (long term).

Members of the team had reservations about showing stakeholders and/or the public Option #4 because there is no timeline of when, if ever, the rail line might be converted to a multi-use trail.

Members of the team asked if Option #4 could be shown without the multi-use trail and a new crossing of the rail line, but understanding that the crossing is not compliant with Transport Canada requirements regarding acceptable skew angles.

AE suggested that a meeting with Transport Canada and OBRAG be arranged to determine if both parties might be amenable to a design exception for the crossing skew angle at this location given the low vehicular and rail traffic numbers.

AE AE will attempt to set up the meeting however the City did not want the timing of the meeting to disrupt the schedule going forward.

#### 5.7 PREFERRED DESIGN CONCEPT FOR THE DENISON AVENUE EXTENSION

The Project Team decided to proceed with the following;

- Option #1 be shown as the preferred design concept for the extension; and,
- That Option #4 be amended to not show the multi-use trail but show the non-compliant atgrade rail crossing.

#### 6 NEXT STEPS

AE/City

- AE will attempt to convene a meeting with Transport Canada and OBRAG for August 2019
- A Technical Advisory Committee (TAC) meeting will be held at the city the last week of August 2019
- A Stakeholders Group (SHG) meeting will be held in early to mid-September 2019
- A Public Information Centre to be held after the TAC and SHG meetings in mid- to late-September 2019

Minutes prepared by, Associated Engineering (Ontario) Limited

Marko Paranosic, P.Eng. PE Project Manager, Infrastructure

Manho Farenoria



# Public Works & Engineering Capital Works

#### **MEETING AGENDA**

Project Team Meeting 02

Environmental Assessment Study for Denison Avenue Extension From Park Street to Mill Street

Tuesday, July 23, 2019 @ 10:30 AM Boardroom 2A – 1975 Williams Parkway, City of Brampton

- 1. Introductions (10:30AM)
- 2. Review of Project Status (10:35AM)
  - ✓ Description
  - ✓ Communications; Stakeholders, First Nations, Local Residents
  - ✓ Background Studies completed to date
    - Overview of Transportation Analysis Report
    - Overview of Safety Assessment Report
    - o Overview of Archaeology/Built Cultural Heritage Reports
- 3. Review of Proposed Problem Statement (10:50AM)
- 4. Review of Alternative Solutions (10:55AM)
  - ✓ Alternative 1 "Do-Nothing"
  - ✓ Alternative 2 Improvements to Parallel Routes
  - ✓ Alternative 3 Extension of Denison Avenue including Active Transportation improvements
  - ✓ Selection of Preferred Solution (Alternative 3)
- 5. Review of Alternative Design Concepts for Preferred Solution (11:05AM)
  - ✓ Option 1 Extension at South End of 45 Railroad Street
  - ✓ Option 2 Extension at South End of 45 Railroad Street with Realignment west of Park Street
  - ✓ Option 3 Extension through Middle of 45 Railroad Street
  - ✓ Option 4 Extension at South End of 45 Railroad Street with Realignment west of Park Street and Rail Line Conversion to Multi-Use Trail
  - ✓ Selection of Preferred Design Alternative
- 6. Next Steps (11:25AM)
  - ✓ Public Meeting
  - ✓ Stakeholder/TACC Meetings
  - ✓ Preliminary Detailed Design
- 7. Other Items/Discussion (11:30AM)
- 8. End Meeting (12:00PM)

# Environmental Assessment Study Denison Avenue Extension, Park St. to Mill St.

City of Brampton





Project Team Meeting No. 2 Tuesday, July 23<sup>rd</sup>, 2019



# **Agenda**

- 1. Introductions (10:30AM)
- 2. Review of Project Status (10:35AM)
  - Description
  - Communications; Stakeholders, First Nations, Local Residents
  - Background Studies completed to date
- 3. Review of Proposed Problem Statement (10:50AM)
- 4. Review of Alternative Solutions (10:55AM)
- 5. Review of Alternative Design Concepts for Preferred Solution (11:05AM)
- 6. Next Steps (11:25AM)
- 7. Other Items/Discussion (11:30AM)
- 8. End Meeting (12:00PM)



# 1. Review of Project Status

Description

Communications; Stakeholders, First Nations, Local Residents Background Studies Completed to Date

# **Description**

### **Background:**

- City's 2015 Transportation Master Plan recommended an Extension of Denison from Park Street to Mill Street by 2021
- Denison is existing east-west collector, ROW 23-26m

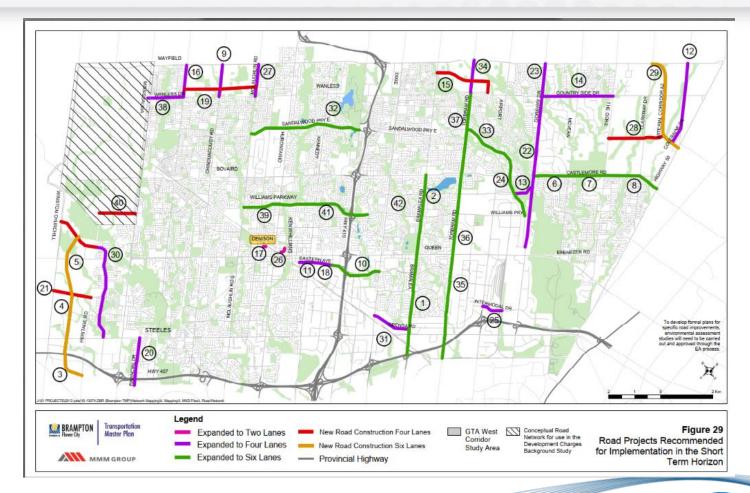
### Scope:

- Schedule "B" Environmental Assessment Study, Phase I - II
- Detailed Transportation/Traffic Analysis to support improvements
- Background Technical Studies to support EA process
- Preliminary Design (30%)





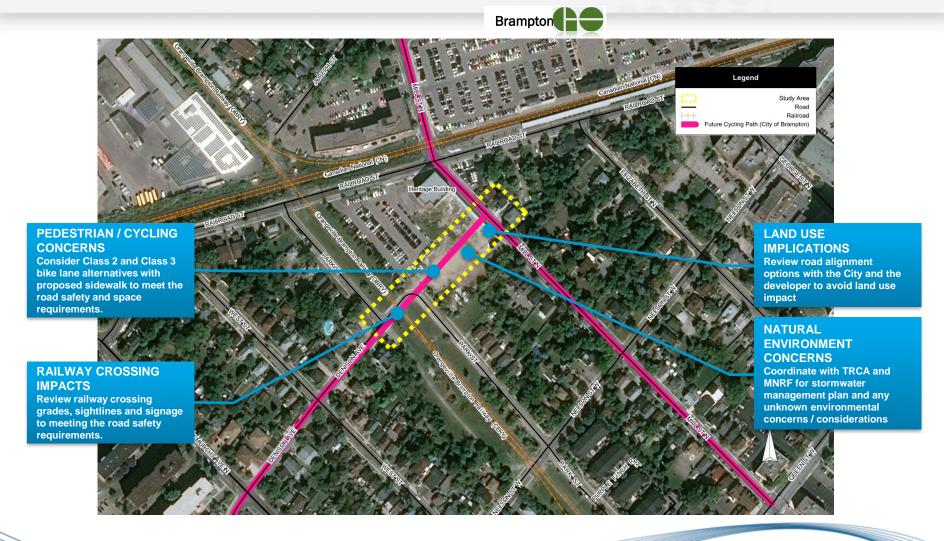
# **Transportation Master Plan**







### **Key Considerations (from Project Initiation Meeting)**





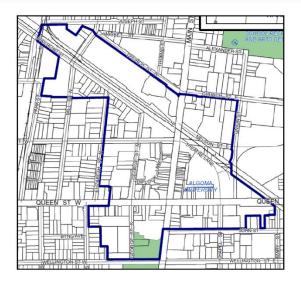
### **Land Uses**

### **City of Brampton Initiated Official Plan Amendment**

- South of Church St. & Joseph St., East of Union St., North of John St. & Wellington St. W, West of Elizabeth St. & Park St.
- To rezone an area within the Downtown Brampton Secondary Plan (Area 7) to permit a University use.

# **Application to Amend Zoning By-Law** (Approved) - 2015

 Development of 26-Storey 387 mixed-use condominium apartment building with commercial uses







# Communications, Stakeholders, First Nations and Local Residents

- Notices of Study Commencement & Initiation Letters sent out in late January 2019 with Response Forms
- Stakeholders included;
  - Utilities
  - Provincial Agencies (GO Transit, MNRF, MECP, etc.);
  - Transport Canada;
  - Peel Region, TRCA; and,
  - Orangeville-Brampton Rail Access Group (OBRAG)
- Local Residents, Area Businesses
- Project Information Form submitted with Notice of Commencement to MECP per new EA process
- First Nations contact list confirmed by MECP for list of Indigenous groups potentially impacted
- Modest Response from Residents, Stakeholders



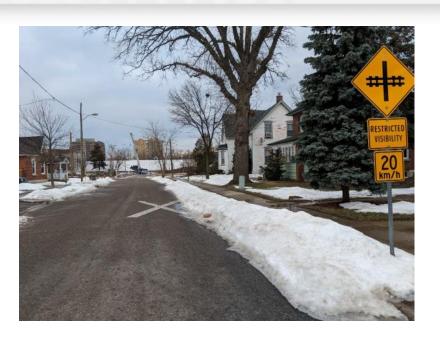
# **Background Studies Completed to Date**

### **Completed:**

- Transportation Study
- Safety Review
- Stage I Archaeological Assessment
- Built-Cultural Heritage Assessment

### **Pending/In-Progress:**

- Natural Environment Assessment
- Geotechnical Investigation
- SWM/Drainage Report
- Socio-Economic Report

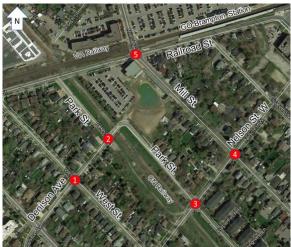




# **Background Studies – Transportation Study**

- City's EMME data in conjunction with January 2019 traffic turning movement counts;
- 2031 & 2041 Horizon Years;
- Captured 45 Railroad Street development and other future land use changes;
- MMLOS, PLOS, ALOS and BLOS analysis done for existing and future conditions;
- Existing and Future PLOS = F for all segments looked at;







# **Background Studies – Transportation Study**

Table 5-1: Summary MMLOS Analysis Results for the Study Intersections

Table 3-1. Sulfillary minLOS Allarysis Results for the Study intersections																
#	Intersection	Existing Conditions			Future Conditions 2031 (without Denison Ave Ext)			Future Conditions 2031 (with Denison Ave Ext)			Future Conditions 2041 (without Denison Ave Ext)			Future Conditions 2041 (with Denison Ave Ext)		
		ALOS (AMPM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS
1	West Street @ Denison Avenue	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В
2	Park Street @ Denison Avenue	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В
3	Park Street @ Nelson Street W	A/A	В	В	A/A	В	В	A/A	В	В	C/A	В	В	A/A	В	В
4	Mill Street N @ Nelson Street W	B/B	В	В	E/D	В	В	C/D	В	В	F/F	В	В	F/F	В	В
5	Mill Street N @ Railroad Street	A/A	В	В	D/A	В	В	D/A	В	В	F/E	В	В	F/E	В	В
6	Denison Avenue @ Park Street	N/A	N/A	N/A	N/A	N/A	N/A	A/A	В	В	N/A	N/A	N/A	A/A	В	В
7	Denison Avenue @ Mill Street	N/A	N/A	N/A	N/A	N/A	N/A	A/A	В	В	N/A	N/A	N/A	A/A	В	В



# **Background Studies – Transportation Study**

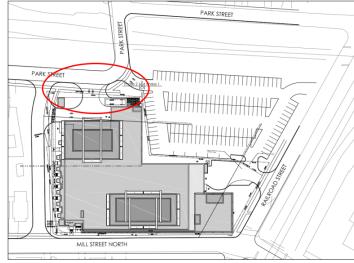
Table 5-2: Summary MMLOS Analysis Results for the Study Segments

rubic 3-2. Summary mine 03 Analysis results for the Study Segments															
Road Name	Existing Conditions			Future Conditions 2031 (without Denison Ave Ext)			Future Conditions 2031 (with Denison Ave Ext)			Future Conditions 2041 (without Denison Ave Ext)			Future Conditions 2041 (with Denison Ave Ext)		
	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS
Denison Avenue	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F	B/A	В	F
Park Street	B/B	В	F	C/C	В	F	C/C	В	F	F/D	В	F	C/C	В	F
Railroad Street	C/C	В	F	F/F	В	F	F/F	В	F	F/F	В	F	F/F	В	F
Mill Street	B/B	В	F	D/D	В	F	C/C	В	F	F/F	В	F	F/F	В	F
West Street	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F
Nelson Street	B/B	В	F	F/E	В	F	D/D	В	F	F/F	В	F	F/F	В	F



# **Background Studies – Safety Review**

- Field Review done in February 2019;
- Concerns with existing sidewalk widths and conditions in study area;
- Proposed 45 Railroad Street
   Development and GO Transit parking
   lot access onto Park Street
- Condition of existing at-grade OBR line crossing of Denison Avenue (location, skew, approaches, proximity to accesses);

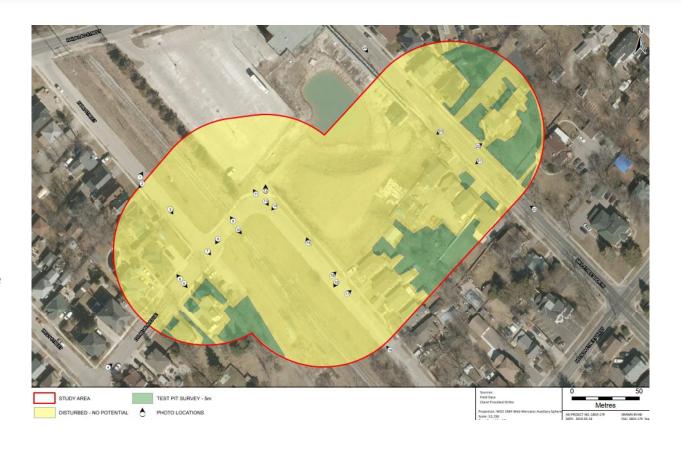






## **Background Studies – Archaeological Assessment**

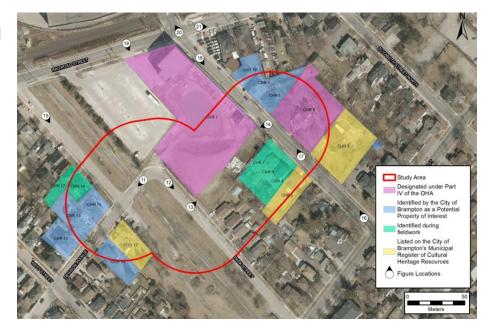
- Majority of sites within study area – no potential impact
- Some would require additional (Stage II) assessment depending on preferred alternative





## **Background Studies – Built Cultural Heritage**

- 3 area properties identified as being on City's registry for Cultural Heritage Resources
- 7 area properties identified as properties of interest
- 45 Railroad Street façade along Mill Street being preserved currently







# **Problem & Opportunity Statement**

### **Proposed Problem and Opportunity Statement:**

"To further explore the recommendation as provided in the City's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street with the following goals;

- Improving neighbourhood connectivity and moving people safely and efficiently through the Brampton downtown core, including new active transportation infrastructure;
- Accommodating existing and future area development and changes to land use;
- Meeting area transportation network demands of increasing population and growth; and,
- Improving the existing Denison Avenue at-grade crossing of the Orangeville-Brampton Rail line."



# 3. Review of Alternative Solutions

Alternative #1 - "Do Nothing"

Alternative #2 – Improvements to Parallel Routes

Alternative #3 – Extension of Denison Avenue Including Active
Transportation Improvements

### **Review of Alternative Solutions**

### Alternative #1 – "Do-Nothing"

 Maintain Denison Avenue/Park Street/Mill Street configuration with no improvements other than regular maintenance

### Alternative #2 – Improve Parallel Routes

 Add capacity to adjacent parallel roads such as Railroad Street and/or Nelson Street

# Alternative #3 – Extension of Denison Avenue Including Active Transportation Improvements

 Construct an extension of Denison Avenue between Park Street and Mill Street with active transportation infrastructure (multi-use trail, cycle lanes, sidewalks) to support pedestrian and cyclist modes of transportation



### **Review of Alternative Solutions**

# Alternative #3 – Extension of Denison Avenue Including Active Transportation Improvements

Preferred Solution

	Alternative #1	Alternative #2	Alternative #3		
	"Do-Nothing"	Improve Parallel Routes	Extension of Denison Avenue Roadway including Active Transportation Improvements		
	laintain Denison Avenue/Park Street/Mill Street with no improvements other than egular maintenance	Add capacity to adjacent parallel roads (Railroad Street, Nelson Street)  Construction of an extension of Denison Avenue between Park Street at transportation infrastructure to support pedestrian and cyclist modes of			
Г	Not Preferred	Not Preferred	Preferred		
F	Eliminated from further consideration	Eliminated from further consideration	Recommended as a Preferred Solution		
1	Is not consistent with recommendations in the City of Brampton's Master	Is not consistent with recommendations in the City of Brampton's Master	Complies with aspects of the City's Master Transportation Plan and goal of improving		
	Transportation Plan and goal of improving neighbourhood connections, active transportation facilities and connections to local transit infrastructure	Transportation Plan and goal of improving neighbourhood connections, active transportation facilities and connections to local transit infrastructure	neighbourhood connections, active transportation facilities and additional local network transportation capacity		

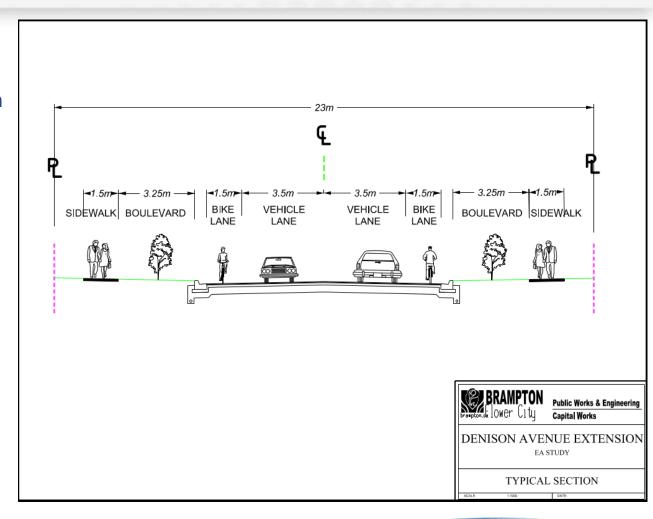


# 4. Review of Alternative Design Concepts for Extension of Denison Avenue

- Option # 1 Extension at South End of 45 Railroad Street Development
- Option #2 Extension at South End of 45 Railroad Street with Realignment West of Park Street
- Option #3 Extension through Middle of 45 Railroad Street property
- Option #4 Extension at South End of 45 Railroad Street with Realignment West of Park Street and OBR Line Conversion to Multi-Use Trail

### **Alternative Design Concepts - Typical Section**

- 23m ROW
- Meets City of Brampton guidelines for a Minor Collector Roadway

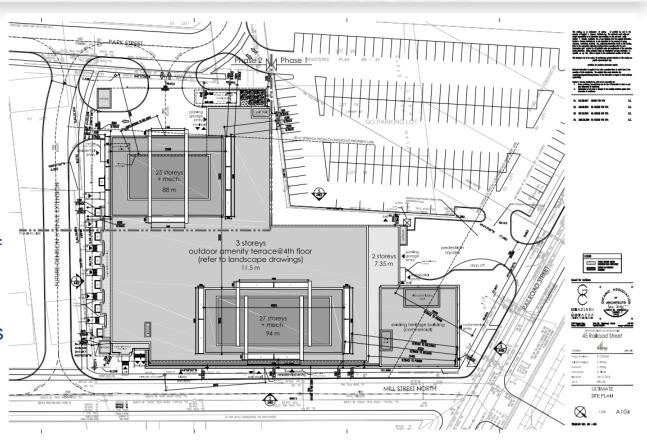






### **Alternative Design Concepts - 45 Railroad Street**

- Future Denison Avenue Extension Alignment shown as approved
- Located at south end of the 45 Railroad Street development, discontinuous from Denison Avenue west of Park Street
- Does not account for 23m ROW requirements nor sidewalk
- Proposed accesses onto Park Street are safety concerns







- Utilizes proposed

   (approved) extension of
   Denison Avenue at
   south end of 45

   Railroad Street;
- Impacts to 34 Park Street and 45 Mill Street;
- Concerns about accesses onto Park Street, existing Denison to Park curve, remain

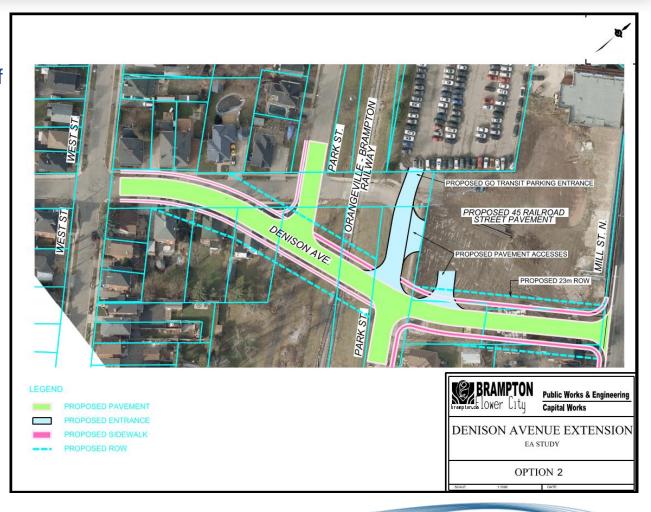




- Utilizes proposed

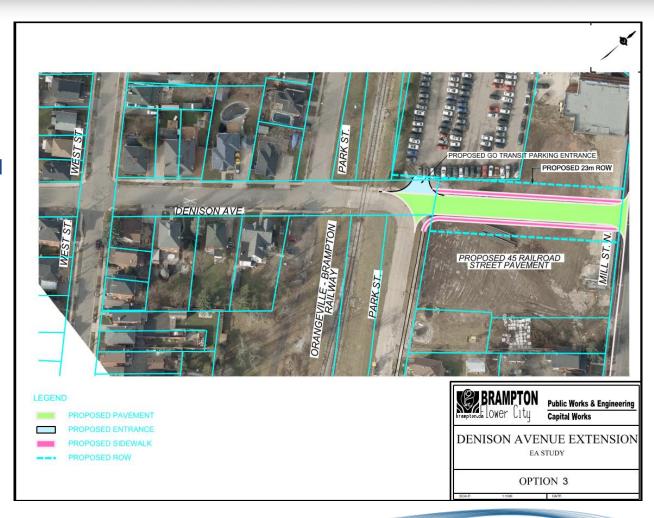
   (approved) extension of
   Denison Avenue at
   south end of 45

   Railroad Street;
- Realigns Denison west of Park for better flow;
- Realignment over OBR line restricted to 70-110 deg angle (Transport Canada)
- Displaces 4 homes, some identified as cultural heritage considerations



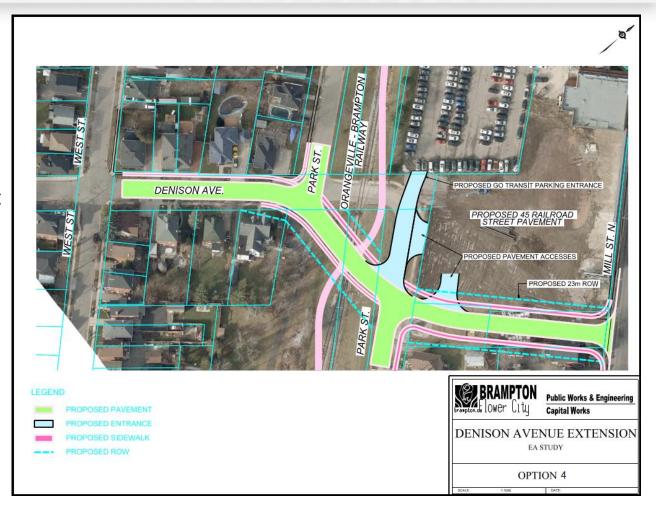


- Provides a more "typical" extension alignment
- Major impact to proposed 45 Railroad Street Development





- Utilizes proposed (approved) extension of Denison Avenue at south end of 45 Railroad Street;
- Realigns Denison west of Park for better flow;
- Assumes future conversion of OBR line to multi-use trail thereby eliminating skew angle restrictions in Option #2





### **Review of Alternatives Design Concepts**

	Option #1	Option #2	Option #3	Option #4	
	Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)	
	Preferred (Interim Solution)	Not Preferred	Not Preferred	Most Preferred (Ultimate Solution)	
	<ul> <li>Option #1 provides an improvement on neighbourhood connectivity, active transportation facilities and access while avoiding major impacts to existing residential properties and/or proposed developments. However, concerns with the Denison alignment west of Park Street are not addressed and improve</li> </ul>	Option #2 provides improvement on neighbourhood connectivity, active transportation facility and access. However, the identified impacts to existing residential properties and the Orangeville-Brampton rail line at-grade crossing are significant and a significant cost. As such, this option is not preferred.	Option #3 provides improvement on neighbourhood connectivity, active transportation facility and access. Option #4 also represents the ideal alignment for the Denison Avenue Extension. However, the identified impact to the proposed 45 Railroad Street development would be significant and require a complete redesign of that project at significant expense.	Option #4 provides improvement on neighbourhood connectivity, active transportation facilities and access. The realignment of Denison Avenue west of Park Street would meet minimum design criteria while avoiding residential property impacts and not affecting the 45 Railroad Street development. This option is most preferred. Subject to	
Ī	)*C			er .	
				ECOSTAL C	
	BRAMTON PAIR With a Expiriting Department of	BRANTON PARE Mote & Engine Personal Secretary Secre	PARTICIPATION AND ADMINISTRATION AND ADMINISTRATION AND ADMINISTRATION ADMINISTRA	BRAINTON FAIR MALE Departure Committee Committ	
	PRINCES CHINE  ENSORY  OPTION 1-0	MATERIAL DESCRIPTION OPTION 2	HISTORY STATES  OPTION 3	#BUTTLED HORS  OPTION 4  OPTION 4	



# 5. Next Steps

Public Meeting
Stakeholder/TACC Meetings
Preliminary Detailed Design

### Schedule

#### 2019 – Key Benchmarks and Deliverables

- Stakeholder and TACC Group Meetings August 2019
- Public Information Centre September 2019
- Draft Environmental Project Report October 2019
- Final EPR and Notice of Study Completion December 2019







# 5. Other Items



# EVALUATION OF EXTENSION ALTERNATIVE PLANNING SOLUTIONS Denison Avenue Extension Class EA Study

Project No. 2018-048

#### Legend

Score	Impact Ranking Scale
0	High Impact
•	Medium Impact
•	Low Impact/Neutral After Mitigation
•	No Adverse Impacts for this Criterion
•	Beneficial Imapct/Ideal Conditions

Score	Impact Ranking Scale
0	Least Preferred (Highest Impact)
•	<b>A</b>
•	
•	•
•	Most Preferred
	(Lowest Impact)

	Potential Impacts			Alternative Solutions	
	FO	iciniai iiripacis	Alternative #1 Alternative #2		Alternative #3
			"Do-Nothing"	Improve Parallel Routes	Extension of Denison Avenue Roadway including Active Transportation Improvements
Description			Maintain Denison Avenue/Park Street/Mill Street with no improvements other than regular maintenance	Add capacity to adjacent parallel roads (Railroad Street, Nelson Street)	Construction of an extension of Denison Avenue between Park Street and Mill Street and active transportation infrastructure to support pedestrian and cyclist modes of transportation.
		Potential Impacts on			•
न्न	1.1	1 Terrestrial and/or Aquatic Features (proximity to habitat features)	No Impacts	Impacts would be dependent on design of parallel road improvements.	Impacts would be conditional on design of Denison Avenue extension alternatives.
Natural		Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Wildlife Habitat (SWH)			
Z	1.2		No Impacts	Impacts would be dependent on design of parallel road improvements.	Impacts would be conditional on design of Denison Avenue extension alternatives.
		Property Impacts (Existing Residential, Commercial and/or Industrial Properties)			•
	2.1		No Impacts	<ul> <li>Minor impacts dependent on the scale of improvements implemented on parallel roads</li> </ul>	Impacts dependent on design alternatives for this solution.
		Impact to Future Development Plans	•	•	•
	2.2		No Impacts	No anticipated impacts	Impacts dependent on design alternatives for this solution.
			0	$\bigcirc$	
Social/Economic	2.3	Consistency with Planning Policies	Not consistent with City of Brampton 2015 Transportation Master Plan or Official Plan	Not consistent with City of Brampton 2015 Transportation Master Plan or Official Plan	<ul> <li>Consistent with the City of Brampton's 2015 Transportation Master Plan recommendation to extend Denison Avenue between Park Street and Mill Street.</li> <li>Consistent with other City of Brampton policies providing infrastructure that supports active transportation, livable communities and moving people and goods including the Official Plan, Brampton Vision 2040 and the City's Active Transportation Master Plan</li> </ul>



#### **EVALUATION OF EXTENSION ALTERNATIVE PLANNING SOLUTIONS**

Denison Avenue Extension Class EA Study Project No. 2018-048

Potential Impacts		tential Impacts		Alternative Solutions		
		icittiai iiripacts	Alternative #1	Alternative #2	Alternative #3	
			"Do-Nothing"	Improve Parallel Routes	Extension of Denison Avenue Roadway including Active Transportation Improvements	
Description			Maintain Denison Avenue/Park Street/Mill Street with no improvements other than regular maintenance	Add capacity to adjacent parallel roads (Railroad Street, Nelson Street)	Construction of an extension of Denison Avenue between Park Street and Mill Street and active transportation infrastructure to support pedestrian and cyclist modes of transportation.	
		Access (Existing and	•	•	•	
	2.4	Future Land Uses)	No Impacts	No Impacts	Impacts dependent on design alternatives for this solution.	
			0	0		
	2.5	Neighbourhood Connectivity	Does not improve upon existing disconnection between Park Street and Mill Street for pedestrians, cyclists or vehicles	Does not improve upon existing disconnection between Park Street and Mill Street for pedestrians, cyclists or vehicles	<ul> <li>Improves connection between Park Street and Mill Street for pedestrians, cyclists and vehicle traffic.</li> </ul>	
			•	•	•	
. <u>e</u>	2.6	Noise		None of the alternatives would have any significant impact on noise level	els	
nono	2.7	Air Quality	•			
Social/Economic			<ul> <li>None of the alternatives would have any significant impact on air quality</li> </ul>			
တိ	2.8	Climate Change	•			
			No reduction from existing carbon emissions.	Improvement of traffic capacity and flows would potentially reduce emissions	Improvement of traffic capacity and flows would potentially reduce emissions	
ent			•	0	•	
Environment	3.1	Archaeology	No Impacts	Impacts would be dependent on scope and design of improvements on alternative routes	Impacts would be dependent on the design for Denison Avenue Extension.	
		2 Built Heritage	•	•	•	
Cultural	3.2		No Impacts	Impacts would be dependent on scope and design of improvements on alternative routes	Impacts would be dependent on the design for Denison Avenue Extension.	
			•	•		
Sal	4.1	Local Transportation Network and Operations	No capacity added to the local transportation network nor traffic reduction on parallel routes. However, existing and future traffic volumes are relatively low.	Would improve local transportation network capacity through improvements on parallel roadways	Would improve local transportation network by providing additional traffic capacity.	
Technical			0	0		
Tech	4.2	Traffic Safety	No Improvements are provided to existing traffic safety concerns as identified in the Safety Assessment	No Improvements are provided to existing traffic safety concerns as identified in the Safety Assessment	Opportunities to make improvements to identified traffic safety concerns.	



# EVALUATION OF EXTENSION ALTERNATIVE PLANNING SOLUTIONS Denison Avenue Extension Class EA Study

	Pot	tential Impacts		Alternative Solutions	
rotentiai inipacts		tentiai iiripaets	Alternative #1	Alternative #2	Alternative #3
			"Do-Nothing"	Improve Parallel Routes	Extension of Denison Avenue Roadway including Active Transportation Improvements
Desc	ription		Maintain Denison Avenue/Park Street/Mill Street with no improvements other than regular maintenance	Add capacity to adjacent parallel roads (Railroad Street, Nelson Street)	Construction of an extension of Denison Avenue between Park Street and Mill Street and active transportation infrastructure to support pedestrian and cyclist modes of transportation.
		Provisions for Active	$\circ$		
	4.3	Transportation	None provided	None provided	Minor improvements to Active Transportation facilities
	4.4	Design Criteria and Geometrics	0	0	•
			No ability to upgrade the Denison Avenue corridor to adhere to applicable design standards and current practices	No ability to upgrade the Denison Avenue corridor to adhere to applicable design standards and current practices	Some ability to upgrade the Denison Avenue corridor to adhere to applicable design standards and current practices dependent on preferred design alternative
S	5.1	Estimated Capital Cost		0	0
Costs			No Capital Costs	High capital costs associated with improvements to parallel corridors	High capital costs would be required
		Summary	Not Preferred	Not Preferred	Preferred
		Discussion	<ul> <li>Eliminated from further consideration</li> <li>Is not consistent with recommendations in the City of Brampton's Master Transportation Plan and goal of improving neighbourhood connections, active transportation facilities and connections to local transit infrastructure</li> </ul>	<ul> <li>Eliminated from further consideration</li> <li>Is not consistent with recommendations in the City of Brampton's Master Transportation Plan and goal of improving neighbourhood connections, active transportation facilities and connections to local transit infrastructure</li> </ul>	Recommended as a Preferred Solution     Complies with aspects of the City's Master Transportation Plan and goal of improving neighbourhood connections, active transportation facilities and additional local network transportation capacity



Project No. 2018-048

#### Legend

Score	Impact Ranking Scale
0	High Impact
•	Medium Impact
•	Low Impact/Neutral After Mitigation
•	No Adverse Impacts for this Criterion
•	Beneficial Imapct/Ideal Conditions

Score	Impact Ranking Scale
0	Least Preferred (Highest Impact)
•	<b>•</b>
•	
•	
•	Most Preferred (Lowest Impact)

		Potential Impacts		Alignment	Alternatives	
		i otentiai impaota	Option #1	Option #2	Option #3	Option #4
Description			Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)
			•	•	•	•
ıral	1.1	Potential Impacts on Terrestrial and/or Aquatic Features (proximity to habitat features)	• None	No Impacts Anticipated	No Impacts Anticipated	No Impacts Anticipated
Natural			•	•		•
	1.2	Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Wildlife Habitat (SWH)	• None	No Impacts Anticipated	No Impacts Anticipated	No Impacts Anticipated
			•	0	0	0
Social/Economic	2.1	Property Impacts (Existing Residential, Commercial and/or Industrial Properties)	<ul> <li>Displaces one (1) residential property (45 Mill Street) required to accommodate the proposed 23m ROW required for new roadway.</li> <li>Direct impact to one (1) property (34 Park Street, 14.5m²) to accommodate 23m ROW for new roadway.</li> </ul>	<ul> <li>Displaces four (4) residential properties (45 Mill Street, 1 Denison Avenue, 3 Denison Avenue, 5 Denison Avenue) required to accommodate the proposed 23m ROW required for new roadway.</li> <li>Direct impact to one (1) property (34 Park Street, 14.5m²) to accommodate 23m ROW for new roadway.</li> </ul>	Direct impact to one (1) property (45 Railroad Street) to accommodate 23m ROW for new roadway. (see below for Impact to Future Development Plans)	<ul> <li>Displaces one (1) residential property (45 Mill Street) required to accommodate the proposed 23m ROW required for new roadway.</li> <li>Direct impact to two (2) properties (34 Park Street, 14.5m², 1 Denison Avenue, ) to accommodate 23m ROW for new roadway.</li> </ul>
O			•	0	0	•
Social/Economic	2.2	Impact to Future Development Plans	Extension of Denison Avenue would be in alignment provided by developer of 45 Railroad Street property and has been accommodated by approved site plan design.	Extension of Denison Avenue would be in alignment provided by developer of 45 Railroad Street property and has been accommodated by approved site plan design.	High impact to current (approved and under construction) site development of 45 Railroad Street property. Site plan would require complete re-design.	Extension of Denison Avenue would be in alignment provided by developer of 45 Railroad Street property and has been accommodated by approved site plan design.
S	2.3	Consistency with Planning Policies	•	•	•	•



		Potential Impacts		Alignment	Alternatives			
			Option #1	Option #2	Option #3	Option #4		
Description			Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)		
			<ul> <li>Consistent with the City of Brampton Transportation Master Plan (2015) recommendation to extend Denison Avenue between Park Street and Mill Street;</li> <li>Consistent with City of Brampton 2040 Planning Vision and Official Plan (2015) goals of providing infrastructure that supports active transportation, livable communities and moving people and goods.</li> </ul>					
			•	•	0	•		
	2.4	Access (Existing and Future Land Uses)	<ul> <li>The extension of Denison Avenue will provide better direct access for existing residents on Park Street and/or Mill Street. It will also provide more direct access for pedestrians and cyclists.</li> <li>The extension of Denison Avenue at the south end of the 45 Railroad Street property will provide access to the south end of the development via a new driveway entrance.</li> </ul>	<ul> <li>The extension of Denison Avenue will provide better direct access for existing residents on Park Street and/or Mill Street. It will also provide more direct access for pedestrians and cyclists.</li> <li>The extension of Denison Avenue at the south end of the 45 Railroad Street property will provide access to the south end of the development via a new driveway entrance.</li> <li>Some reconfiguration of the proposed west access to the 45 Railroad Street development and south access to the GO Transit parking lot would be required.</li> </ul>	<ul> <li>The extension of Denison Avenue will provide better direct access for existing residents on Park Street and/or Mill Street. It will also provide more direct access for pedestrians and cyclists.</li> <li>New access points would be required for the GO Transit parking area and revised site plan for 45 Railroad Street property</li> </ul>	<ul> <li>The extension of Denison Avenue will provide better direct access for existing residents on Park Street and/or Mill Street. It will also provide more direct access for pedestrians and cyclists.</li> <li>The extension of Denison Avenue at the south end of the 45 Railroad Street property will provide access to the south end of the development via a new driveway entrance.</li> <li>Some reconfiguration of the proposed west access to the 45 Railroad Street development and south access to the GO Transit parking lot would be required.</li> </ul>		
			•	•	•	•		
	2.5	Neighbourhood Connectivity	<ul> <li>Improves connection between Park Street and Mill Street for pedestrians, cyclists and vehicle traffic.</li> </ul>	<ul> <li>Improves connection between Park Street and Mill Street for pedestrians, cyclists and vehicle traffic.</li> </ul>	<ul> <li>Improves connection between Park Street and Mill Street for pedestrians, cyclists and vehicle traffic.</li> </ul>	<ul> <li>Improves connection between Park Street and Mill Street for pedestrians, cyclists and vehicle traffic.</li> </ul>		
			0	0	•	•		
mic	2.6	Noise	<ul> <li>Proposed Denison Avenue extension at south end of 45 Railroad Street property will increase vehicular noise for abutting Park Street and Mill Street along south edge of new roadway.</li> </ul>	<ul> <li>Proposed Denison Avenue extension at south end of 45 Railroad Street property will increase vehicular noise for abutting Park Street and Mill Street along south edge of new roadway.</li> </ul>	No impact to noise.	<ul> <li>Proposed Denison Avenue extension at south end of 45 Railroad Street property will increase vehicular noise for abutting Park Street and Mill Street along south edge of new roadway.</li> </ul>		
Social/Economic			•	•	•	•		
ial/E	2.7	Air Quality		None of the alternatives would ha	ve any impact on existing air quality.			
Soc			•					
	2.8	Climate Change	All the alternatives would improve	traffic flow by adding capacity and reducing traffic on	parallel routes which would provide an overall margina	al improvement on carbon emissions		



		Potential Impacts		Alignment	Alternatives	
		r otentiai inipacts	Option #1	Option #2	Option #3	Option #4
Description			Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)
			•	•	•	0
ŧ	3.1	Archaeology	<ul> <li>No identified archaeological concerns for this alternative.</li> </ul>	<ul> <li>Additional investigation (Stage 2 survey) would be required for realigned section of Denison Avenue.</li> </ul>	No identified archaeological concerns for this alternative.	<ul> <li>Additional investigation (Stage 2 survey) would be required for realigned section of Denison Avenue.</li> </ul>
nme			•	$\circ$	0	•
Cultural Environment	3.2	Built Heritage	<ul> <li>Impact to property at 45 Mill Street identified during fieldwork as having potential built heritage significance, but building impact not anticipated</li> </ul>	<ul> <li>Impact to property listed on City of Brampton's Municipal Registry of Cultural Heritage Resources (1 Denison Avenue)</li> <li>Impact to property identified by City of Brampton as Potential Property of Interest (3 Denison Avenue)</li> <li>Impact to 45 Mill Street identified during fieldwork as having potential built heritage significance</li> </ul>	Impact to 45 Railroad Street east façade (currently being preserved for incorporation into new development)	Impact to property at 45 Mill Street identified during fieldwork as having potential built heritage significance, but building impact not anticipated
			•	•	•	
			All the alternatives would improve local transportation network capacity and would reduce traffic on parallel routes. However, generally the existing and projected future traffic volumes are low.			
	4.1	Local Transportation Network and Operations	<ul> <li>Provides new connection between Park Street and Mill Street.</li> <li>Creates jog in Denison Avenue alignment west of Park Street and new roadway that is not ideal for connecting Denison Avenue west of Park Street with Mill Street.</li> </ul>	<ul> <li>Provides new connection between Park Street and Mill Street.     Eliminates jog in Denison Avenue alignment west of Park Street and new roadway.</li> <li>Provides improved or new access for homes/properties along Denison including new development at 45 Railroad Street.</li> </ul>	<ul> <li>Provides new connection between Park Street and Mill Street.         Ideal for connecting Denison Avenue west of Park Street with Mill Street.     </li> <li>Does not provide additional connection for homes/properties along Denison.         Eliminates proposed accesses for 45 Railroad Street development as well as GO Transit parking area.     </li> </ul>	<ul> <li>Provides new connection between Park Street and Mill Street.     Eliminates jog in Denison Avenue alignment west of Park Street and new roadway.</li> <li>Provides improved or new access for homes/properties along Denison including new development at 45 Railroad Street.</li> </ul>
hnica			•	•	•	
Technical	4.2	Traffic Safety	Existing concerns regarding the proximity of the proposed GO Transit parking lot access to the at-grade rail crossing as well as the 45 Railroad Street development access onto the Park-Mill Street curve would remain, however opportunities to mitigate these concerns would be available	<ul> <li>Realignment of Denison Avenue west of Park Street would provide opportunities to address identify traffic safety concerns with the at-grade rail crossing and access points for GO Transit parking lot and 45 Railroad Street development.</li> </ul>	Realignment of Denison Avenue through the 45     Railroad Street property would provide an opportunity to review and revise access point for GO Transit parking lot area as well as the 45 Railroad Street development. Identified concerns with the existing at-grade rail crossing would still need addressing.	Realignment of Denison Avenue west of Park Street would provide opportunities to address identify traffic safety concerns with the at-grade rail crossing and access points for GO Transit and 45 Railroad Street development.
			•	•	•	•
	4.3	Provisions for Active Transportation	Alternatives provide provisions for active transport	rtation facilities as per active transportation recommer	ndations in the City's Transportation Master Plan and A	active Transportation Plan.

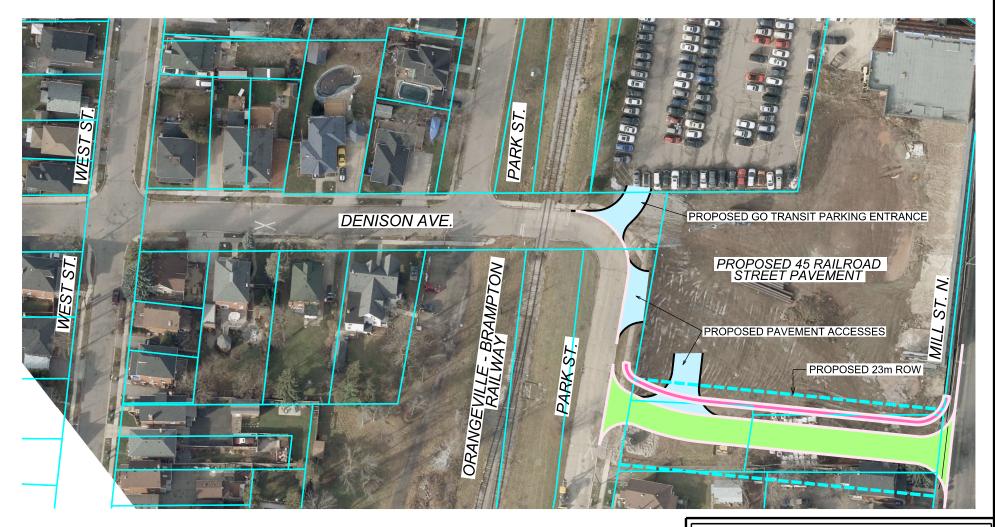


	Dotantial Impacts		Alignment Alternatives			
Potential Impacts		rotential impacts	Option #1	Option #2	Option #3	Option #4
Descri	Description		Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)
			•	•	•	•
	4.5	Design Criteria and Geometrics	<ul> <li>The City of Brampton design criteria for a Minor Collector roadway were used to develop the roadway extension plan.</li> <li>Proposed ROW requirements and cross-section elements are based on the City's requirements and standards.</li> <li>The jog in the alignment would utilize the existing bend from Denison Avenue to Park Street which is sub-standard.</li> <li>The proposed 45 Railroad Street access onto the existing Park Street is on the curve and does not meet Safety Report recommendations.</li> <li>The proposed GO Transit parking area access onto Park Street/Denison Avenue is within 30 m of the rail crossing and would need to be relocated.</li> </ul>	<ul> <li>The City of Brampton design criteria for a Minor Collector roadway were used to develop the roadway extension plan.</li> <li>Proposed ROW requirements and cross-section elements are based on the City's requirements and standards.</li> <li>The realignment of Denison Avenue west of Park Street would cross the existing OBR rail line at 110° to meet minimum standards.</li> <li>The proposed 45 Railroad Street access and proposed GO Transit parking area access would require revision.</li> </ul>	<ul> <li>The City of Brampton design criteria for a Minor Collector roadway were used to develop the roadway extension plan.</li> <li>Proposed ROW requirements and cross-section elements are based on the City's requirements and standards.</li> <li>The proposed 45 Railroad Street access and proposed GO Transit parking area access onto Park Street/Denison Avenue would need to be relocated/adjusted</li> </ul>	<ul> <li>The City of Brampton design criteria for a Minor Collector roadway were used to develop the roadway extension plan.</li> <li>Proposed ROW requirements and cross-section elements are based on the City's requirements and standards.</li> <li>The proposed 45 Railroad Street access onto the existing Park Street is on the curve and does not meet Safety Report recommendations.</li> <li>The proposed 45 Railroad Street access and proposed GO Transit parking area access would require revision.</li> </ul>
		Orangeville-Brampton Rail Line Crossing		•		•
	4.6		<ul> <li>No new or relocated crossing of OBR rail line would be required as part of this alternative design.</li> <li>Upgrades to the existing at-grade crossing to upgrade crossing to meet Transport Canada guidelines for at-grade rail crossings would still be required.</li> </ul>	<ul> <li>Realignment of Denison Avenue, west of Park Street, would require a new relocated crossing of the OBR rail line.</li> <li>Design standards require that any new crossing of a rail line be between 70-110° angle per current Transportation Canada guidelines for at- grade rail crossings</li> </ul>	<ul> <li>No new or relocated crossing of OBR rail line would be required as part of this alternative.</li> <li>Upgrades to the existing at-grade crossing to upgrade crossing to meet Transport Canada guidelines for at-grade rail crossings would still be required.</li> </ul>	Under Option 4 OBR rail line would be replaced with multi-use path. There would be no design minimum for crossing angle for the multi-use path and Denison Avenue west of Park Street.
		Storm Water Management/Drainage	•	•	•	•
	4.7		<ul> <li>Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area.</li> <li>Improvements would be limited extension through 45 Railroad Street property only.</li> </ul>	Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area.	<ul> <li>Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area.</li> <li>Improvements would be limited extension through 45 Railroad Street property only.</li> </ul>	Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area.
		Utilities	•	•	•	•
	4.8		Minor impacts to existing above-ground utilities (hydro, streetlighting)	Minor impacts to existing above-ground utilities (hydro, streetlighting)	Minor impacts to existing above-ground utilities (hydro, streetlighting)	Minor impacts to existing above-ground utilities (hydro, streetlighting)



Potential Impacts			Alignment Alternatives			
			Option #1	Option #2	Option #3	Option #4
Description			Realignment at South End of 45 Railroad Street Property	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railroad St. Property	Realignment West of Park, Across OBG Rail Line Converted to MUP (Subject to Future Rail Use)
	E 4	Estimated Construction Cost	•	•	•	•
	5.1		Est. \$340,000	Est. \$950,000	Est. \$340.000	Est. \$945,000
		Property Costs (see also Property under Socio-Economic Impacts)	•	0	0	•
rction	5.2		Moderate	High	High	Moderate
nstrı		Construction Staging	•	•	•	0
Cost and Construction	5.3		<ul> <li>Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development.</li> <li>Construction would have minor impacts to existing Denison, Park and/or Mill Street function and only minor interruption of OBR rail line operations while improvements to the existing crossing are made.</li> </ul>	<ul> <li>Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development.</li> <li>Realignment of Denison Avenue, west of Park Street would require disruption to OBR rail operations for duration of work through rail ROW.</li> <li>Denison Avenue west of Park Street may require closure/restricted access for realignment and reconstruction.</li> </ul>	Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development (expected re-design of site)	<ul> <li>Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development.</li> <li>Realignment of Denison Avenue, west of Park Street would require short term closure; there would be no rail line to impact;</li> <li>Denison Avenue west of Park Street may require closure/restricted access for realignment and reconstruction.</li> </ul>
	Summary Preferred (Interim Solution)		Not Preferred	Not Preferred	Most Preferred (Ultimate Solution)	
		Reasoning	Option #1 provides an improvement on neighbourhood connectivity, active transportation facilities and access while avoiding major impacts to existing residential properties and/or proposed developments. However, concerns with the Denison alignment west of Park Street are not addressed and improve	Option #2 provides improvement on neighbourhood connectivity, active transportation facility and access. However, the identified impacts to existing residential properties and the Orangeville-Brampton rail line at-grade crossing are significant and a significant cost. As such, this option is not preferred.	Option #3 provides improvement on neighbourhood connectivity, active transportation facility and access. Option #4 also represents the ideal alignment for the Denison Avenue Extension. However, the identified impact to the proposed 45 Railroad Street development would be significant and require a complete redesign of that project at significant expense.	Option #4 provides improvement on neighbourhood connectivity, active transportation facilities and access. The realignment of Denison Avenue west of Park Street would meet minimum design criteria while avoiding residential property impacts and not affecting the 45 Railroad Street development. This option is most preferred. Subject to





#### **LEGEND**

PROPOSED PAVEMENT



PROPOSED ENTRANCE



PROPOSED SIDEWALK



PROPOSED ROW



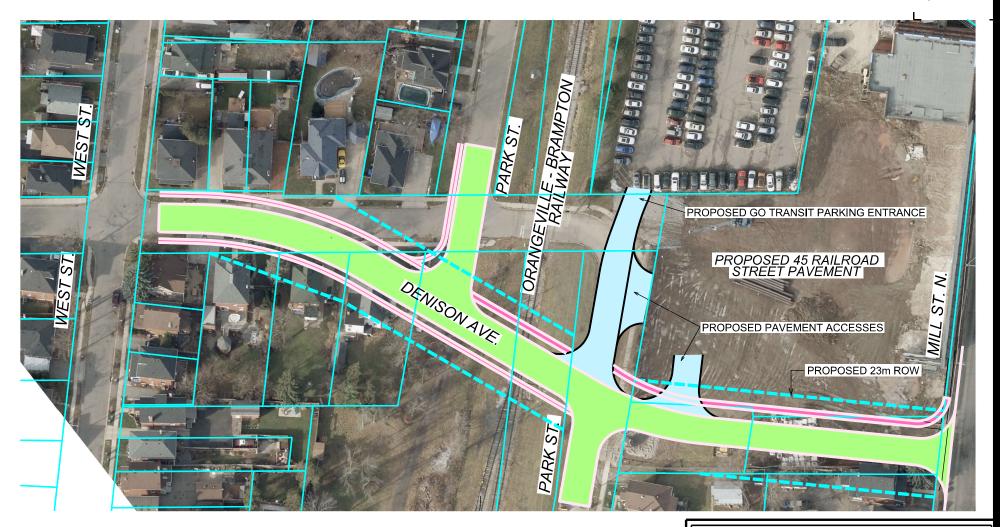
Public Works & Engineering Capital Works

DENISON AVENUE EXTENSION

EA STUDY

OPTION 1

CALE: 1:1000 DATE: MAY 24







PROPOSED PAVEMENT



PROPOSED ENTRANCE



PROPOSED SIDEWALK



PROPOSED ROW



Public Works & Engineering Capital Works

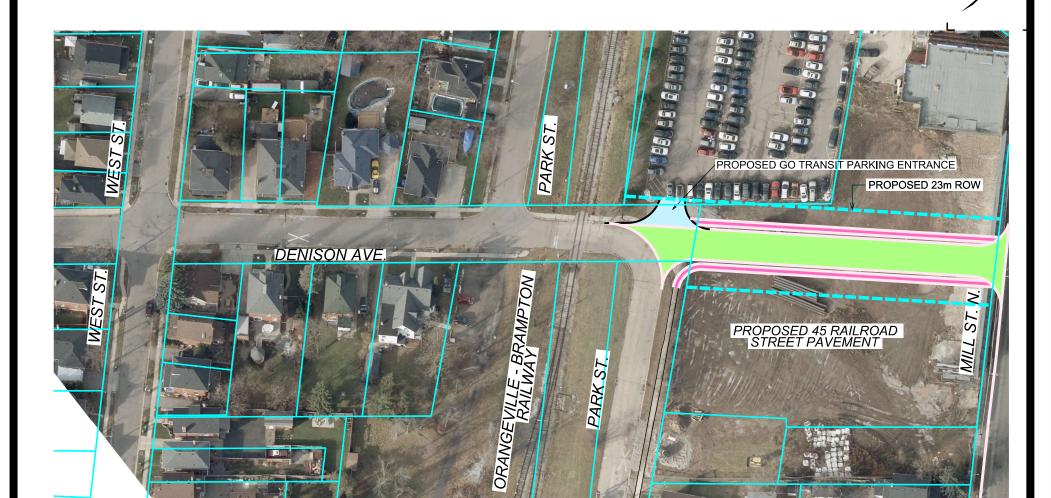
#### **DENISON AVENUE EXTENSION**

EA STUDY

OPTION 2

SCALE:

DATE





PROPOSED PAVEMENT



PROPOSED ENTRANCE



PROPOSED SIDEWALK



PROPOSED ROW



Public Works & Engineering Capital Works

DENISON AVENUE EXTENSION

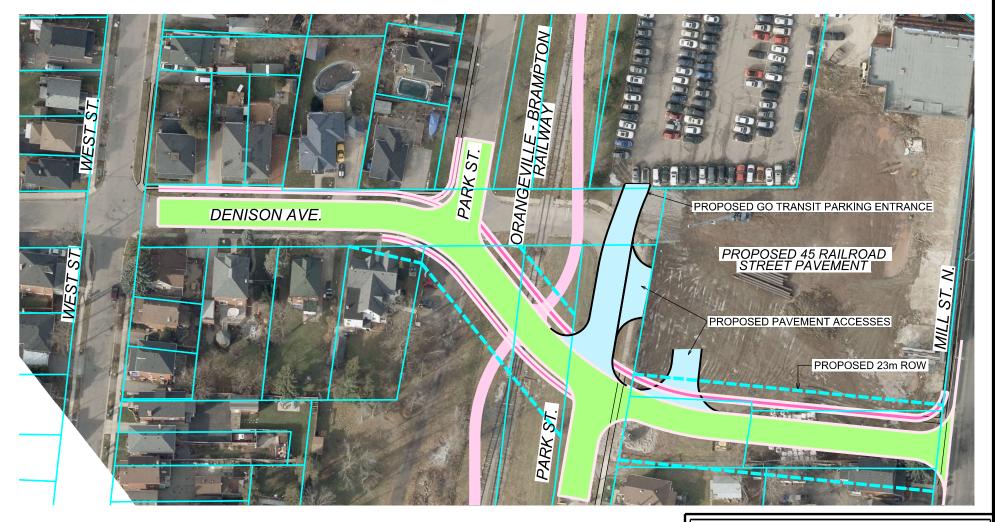
EA STUDY

**OPTION 3** 

SCALE:

DATE





#### **LEGEND**

PROPOSED PAVEMENT



PROPOSED ENTRANCE



PROPOSED SIDEWALK



PROPOSED ROW



Public Works & Engineering
Capital Works

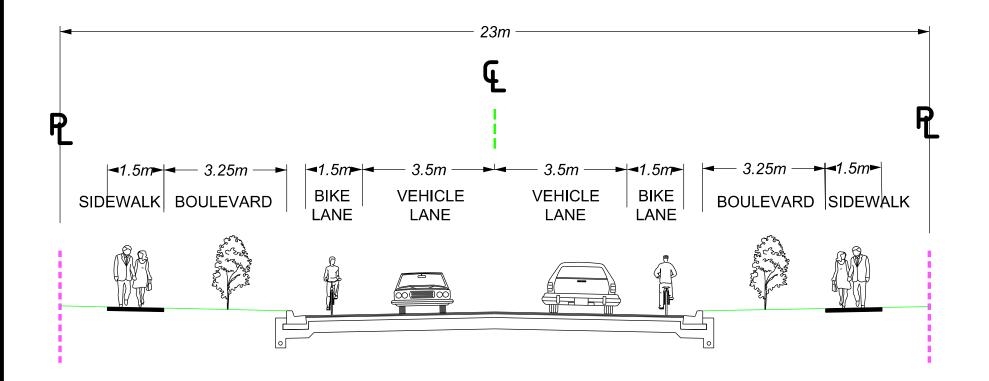
DENISON AVENUE EXTENSION

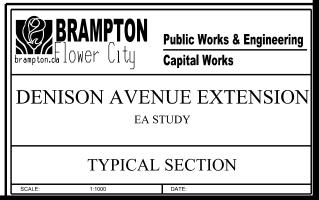
EA STUDY

**OPTION 4** 

SCALE:

DATE:





LAST UPDATED 21 SEP 16 -- PMZ



**Date:** August 28, 2019 **File:** 20185301.PM.04.01

**Time:** 9:30 am **Page:** 1 of 4

**Project:** Denison Avenue Extension Class EA Study

**Subject:** Project Team Meeting 03 - PIC Dry Run

**Client:** City of Brampton (City)

**Location:** City of Brampton - Williams Parkway Operations Centre,

Bdrm WPOC Admin-2A

**Present:** Marko Paranosic Associated Engineering

Soheil Nejatian City- Project Manager

Carmen Caruso City - Planner, Development

Mario Goolsarran City - Infrastructure Planning

Tim Kocialek City - Engineering

Brian Lakeman City - Transportation Planning

Cassandra Jasinski City - Planner, Heritage
Donna Kozar City - Environmental

Mushtaq Tunio City - Roads Maintenance

**Distribution:** Those Present

Hank Wang City -Transit Planning
John Fantin City - CADD Supervisor

Henrik Zbogar City - Transportation Planning

Cengiz Cakmak City - Engineering

Maggie Liu City - Infrastructure Planning
Lisa Lieu City - Traffic Modelling Lead
Bishnu Parajuli City - Infrastructure Planning
Linda Wu City - Transportation Planning

David Monaghan City - Traffic Planning

Muhammad Imran City - Traffic Operations

Loui Pastor City - Surveys & Mapping

#### **RECORD OF MEETING**

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

Action By: Discussion:

1 INTRODUCTION

INFO Meeting attendees introduced themselves.

2 REVIEW OF DRAFT PUBLIC INFORMATION CENTRE (PIC) BOARDS

<u>Board</u> <u>Comment</u>

Welcome Board (1) • No comments







Subject: Project Team Meeting 03

August 28, 2019

- 2 -

- Action By:	Discussion:	
	Purpose of Meeting (2)	No comments
	Study Overview (3)	No comments
	Municipal Class EA Process Chart (4)	No comments
	Public Consultation (5)	No comments
AE	Background – Master Transportation Plan	<ul> <li>Suggestion to add the expected completion date for "Short Term Horizon" i.e. 2021</li> </ul>
AE		<ul> <li>Add a new board at this point showing the study overview area/road network</li> </ul>
AE	Transportation Study (7)	<ul> <li>Suggestion that the Problem and Opportunity board be advanced in the sequence in front of the Transportation Study overview boards and Existing Conditions</li> <li>Instead of referring to "traffic" in the second bullet point, prefer to use "multi-modal"</li> </ul>
AE	Transportation Study (8)	<ul> <li>More explanation of why pedestrian operations was determined as "poor" i.e. sidewalk widths, breaks in sidewalk links etc.</li> </ul>
AE	Existing Conditions – Archaeology and Built Cultural Heritage (9)	<ul> <li>For archeology, 2<sup>nd</sup> point, add "The majority of the study area had no archeological potential (except for the area shown in green). Based on the preliminary preferred alternative, there are no areas of archaeological potential which will be impacted by the extension"</li> <li>No need to revise or remove the image for Built Cultural Heritage shown</li> <li>Add that "Three area properties were identified as being on the City's</li> </ul>
		Municipal Register of Cultural Heritage Resources" and "The Denison Road Extension will aim to avoid impacts to identified heritage properties"
AE	Existing Conditions – Socio-Economic and Natural Environment (10)	<ul> <li>Needs to be updated for Natural Environment features</li> <li>Existing land uses shouldn't describe potential uses</li> <li>Change "institutional' to "university"</li> <li>Remove the graphic showing the university planning area, substitute with image from Official Plan showing land uses in the area</li> </ul>
AE	Problem and Opportunity (11)	<ul> <li>The first sentence referencing the Transportation Study to be deleted</li> <li>Refer to "built cultural heritage <u>resources</u>"</li> <li>Refer to "increasing population and employment growth"</li> </ul>
AE	Review of Alternative Solutions (12)	<ul> <li>Questions regarding what did Alternative #2 assess? Was it the expansion of vehicular traffic capacity (i.e. additional lanes) on parallel routes or the installation of active transportation infrastructure, or both?</li> <li>After discussion it was agreed that Alternative #2 references primarily the expansion of vehicular traffic capacity on parallel routes, however since local area traffic capacity was an insignificant driver for the overall</li> </ul>

project, it was not enough to carry it through





Subject: Project Team Meeting 03

August 28, 2019

- 3 -

Action By:	Discussion	<u>ı:</u>	
			• Text in the Evaluation Matrix for the Alternative Solutions will need to be adjusted to clearly represent the above
AE		n Matrix for ve Solutions (13)	<ul> <li>Legend is to be updated to match the table</li> <li>Under Discussion should read "Transportation Master Plan" not "Master Transportation Plan"</li> <li>Discussion about the statement "Not consistent with City of Brampton 2015 Transportation Master Plan or Official Plan" in Section 2.3 – it was suggested that the TMP does not recommend projects and merely provides goals that the EA process is supposed to confirm or refute;</li> <li>Consensus was to amend the statement to read " is not consistent with the goals as outlined in the City of Brampton 2015 Transportation Master Plan"</li> </ul>
AE	-	f Design or Denison xtension ((14)	<ul> <li>Suggested that "Options" be changed to "Alternatives" for this slide and all relevant slides describing the design alternatives for the extension</li> </ul>
AE	-	f Design or Denison extension (15)	<ul> <li>Discussion was had regarding the proposed "Interim" and "Ultimate" typical cross-sections as shown</li> <li>Consensus was to remove the title "Interim" and change to "Preferred" since it was undetermined if the full 23m right-of-way and CoB standard cross-section for a Minor Collector roadway would ever be implemented</li> <li>Change "Ultimate" to "Potential Future" with reference to it being the CoB standard cross-section</li> <li>Each cross-section to be presented separately on the page 'Preferred' presented ahead of 'Potential Future'</li> <li>In the interest of providing on-road cycle facilities per the CoB Active Transportation Master Plan recommendations it was agreed to show a 3.75m wide "sharrow" lane for bikes and cars in lieu of the separate on-road cycle facility. This is also done in consideration of the lack of connecting cycle lanes and/or multi-use trails.</li> </ul>
AE	Review of Options (	f Design 16, 17, 18,19)	<ul> <li>Remove reference to "Ultimate 23m ROW" and show only "Proposed ROW" since the 23m reference may be confusing</li> <li>Alternative showing the "Ultimate" extension layout can be removed from the set</li> <li>AE was asked to clarify if the 45 Railroad Street development plan does in fact show the proposed north side sidewalk on private property at the corners.</li> </ul>
AE		n Matrices for ptions (20)	<ul> <li>Suggested that the "However" statements in the Reasoning section at the conclusion of the matrix be removed.</li> <li>Legend to be updated to match table</li> </ul>
AE	Next Steps (21)		<ul> <li>Add an additional step "Confirm the Preliminary Preferred Alignment"</li> <li>Add in "December 2019" as the date of completion for the study</li> </ul>
AE	Please Pro (22) 3	ovide Feedback	<ul> <li>Minimum two weeks should be allowed for feedback, suggested to change the deadline date to Friday October 4, 2019</li> </ul>
	3	OTHER	





Subject: Project Team Meeting 03

August 28, 2019

- 4 -

Action By: Discussion:

AE/City

- A Technical Advisory Committee (TAC) meeting had been scheduled for September 4, 2019 however it looks likely that that meeting will be cancelled. Only OBRAG and Peel Region have expressed interest; a separate meeting with OBRAG has been held already and Peel Region will be contacted to determine what (if any) interests they have in the project
- A Stakeholders Group (SHG) meeting will be held September 10, 2019

Minutes prepared by, Associated Engineering (Ontario) Limited

Marko Paranosic, P.Eng. PE

Manho Farenoria

Project Manager, Infrastructure

### WELCOME

#### Stakeholder Group Meeting

Denison Avenue
From Park Street to Mill Street

Municipal Class Environmental Assessment (Schedule B)

September 10, 2019 6:30PM to 8:00PM

Please sign in so that we are able to provide you with any future study updates.





### WELCOME

#### **Public Information Centre**

### Denison Avenue

From Park Street to Mill Street

Municipal Class Environmental Assessment (Schedule B)

September 19, 2019 6:30PM to 8:00PM

Please sign in so that we are able to provide you with any future study updates.





# Purpose of the Stakeholder Group Meeting

#### This Stakeholder Group Meeting has been arranged to:

- Provide the stakeholder with background context and information;
- Present the Need and Justification for the extension of Denison Avenue between Park Street and Mill Street;
- Present alternative solutions and identify the preferred planning solution;
- Present the process for assessing and evaluating alignment alternatives for the Denison Avenue extension;
- Present the preliminary preferred design alternative;
- Obtain input and comments from stakeholders; and,
- Identify the next steps in the process





# Purpose of this Public Information Centre

#### This PIC has been arranged to:

- Introduce the study to the public;
- Provide background context and information;
- Present the Need and Justification for the extension of Denison Avenue between Park Street and Mill Street;
- Present alternative solutions and identify the preferred planning solution;
- Present the process for assessing and evaluating alignment alternatives for the Denison Avenue extension;
- Present the preliminary preferred design alternative;
- Obtain public input and comments; and,
- Identify the next steps in the process





# Study Overview

The purpose of this study is to conduct a Schedule "B" Class Environmental Assessment for the extension of Denison Avenue between Mill Street and Park Street.

The extension of Denison Avenue was identified in the City of Brampton's 2016 Transportation Master Plan.

The main objectives of the study are the following:

- Complete Phases I & II of the Municipal Class EA process;
- Consider a range of alternatives and their impacts on a number of criteria;
- Evaluate preliminary preferred designs; and,
- Encourage participation from the public, stakeholders and affected parties throughout the study process and address public comments.
- Complete Environmental Assessment and file Environmental Project Report for public review

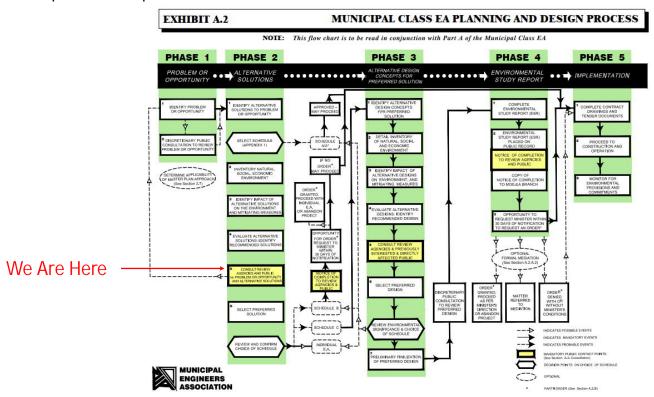




# Municipal Class EA Process

The Municipal Class EA process enables the planning and implementation of municipal infrastructure projects to be undertaken in accordance with an approved process that ensure public consultation and full regard for the protection of the environment and minimization of negative impacts.

The Municipal Class EA process is shown below:







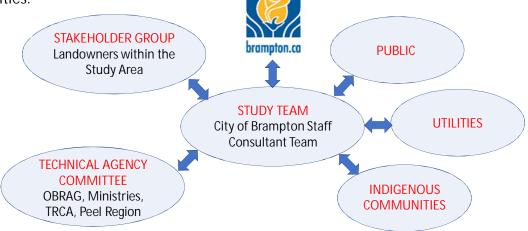
### **Public Consultation**

Public Consultation is an essential part of the decision making process.

Opportunities to provide your input are not limited to this PIC or any other milestones. You can provide input to the study team at any point throughout the study.

The Study Team recognizes that there are many different interests within our study area. Our Public Consultation program includes outreach to the following groups:

- Stakeholder Group (directly affected landowners within the Study Area);
- Technical Agency Committee (including Orangeville-Brampton Rail, various Ministries, TRCA and Region of Peel);
- Utilities; and,
- Indigenous Communities.

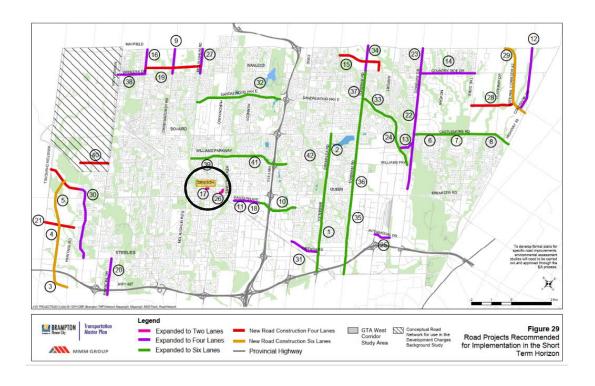






# Background – Transportation Master Plan

The City of Brampton's 2015 Transportation Master Plan (TMP) identified the extension of Denison Avenue between Park Street and Mill Street as a Short Term Horizon goal (to be constructed by 2021).

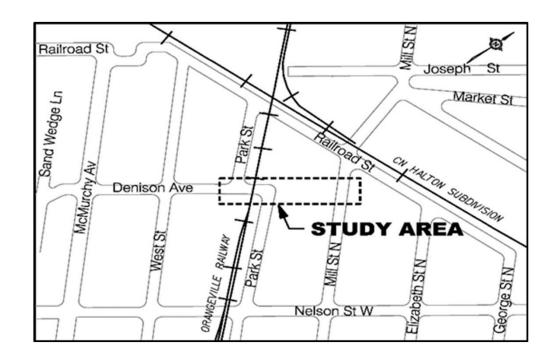






# Background – Area Overview

The Study Area shown in the figure below was initially identified in the Notice of Study Commencement.







# Problem & Opportunity Statement

The following Problem and Opportunity Statement was prepared for the project:

To further explore the recommendation as provided in the City's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street with the following goals;

- Improving neighbourhood connectivity and moving people safely and efficiently through the Brampton downtown core, including new active transportation infrastructure;
- Accommodating existing and future area development and changes to land use;
- Meeting area transportation network demands of increasing population and employment growth; and,
- Minimizing impacts to existing Built Cultural Heritage resources within the Study Area.

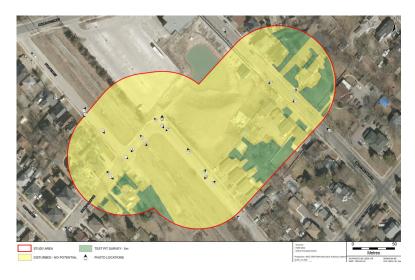




# Existing Conditions – Archaeology and Built Cultural Heritage

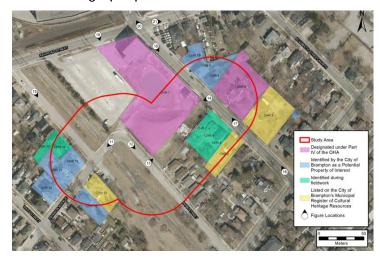
#### Stage I Archaeological Assessment

- The majority of the study area had no potential archeological impact
- Based on the preliminary preferred alternative there are no areas of archaeological potential(shown in green) that would be impacted.



#### **Built Cultural Heritage Assessment**

- Three area properties were identified as being on the City's Municipal Registry of Cultural Heritage Resources
- Seven area properties were identified as being "properties of interest"
- The Denison Avenue Extension would aim to avoid impacts to identified heritage properties



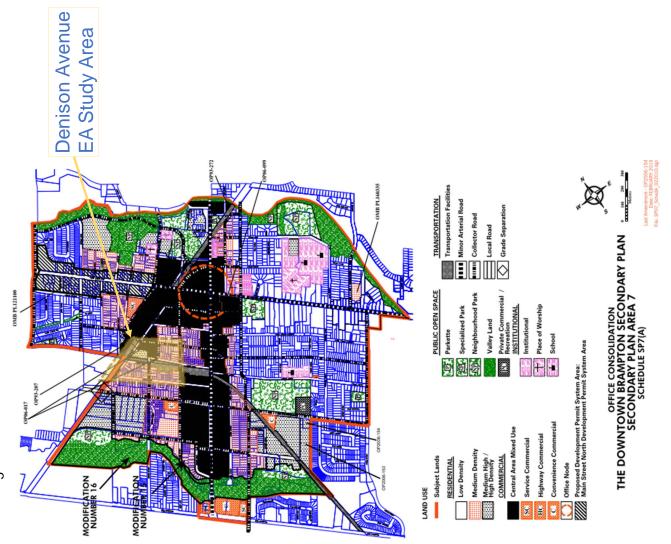




# Existing Conditions - Socio-Economic

# Socio-Economic

- The study area is located within the Downtown Brampton Secondary Plan Area
- Land use within the study area includes;
- Development of 387 unit mixed-use condominium development on the 45 Railroad Street site (ongoing)
- ➤ GO Transit station
- Residential single unit detached homes









# **Transportation Study**

- A Transportation Study was undertaken for the study area.
- The study reviewed multi-modal traffic operations for the current year (2019) and horizon years 2031 and 2041.
- Traffic data used in the analysis took into account future area growth and planned developments.
- All area intersections operate well under existing conditions and projected 2031 conditions
- Mill Street/Nelson Street and Mill Street/Railroad Street intersections fail under projected 2041 conditions
  - ☐ ALOS = Automotive Level of Service
  - ☐ BLOS = Bike Level of Service
  - ☐ PLOS = Pedestrian Level of Service

#### Analysis of Area Intersections

#	Intersection	Existing Conditions		Future Conditions 2031 (without Denison Ave Ext)			Future Conditions 2031 (with Denison Ave Ext)			Future Conditions 2041 (without Denison Ave Ext)			Future Conditions 2041 (with Denison Ave Ext)			
		ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS
1	West Street @ Denison Avenue	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В
2	Park Street @ Denison Avenue	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В	A/A	В	В
3	Park Street @ Nelson Street W	A/A	В	В	A/A	В	В	A/A	В	В	C/A	В	В	A/A	В	В
4	Mill Street N @ Nelson Street W	B/B	В	В	E/D	В	В	C/D	В	В	F/F	В	В	F/F	В	В
5	Mill Street N @ Railroad Street	A/A	В	В	D/A	В	В	D/A	В	В	F/E	В	В	F/E	В	В
6	Denison Avenue @ Park Street	N/A	N/A	N/A	N/A	N/A	N/A	A/A	В	В	N/A	N/A	N/A	A/A	В	В
7	Denison Avenue @ Mill Street	N/A	N/A	N/A	N/A	N/A	N/A	A/A	В	В	N/A	N/A	N/A	A/A	В	В



Level of Service (LOS) for Traffic Operations





# **Transportation Study**

- Individual Road Sections within the Study Area were also analyzed;
- It was identified that pedestrian operations for all road segments is poor. The reasons for the poor ratings included the following:
  - Area of existing sidewalk widths < 1.5m</li>
  - Areas of sidewalk discontinuity
  - ☐ ALOS = Automotive Level of Service
  - ☐ BLOS = Bike Level of Service
  - ☐ PLOS = Pedestrian Level of Service

Road Name	Existing	g Cond	itions	Future Conditions 2031 (without Denison Ave Ext)			Future Conditions 2031 (with Denison Ave Ext)			Future Conditions 2041 (without Denison Ave Ext)			Future Conditions 2041 (with Denison Ave Ext)		
	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS	ALOS (AM/PM)	BLOS	PLOS
Denison Ave. (Park Street to West Street)	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F	B/A	В	F
Park Street (Railroad Street to Denison Ave.)	B/B	В	F	C/C	В	F	C/C	В	F	F/D	В	F	C/C	В	F
Railroad Street (West Street to Mill Street)	C/C	В	F	F/F	В	F	F/F	В	F	F/F	В	F	F/F	В	F
Mill Street (Nelson Street to Railroad Street)	B/B	В	F	D/D	В	F	C/C	В	F	F/F	В	F	F/F	В	F
West Street (Railroad Street to Nelson Street)	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F	A/A	В	F
Nelson Street (West	B/B	В	F	F/E	В	F	D/D	В	F	F/F	В	F	F/F	В	F

Analysis of Area Road Segments



Level of Service (LOS) for Traffic Operations





# Review of Alternative Solutions

Under the provisions of the Municipal Class Environmental Assessment process, all reasonable planning alternatives to the undertaking require consideration.

The alternative planning solutions considered by the Project Team were as follows:

#### Alternative #1 – "Do-Nothing"

 Maintain Denison Avenue/Park Street/Mill Street configuration with no improvements other than regular maintenance

#### Alternative #2 – Improve Parallel Routes

Add capacity to adjacent parallel roads such as Railroad Street and/or Nelson Street

#### Alternative #3 – Extension of Denison Avenue Including Active Transportation Improvements

 Construct an extension of Denison Avenue between Park Street and Mill Street with active transportation infrastructure to support pedestrian and cyclist modes of transportation





#### **Evaluation of Alternative Solutions**

Score	Impact Ranking Scale				
0	High Impact				
•	Medium Impact				
•	Low Impact/Neutral After Mitigation				
•	No Adverse Impacts for this Criterion				
•	Beneficial Impact/Ideal				

Score	Impact Ranking Scale
0	Least Preferred (Highest Impact)
•	<b>A</b>
0	
•	-
•	Most Preferred (Least Impact)

Potential Impacts  Potential Impacts on Terrestrial and/or Aquatic Features (proximity to habitat feature)  Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Wildfill Habitat (SWH)  Property Impacts (Existing Residential, Commercial and/or Industrial Properties)  Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)  Neighbourhood Connectivity	No Impacts      Does not improve upon existing disconnection between Park Street	Alternative #2  Improve Parallel Routes  Add traffic and active transportation capacity to adjacent parallel roads (Railroad Street, Nelson Street)  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on the scale of improvements implemented on parallel roads.  No anticipated impacts  No anticipated impacts  No consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Alternative #3  Extension of Denison Avenue Roadway including Active Transportation Improvements Impacts would be conditional on design of Denison Avenue extension alternatives Impacts would be conditional on design of Denison Avenue extension alternatives Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution Master Plan to extend Denison Avenue between Park Street and MIII Street.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and MIII Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, Iwable communities and moving people and goods including the Citical Plan.  Brampton Valories and Plan of the City's Active Transportation Master Plan  Impacts dependent on design alternatives for this solution.						
and/or Aquatic Features (proximity to habitat features)  Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Whitifile Febriat (SWH)  Property Impacts (Existing Residential Commercial and/or Industrial Properties)  Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts	Add traffic and active transportation capacity to adjacent parallel roads (Railroad Street, Nelson Street)  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  More impacts dependent on the scale of improvements implemented on parallel roads.  No anticipated impacts  No anticipated impacts  No anticipated impacts  No Consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan	including Active Transportation Improvements  Construction of an extension of Denison Avenue between Park Street and Mill Street and active transportation infrastructure to support pedestrian and cyclist modes of transportation.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, livable communities and moving people and goods including the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plan transports of Master Plan.						
and/or Aquatic Features (proximity to habitat features)  Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Whitifile Febriat (SWH)  Property Impacts (Existing Residential Commercial and/or Industrial Properties)  Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts     No Impacts	capacity to adjacent parallel roads (Railroad Street, Nelson Street)  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  Minor impacts dependent on the scale of improvements implemented on parallel roads.  No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Avenue between Park Street and Mill Street and active transportation infrastructure to support pedestrian and cyclist modes of transportation.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, fixable communities and moving people and goods including the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plan to exting the City of Brampton opolicies providing the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plan Impacts dependent on design alternatives						
and/or Aquatic Features (proximity to habitat features)  Potential for Impacts to Confirmed Species at Risk (SAR) and/or Significant Whitifile Febriat (SWH)  Property Impacts (Existing Residential Commercial and/or Industrial Properties)  Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts	Impacts would be dependent on design of parallel road improvements.  Impacts would be dependent on design of parallel road improvements.  Minor impacts dependent on the scale of improvements implemented on parallel roads.  No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, Iwable communities and moving people and goods including the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plans to work the City's Active Transportation Master Plans.  Impacts dependent on design alternatives.						
to habitat features)  Potential for impacts to Confirmed Species at Risk (SAR) and/out Species at Risk (SAR) and/out Species at Risk (SAR) and/out Residential, Commercial and/or industrial Properties)  Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Usee)	No Impacts  No Impacts  No Impacts  No Impacts  Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No Impacts  Does not impocupon existing disconnection between Park Street	Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No micipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Denison Avenue extension alternatives.  Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, Iwable communities and moving people and goods including the Official Plan.  Brampton Vision 2040 and the City's Active Transportation Master Plan.  Impacts dependent on design alternatives						
Species at Risk (SAR) and/or Significant Wildlife Habitat (SWH) Property Impacts (Existing Residential, Commercial and/or Industrial Properties) Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts  No Impacts  No Impacts  Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No Impacts  Does not improve upon existing disconnection between Park Street	Impacts would be dependent on design of parallel road improvements.  • Minor impacts dependent on the scale of improvements implemented on parallel roads • No anticipated impacts  • Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  • No Impacts	Impacts would be conditional on design of Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to example the solution.  Consistent with the City of Brampton's 2015 Transportation Master Plan to example the solution of the City of Consistent with other City of Brampton policies providing infrastructure that supports active transportation, Iwable communities and moving people and goods including the Official Plan. Brampton Vision 2010 and the City's Active Transportation Master Plan.						
Species at Risk (SAR) and/or Significant Wildlife Habitat (SWH) Property Impacts (Existing Residential, Commercial and/or Industrial Properties) Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts  No Impacts  Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No Impacts  Does not improve upon existing disconnection between Park Street	No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No Impacts  No Impacts  No Impacts  No Impacts	Denison Avenue extension alternatives.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street.  Consistent with other City of Brampton policies providing infrastructure that supports active transportation, livable communities and moving people and goods including the Official Plan, Brampton Vision 2040 and the City's Active Transportson Master Plan  Impacts dependent on design alternatives						
Residential, Commercial and/or industrial Properties) Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Usee)	No Impacts  No Impacts  Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  No Impacts  Does not improve upon existing disconnection between Park Street	Minor impacts dependent on the scale of improvements implemented on parallel roads  No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to exand Denison Averue between Park Street and Mill Street. Consistent with other City of Brampton policies providing infrastructure that supports active transportation, fivable communities and moving people and goods including the Official Plan, Brampton Vision 2040 and the City's Active Transportation Master Plan  Impacts dependent on design alternatives  Impacts dependent on design alternatives						
Residential, Commercial and/or industrial Properties) Impact to Future Development Plans  Consistency with Planning Policies  Access (Existing and Future Land Usee)	No Impacts  Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  Does not improve upon existing disconnection between Park Street	improvements implemented on parallel roads  No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	for this solution.  Impacts dependent on design alternatives for this solution.  Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street. Consistent with other City of Brampton policies providing infrastructure that supports active transportation, likelie communities and moving people and goods including the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plan.						
Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	No Impacts      Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan      No Impacts      Does not improve upon existing disconnection between Park Street	No anticipated impacts  Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Impacts dependent on design alternatives for this solution.      Consistent with the goal of the City of Brampton's 2015 Transportation Master Plen to extend Denison Avenue between Park Street and Mill Street.      Consistent with other City of Brampton copies and Mill Street.      Consistent with other City of Brampton copies and Mill Street.      Consistent with other City of Brampton copies and copies and copies and papers a citive transportation, likelie communities and moving nepole and goods including the Official Plan.      Brampton Vision 2040 and the City's Active Transportation Master Plan.      Impacts dependent on design alternatives.      Impacts dependent on design alternatives.						
Plans  Consistency with Planning Policies  Access (Existing and Future Land Uses)	Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  Does not improve upon existing disconnection between Park Street	Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Impacts dependent on design alternatives for this solution.      Consistent with the goal of the City of Brampton's 2015 Transportation Master Plen to extend Denison Avenue between Park Street and Mill Street.      Consistent with other City of Brampton copies and Mill Street.      Consistent with other City of Brampton copies and Mill Street.      Consistent with other City of Brampton copies and copies and copies and papers a citive transportation, likelie communities and moving nepole and goods including the Official Plan.      Brampton Vision 2040 and the City's Active Transportation Master Plan.      Impacts dependent on design alternatives.      Impacts dependent on design alternatives.						
Access (Existing and Future Land Uses)	Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts  Does not improve upon existing disconnection between Park Street	Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan  No Impacts	Consistent with the goal of the City of Brampton's 2015 Transportation Master Plan to extend Denison Avenue between Park Street and Mill Street. Consistent with other City of Brampton policies providing infrastructure that supports active transportation, livable communities and moving people and goods including the Official Plan, Brampton Vision 2040 and the City's Active Transportation Master Plan  Impacts dependent on design alternatives  Impacts dependent on design alternatives						
Access (Existing and Future Land Uses)	Not consistent with goal of the City of Brampton 2015 Transportation Master Plan or Official Plan     No Impacts     Does not improve upon existing disconnection between Park Street	Not consistent with the goal of the City of Brampton 2015 Transportation Master Plan or Official Plan     No Impacts	Brampton's 2015 Transportation Master Plan to exand Denison Avenue between Park Street and Mill Street. Consistent with other City of Brampton policies providing infrastructure that supports active transportation, invable communities and moving people and goods including the Official Plan. Brampton Vision 2040 and the City's Active Transportation Master Plan • Impacts dependent on design alternatives						
Uses)	No Impacts      O     Does not improve upon existing disconnection between Park Street	No Impacts	Impacts dependent on design alternatives						
<u> </u>	Does not improve upon existing disconnection between Park Street	0							
Neighbourhood Connectivity	Does not improve upon existing disconnection between Park Street								
		Does not improve upon existing Does not improve upon existing							
	•	•	•						
Noise	None of	of the alternatives would have any significant impa	or on noise levels						
	• • • •								
Air Quality	None	of the alternatives would have any significant impa	act on air quality						
Climate Change	•	•	•						
Cimate Change	No reduction from existing carbon emissions.	Improvement of traffic capacity and flows would potentially reduce emissions	Improvement of traffic capacity and flows would potentially reduce emissions						
Ab	- No Imposts	Impacts would be dependent on scope and	Impacts would be dependent on the design						
Archaeology	No Impacts	design of improvements on alternative routes	for Denison Avenue Extension.						
D. ile Unite	• No Imposts	•	Impacts would be dependent on the design						
Built Heritage	No Impacts	<ul> <li>Impacts would be dependent on scope and design of improvements on alternative routes</li> </ul>	for Denison Avenue Extension.						
	•	•	•						
Local Transportation Network and Operations	No capacity added to the local transportation network nor traffic reduction on parallel routes. However, existing and future traffic volumes are relatively low.	Would improve local transportation network capacity through improvements on parallel roadways	Would improve local transportation network by providing additional traffic capacity.						
	0	0	•						
Traffic Safety	No Improvements are provided to existing traffic safety concerns as identified in the Safety Assessment	No Improvements are provided to existing traffic safety concerns as identified in the Safety Assessment	Opportunities to make improvements to identified traffic safety concerns.						
Provisions for Activo	O O	- ASSESSITION	•						
Provisions for Active Transportation	None provided	None provided	Minor improvements to Active     Transportation facilities						
	0	0	•						
Design Criteria and Geometrics	No ability to upgrade the Denison Avenue corridor to adhere to applicable design standards and current practices	corridor to adhere to applicable design standards and current practices	Some ability to upgrade the Denison Avenue corridor to adhere to applicable design standards and current practices dependent on preferred design alternative						
	•		0						
	No Capital Costs	improvements to parallel corridors	High capital costs would be required						
Estimated Capital Cost	Not Preferred	Not Preferred	Preferred     Recommended as a Preferred Solution						
	<ul> <li>Is not consistent with goals identified</li> </ul>	<ul> <li>Is not consistent with goals identified in the City of Brampton's Transportation Master Plan and the goal of improving neighbourhood connections, active</li> </ul>	Recommended as a Preferred Solution     Consistent with goals of the City's     Transportation Master Plan and goal of     improving neighbourhood connections,     active transportation facilities and     additional local network transportation     capacity						
Pr	rovisions for Active ansportation sign Criteria and Geometrics stimated Capital Cost	relatively low.	relatively low.  In No Improvements are provided to existing traffic safety concerns as identified in the Safety Assessment value of the safety Assessment						





## Review of Alternative Designs for Denison Avenue Extension

Once the preferred Solution to extend Denison Avenue was selected a number of Design Options for the extension were developed, reviewed and evaluated.

#### Alternative #1 – Extension at South End of 45 Railroad Street Development

- Utilizes proposed extension of Denison Avenue at south end of the 45 Railroad Street property
- This alignment is conceptualized into the current site plan of 45 Railroad Street

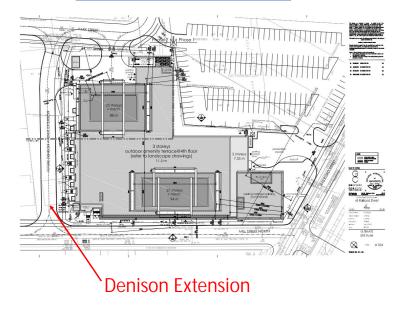
# Alternative #2 – Extension at South End of 45 Railroad Street with Realignment West of Park Street

- Utilizes proposed extension of Denison Avenue at south end of the 45 Railroad Street property
- Re-alignment of Denison Avenue west of Park Street to improve roadway geometrics
- New at-grade crossing of rail line, crossing angle compliant with Transportation Canada guidelines (70° to 110°)

#### Alternative #3 – Extension through Middle of 45 Railroad Street Development

• Extends Denison Avenue straight through the 45 Railroad Street Development in a more "typical" alignment

#### 45 Railroad Street Site Plan







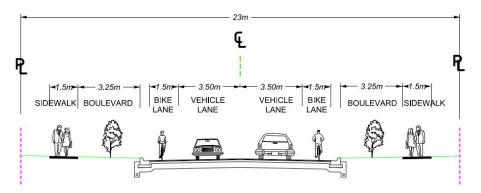
## Review of Alternative Designs for Denison Avenue Extension

Preliminary Preferred Cross-Section for the Denison Avenue Extension

- The City's Standard Cross-Section for a Minor Collector Roadway has the following;
  - 23 m wide Right-of-Way (ROW)
  - ➤ 1.5m wide on-road bike lanes on both sides
  - > 1.5m sidewalks on both sides
  - 3.25m width boulevard

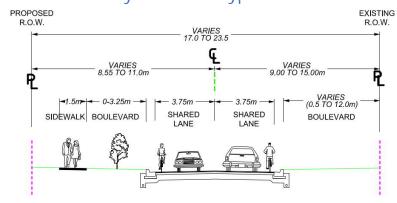
- The Preliminary Preferred Cross-Section is a modified version of the City Standard in order to avoid property impacts and fit with the proposed 45 Railroad Street development, would have the following;
  - Variable Right-of-Way width
  - > 1.5m sidewalks on north side only
  - Wider shared vehicle/cycle (sharrow) lanes in lieu of separate on-road bike lanes

#### City of Brampton Standard Cross-Section



The Standard Cross-Section would be subject to future development application(s) and property acquisition

#### **Preliminary Preferred Typical Cross-Section**









#### Denison Avenue, Park Street to Mill Street Municipal Class Environmental Assessment





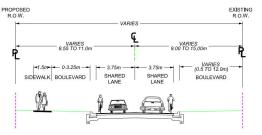
#### **LEGEND**

PROPOSED PAVEMENT

PROPOSED ENTRANCE

PROPOSED SIDEWALK

----- PROPOSED ROW





Public Works & Engineering
Capital Works

DENISON AVENUE EXTENSION

EA STUDY

**ALTERNATIVE DESIGN 1** 

SCALE: 1:1000 DATE: MAY 24, 2019

ST UPCATED MAY 24, 2019



#### Denison Avenue, Park Street to Mill Street Municipal Class Environmental Assessment



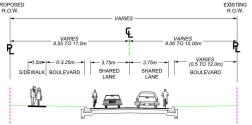
#### **LEGEND**

PROPOSED PAVEMENT

PROPOSED ENTRANCE

PROPOSED SIDEWALK

----- PROPOSED ROW





Public Works & Engineering
Capital Works

DENISON AVENUE EXTENSION
EA STUDY

ALTERNATIVE DESIGN 2

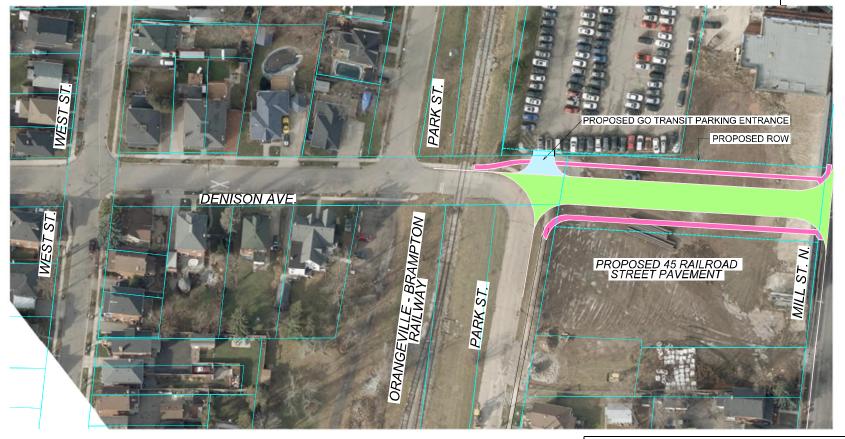
SCALE: 1:1000 DATE:

ST UPCATED 21 SEP 16 -- PAIZ



#### **Denison Avenue, Park Street to Mill Street**

Municipal Class Environmental Assessment



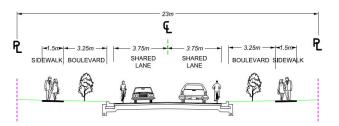
#### **LEGEND**

PROPOSED PAVEMENT

PROPOSED ENTRANCE

PROPOSED SIDEWALK

PROPOSED ROW





Public Works & Engineering
Capital Works

DENISON AVENUE EXTENSION

EA STUDY

ALTERNATIVE DESIGN 3

SCALE: 1:1900 DATE:

ST UPDATED 21 SEP 18 -- PNZ

#### **Evaluation of Design Alternatives**

Score	Impact Ranking Scale
0	High Impact
•	Medium Impact
•	Low Impact/Neutral After Mitigation
•	No Adverse Impacts for this Criterion
•	Beneficial Impact/Ideal Conditions

	•
Score	Impact Ranking Scale
0	Least Preferred (Highest Impact)
•	
•	
•	•
•	Most Preferred (Least Impact)

		otential Impacts	Alternative #1	Design Alternatives  Alternative#2	Alternative #3			
Des	criptio	n	Realignment at South End of 45 Railroad Street	Realignment West of Park, Across OBG Rail Line	Extension of Denison straight through 45 Railro			
		Potential Impacts on	Property	•	St. Property			
ıral	1.1	Terrestrial and/or Aquatic Features (proximity to habitat features)	None	None	None			
Natural		Potential for Impacts to Confirmed Species at Risk	•	•	•			
	1.2	Confirmed Species at Risk (SAR) and/or Significant Wildlife Habitat (SWH)	None	None	None			
		Property Impacts (Existing	No Direct Impact or Displacement of any existing	Displaces three (3) residential properties (1 Denison	Direct impact to one (1) property (45 Railroad			
	2.1 Residential, Commercial proper and/or Industrial Properties)		properties	Avenue, 3 Denison Avenue, 5 Denison Avenue) required to accommodate the proposed 23m ROW required for new roadway.	Street) to accommodate 23m ROW for new roadway. (see below for impact to Future Development Plans)			
	2.2 Impact to Future Development Plans		Extension of Denison Avenue would be in alignment provided by developer of 45 Railroad Street property and has been accommodated by approved site plan design.	Extension of Denison Avenue would be in alignment provided by developer of 45 Railroad Street property and has been accommodated by approved site plan design.	High impact to current (approved and under construction) site development of 45 Railroad Street property. Site plan would require comple re-design.			
	2.3 Consistency with Planning Policies		Consistent with the City of Brampton Transportati     Consistent with City of Brampton 2040 Planning V and moving people and goods.	on Master Plan (2015) goal of extending Denison Avenue bet fision and Official Plan (2015) goals of providing infrastructur	ween Park Street and Mill Street; e that supports active transportation, livable communi			
SOCIAI/ECONOMIC	2.4	Access (Existing and Future Land Uses)	The extension of Denison Avenue will provide better direct access for existing residents on Paix Street and/or Mil Street. It will approvide more direct access for pedestrians and cyclasts. The extension of Denison Avenue at the south end of the 45 Railroad Street property will provide access to the south end of the development via a new driveway entrance.	The extension of Denison Avenue will provide better direct access for existing residents on Park Street and/or All Street. It will also provide more direct access for pedestriens and cyclists. The extension of Denison Avenue at the south end of the 45 Ratiroad Street property will provide access to the south end of the development with a new driveway entrance.  Some Exonagination of the proposed west access to the CO Transit parking for would be required.	The extension of Denison Avenue will provide better direct access for existing residents on P. Street and/orf MS Street. It will be provide me direct access for pedestrians and cyclists. New access points would be required for the C Transit parking area and revised site plan for 4 Railroad Street property			
	2.5	Neighbourhood	Improves connection between Park Street and	Improves connection between Park Street and Mill	Improves connection between Park Street and			
		Connectivity	Mill Street for pedestrians, cyclists and vehicle traffic.	Street for pedestrians, cyclists and vehicle traffic.	Street for pedestrians, cyclists and vehicle train			
	2.6	Noise	0	0	0			
	2.7	Air Quality	-	the alternatives would have any impact on existing noise or	air quality.			
	2.8 Climate Change		All the alternatives would improve traffic flow by add	Ing capacity and reducing traffic on parallel routes which wou	uld provide an overall marginal improvement on carb			
_			•	emissions ①	•			
Environmen	3.1	Archaeology	<ul> <li>No identified archaeological concerns for this alternative.</li> </ul>	<ul> <li>Additional investigation (Stage 2 survey) would be required for realigned section of Denison Avenue.</li> </ul>	<ul> <li>No identified archaeological concerns for this alternative.</li> </ul>			
Cultural Envir	3.2	Built Heritage	No identified Built Cultural Heritage resource impacts.	Impact to property listed on City of Brampton's Municipal Registry of Cultural Heritage Resources (1 Denison Avenue)     Impact to property identified by City of Brampton as Potential Property of Interest (3 Denison Avenue)	Impact to 45 Railroad Street east façade (curr being preserved for incorporation into new development)			
			All the alternatives would improve local transports	etion network capacity and would reduce traffic on parallel rou	tes. However, generally the existing and projected for			
	4.1	Local Transportation Network and Operations	traffic volumes are low.  Provides new connection between Park Street and Mill Street. Creates log oil Denison Avenue alignment west of Park Street and new roadway that is not ideal for connecting Denison Avenue west of Park Street with Mill Street.	Provides new connection between Park Street and Mill Street. Eliminates jog in Denison Avenue alignment west of Park Street and new roadway. Provides improved or new access for homesproperties along Denison including new development at 45 Railroad Street.	Provides new connection between Park Street Mil Street. Ideal for connecting Denison Avenue west of I Street with Mill Street. Does not provide additional connection for homes/properties along Denison. Eliminates proposed accesses for 45 Railroad Street development as well as GO Transit par area.			
	4.2	Traffic Safety	Existing concerns regarding the proximity of the proposed GO Transit parking fot access to the attended of the concerns regarding the proximation of the proposed GO Transit parking for the concerns of the parking Street development access onto the Parkindia Street curve would remain, however opportunities to mitigate these concerns would be available.	Realignment of Denison Avenue west of Park Street would provide opportunities to address identify traffic safety concerns with the at-grader rail crossing and access points for GOT framely parking lot and 45 Realroad Street development.	Realignment of Denison Avenue through the Railroad Street property would provide an opportunity to review and revise access point GO Transit parking lot area as well as the 45 Railroad Street development. Identified concu- with the existing at-grade rail crossing would s need addressing.			
İ	4.3	Provisions for Active	•	•	•			
		Transportation	Transportation Plan.	tation facilities as per active transportation recommendations	in the City's Transportation Master Plan and Active			
Technical	4.5	Design Criteria and Geometrics	A modified City of Brampton design criteria for a Minor Collector roadway were used to develop her roadway extension plan. Proposed ROW requirements and cross-section elements based updated to a world properly means as well as provide consistency with features on connecting roadways.     The log in the alignment would utilize the existing bend from Demon Avenue to Park Street which is sub-standard.	A modified City of Brampton design criteria for a Minor Collector roadway were used to develop the roadway extension plan. Proposed FOV Minor requirements and cross-section elements based used to make properly impacts as well as provide consistency with features on connecting roadways. The realignment of Denison Avenue west of Park Street would cross the existing OBR rail fine at 110° to meet infaminum standards.	A modified City of Brampton design criteria for Minor Collector roadway were used to devold roadway extension plan. Proposed RDW requirements and cross-section elements but adjusted to a woold properly impacts as well as provide consistency with features on connecti roadways.     The proposed 45 Railroad Street access and proposed GO Transit parking area access only reposed GO Transit parking area access only relocated/adjusted.			
			No now or releasted exercing of ORP roll line	Realignment of Denison Avenue, west of Park Street.	No new or relevated greening of ORR milling.			
	Orangeville-Brampton Rail Line Crossing design.     Upgrades to the existing at-grade crossing to meet Transpor guidelines for at-grade rail crossing.		would be required as part of this alternative	<ul> <li>Realignment of Lemison Avenue, west or Park Street, would require a new relocated crossing of the OBR rail line.</li> <li>Design standards require that any new crossing of a rail line be between 70-110° angle per current Transportation Canada guidelines for at-grade rail crossings</li> </ul>	No new or relocated crossing of OBR rail line would be required as part of this alternative.     Upgrades to the existing at-grade crossing to upgrade crossing to meet Transport Canada guidelines for at-grade rail crossings would st required.			
	4.7	Storm Water Management/Drainage	Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area. Improvements would be limited extension through 45 Railroad Street property only.	Opportunities to provide improvements to local drainage as part of new road construction to improve storm water management in the area.	Opportunities to provide improvements to loca drainage as part of new road construction to improve storm water management in the area Improvements would be limited extension thro 45 Railroad Street property only.			
	4.8	Utilities	Minor impacts to existing above-ground utilities	Minor impacts to existing above-ground utilities	Minor impacts to existing above-ground utilitie			
	5.1	Estimated Construction	(hydro, streetlighting)	(hydro, streetlighting)	(hydro, streetlighting)			
	5.1	Cost	Est. \$340,000	Est. \$1,400,000	Est. \$840,000			
ction	5.2	Property Costs (see also Property under Socio-	Moderate	O High	Hgh			
nustru		Economic Impacts)	• Moderate	nigri 🕒	ngn ●			
Cost and Construction	5.3	Construction Staging	Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development.     Construction would have minor impacts to existing Denison, Park and/or Mill Street function and only minor interruption of DBR rail line operations while improvements to the existing crossing are made.	Construction of roadway extension between Park Street and Mill Street could potentially be done in tandem with 45 Railroad Street development. Realignment of Denison Avenue, west of Park Street would require disruption to OBR rail operations for duration of work through rail ROVM. may require duration of work through rail ROVM, may require closure/restricted access for realignment and reconstructions.	Construction of roadway extension between F Street and Mill Street could potentially be don tandem with 45 Railload Street development (expected re-design of site)			
		Summary	Preferred  Option #1 provides an improvement on neighbourhood connectivity, active transportation facilities and access while avoiding major impacts to estisting residential properties and/or proposed developments.	Not Preferred  Option #2 provides improvement on neighbourhood connectively, and as improvement on neighbourhood connectively, and as improvement of selecting and access. However, the identified impacts to existing residential properties and the Orangeville-Brampton rail line atgrade crossing are significant and a significant cost. As such, this option is not preferred.	Not Preferred  Option #3 provides improvement on neighbourhood connectivity, active transports facility and access. Option #4 also represents ideal alignment for the Denison Avenue Exten However, the identified impact to the propose Railroad Street development would be significant or equire a complete redesign of that project significant expense.			





# Next Steps

The next steps for the Class Environmental Assessment Study are:

- Review comments and suggestions received from the public and agencies and incorporate into the study, as appropriate
  and respond to written questions and comments as requested;
- Confirm the Preliminary Preferred Design Alternative for the Denison Avenue Extension
- Carry out the preliminary design for the Denison Avenue Extension
- Complete additional technical studies including an Illumination Report, Stormwater Management Report and Phase I Environmental Site Assessment
- Completion and filing of the Environmental Project Report by December 2019 for 30 day public review





# Please Provide Your Feedback

#### Thank you for attending the Stakeholder Group Meeting.

Public Input is an essential component of the decision-making process.

Please provide us with any comments you have relating to the study and the information presented tonight by completing a comment sheet tonight or by Friday, September 27, 2019.

If you have any questions or comments after tonight's meeting, please contact either of the following:

Soheil Nejatian, P.Eng.
Project Engineer, Infrastructure Planning
Public Works and Engineering
City of Brampton
Tel: 905-874-5909

Soheil.Nejatian@Brampton.ca

Marko Paranosic, P.Eng., PE Senior Project Manager Associated Engineering (Ont.) Ltd. Tel: 226-215-3147

Paranosicm@ae.ca





# Please Provide Your Feedback

#### Thank you for attending the Public Information Centre.

Public Input is an essential component of the decision-making process.

Please provide us with any comments you have relating to the study and the information presented tonight by completing a comment sheet tonight or by Friday October 4, 2019.

If you have any questions or comments after tonight's meeting, please contact either of the following:

Soheil Nejatian, P.Eng.
Project Engineer, Infrastructure Planning
Public Works and Engineering
City of Brampton
Tel: 905-874-5909

Soheil.Nejatian@Brampton.ca

Marko Paranosic, P.Eng., PE Senior Project Manager Associated Engineering (Ont.) Ltd. Tel: 226-215-3147

Paranosicm@ae.ca



