

Redmond Road Extension Schedule B Municipal Class Environmental Assessment

PROJECT FILE (FINAL)

March 2020

Prepared for: City of Mississauga

Prepared by: WSP

THE PUBLIC RECORD

This Municipal Class Environmental Assessment Project File is available for a 30 calendar-day public review period from **March 12**, **2020 to April 13**, **2020** during regular business hours at:

The City of Mississauga

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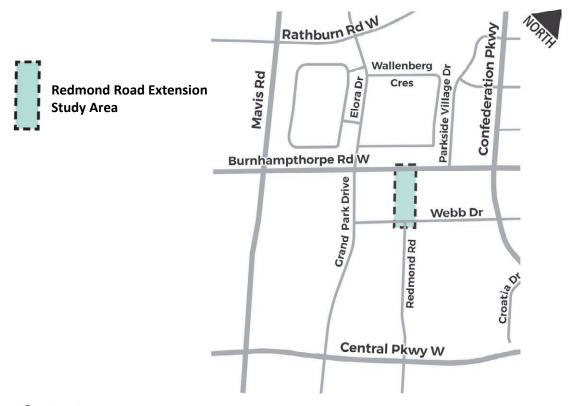
Executive Summary

Introduction

The City of Mississauga has completed a Municipal Class Environmental Assessment (Class EA) Study to evaluate the need to extend Redmond Road from Webb Drive to Burnhamthorpe Road West. The study was carried out as a Schedule B project in accordance with the Municipal Class EA document (2000, as amended in 2015), as approved under the Ontario Environmental Assessment Act.

The Redmond Road Class EA study area is generally situated between Grand Park Drive to the west and Confederation Parkway to the east (Exhibit ES-1), within the 'M City' development, owned by Rogers Real Estate Development Limited.

Exhibit ES-1: Study Area



Planning Context

The planning and policy framework applicable to the Redmond Road Class EA Study was reviewed. The planning and policy framework guides infrastructure planning, land use planning, and strategic investment decisions to support Provincial, Regional

and Local objectives in growth and transportation. Plans and policies reviewed and documented included:

- A Place to Grow Growth Plan for the Greater Golden Horseshoe (2019)
- Provincial Policy Statement (2014)
- Region of Peel Official Plan (2018)
- City of Mississauga Strategic Plan
- City of Mississauga Official Plan (2016)
- Downtown21 Master Plan (2010)
- Downtown Core Local Area Plan (2015)
- Mississauga Transportation Master Plan (2019)
- City of Mississauga Cycling Master Plan (2018)
- Rogers Real Estate Development Limited M City Master Site Plan Agreement (2015)

One of the key guiding plan/policy documents is the Downtown Core Local Area Plan (Mississauga Official Plan Amendment 8 - "MOPA 8"), which builds on the Official Plan and contains more detailed policies and schedules specific to the Downtown Core. The Downtown Core Local Area Plan (DCLAP) policies are intended to promote a high quality of urban design and urban built form. The proposed Redmond Road extension is being planned to directly support DCLAP policies.

The DCLAP goals and objectives are directly relevant to the Redmond Road Class EA Study:

- Create a vibrant Downtown by strengthening the transportation system, improving linkages/access, and enhancing the pedestrian experience;
- Create a fine-grained, well-connected road network that supports multiple modes of transportation; and
- Develop an urban environment that includes high-quality public spaces.

The proposed Redmond Road extension is consistent with the following policies of the DCLAP:

- Development Objectives outlined in Section 2.1 of DCLAP provide policies intended to plan for the location of streets, provide for a high standard of urban and streetscape design, and develop/enhance of a comprehensible public/private system of pathways and open space.
- Urban Design Objectives outlined in Section 3.1 provide policies intended to, for example:
 - Encourage a built form which has a high level of physical continuity, cohesion and linkage between building;
 - Promotes urban scale land blocks, streets and built form appropriate to transit supportive and pedestrian oriented core;
 - Achieve elements of linkage to the abutting communities while ensuring compatible integration and context sensitivity; and
 - Achieve a balance of vehicular traffic and transit and active transportation needs to achieve pedestrian comfort, convenience, safety and accessibility.
- ▶ Urban Design policies for the public realm outlined in Section 3.2.1 of the DCLAP speak to the design of streets, edge boulevards and public open spaces. Again, these policies emphasize the desire to promote a high level of design tailored to the pedestrian and on-street experience.

Existing Conditions

Land Use

The proposed Redmond Road extension will be entirely situated on lands owned by Rogers Real Estate Development Limited and approved for development per the M City Master Site Plan Agreement (2015). The proposed Redmond Road extension between Webb Drive and Burnhamthorpe Road West has been incorporated into the planned M City Master Site Plan and the roadway will serve as a minor collector road within the development.

Land use in the broader surrounding area is a mix of established residential communities to the south (along existing Redmond Road) and to the north of Burnhamthorpe Road West. New condominium communities have developed east

and west of the study area, reflecting the City's plan for high density, mixed-use developments within the downtown core, per the Downtown Core Local Area Plan.

Cultural Heritage

A Cultural Heritage Assessment was conducted in support of the Redmond Road Class EA. Based on this work, there are no built heritage resources or cultural heritage landscapes within or adjacent to the Redmond Road study area.

A Stage 1 Archeological Assessment was conducted. The assessment was carried by Archaeological Research Associates Ltd (ARA) in accordance with the *Ministry of Tourism, Culture and Sport (MTCS) Standards and Guidelines for Consultant Archaeologists* (2011). The findings indicate that the Redmond Road Class EA study area has been previously assessed and/or disturbed. Therefore, no further archaeological assessment is required.

Natural Environment

A Natural Heritage assessment was conducted in support of the Redmond Road Class EA. The review confirmed that there are no natural environmental features or trees within the Redmond Road Class EA study area.

Drainage and Stormwater

The study area falls within the Mary Fix Creek watershed and is under the jurisdiction of the Credit Valley Conservation Authority. Mary Fix Creek is an intermittent surface water feature north of Burnhamthorpe Road. Surface water flow drops into a catch basin on the north side of Burnhamthorpe Road and remerges south of Webb Drive, just east of Confederation Parkway West.

There are no surface water features or areas regulated under Credit Valley Conservation Authority Regulation 160/06, in the Redmond Road Class EA study area. Currently, surface water runoff from the undeveloped parcel drains as overland flow to the surrounding street network where it enters the storm sewer system.

A complete internal storm sewer system will be implemented as the block develops, which will tie into the existing storm system. Road drainage has been accounted for in the drainage design for the development. Further information regarding the M City stormwater management plan can be obtained from the City.

Municipal Services and Utilities

The Region of Peel is making watermain and sanitary sewer improvements on numerous streets in the Mississauga City Centre. The Region has planned this work to improve water supply through water infrastructure upgrades, in support of approved growth in the Mississauga City Centre. Specific work underway in the vicinity of the Redmond Road Class EA study area includes: A new 1500 mm watermain along Burnhamthorpe Road, between Grand Park Drive and Cawthra Road; and new 400 mm and 600 mm local distribution watermains planned for Webb Drive and Duke of York Boulevard, respectively. Sanitary improvements are also identified in these areas. Other local municipal services and utilities will be installed as part of the M City development. This work will be planned and designed in accordance with the City approved Master Site Plan Agreement (2015).

Transportation

Existing Transportation Network

Redmond Road currently exists as a 2-lane north-south roadway between Webb Drive (in the north) and Fairview Road West (in the South). The existing road, south of Webb Drive traverses an older neighbourhood with primarily low density/ single family residential development. Other north-south transportation links in the immediate area include: Grand Park Drive and Confederation Parkway, both City collector roads. Key east-west transportation links in the area include Webb Drive and Central Parkway West, City collector roads, and Burnhamthorpe Road West, a Region of Peel arterial road.

Traffic and Transportation Assessment

An assessment of existing (2018) traffic conditions was undertaken to assess the overall transportation network performance which incorporated the study areas of all four EA studies (Redmond Road, Webb Drive, The Exchange and Kariya Drive). The micro-simulation assessment included an analysis of existing conditions and operational performance for the area bounded by Elora Drive, Webb Drive/Central Parkway West, Hurontario Street, as well as Burnhamthorpe Road West/City Centre Drive.

Results from the future (2031) traffic analysis indicated that without the Redmond Road extension from Webb Drive to Burnhamthorpe Road, traffic exiting from the M City development is expected to experience heavy delays at the adjacent

intersections during the morning peak hour. Many movements are expected to operate at very congested level (i.e. Level of Service 'F') with queues backing up to the property accesses (e.g., northbound left movement at Burnhamthorpe Road and Elora Drive/Grand Park Drive intersection, northbound movements at Burnhamthorpe Road and Parkside Village Drive/Street A intersection, and southbound movements at Webb Drive and Street A intersection). The proposed Redmond Road extension would provide an essential connection between the M City development and the overall road network.

Problems and Opportunities

Based on a review of the planning context and policy framework and the existing traffic conditions, safety issues and multi-modal transportation deficiencies, the following problems and opportunities have been identified:

- Downtown Mississauga is transitioning to an urban, high-density, mixed use community that is oriented toward pedestrian mobility and access to public transit;
- ▶ A key objective of the City's Downtown Core Local Area Plan is to create complete communities that have a compact urban form, are walkable and provide convenient access to a variety of land uses and public transit;
- A new north-south collector road is needed for the M City community to provide access within the community as well as into and beyond the downtown;
- ► A new roadway will provide additional routing in the downtown and make for more pedestrian-friendly environment;
- ► There is an opportunity to contribute to a vibrant urban core through the creation of high-quality public realm/pedestrian environmental that supports street-level commerce and encourages street activity.

Problem and Opportunity Statement:

A new City of Mississauga collector road is required to provide north-south access and connectivity within the planned M City community. A new segment of Redmond Road will facilitate multi-modal movement between the internal road system and the surrounding road network. The new road will also provide for on-street parking and a vibrant pedestrian environment to support street-level commercial uses. The

proposed Redmond Road extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, fine-grained street network with a high-quality public realm and a range of transportation choices.

Alternative Solutions

Phase 1 of the Municipal Class EA process involves the identification of the transportation problems and opportunities to be addressed by the study and Phase 2 involves the identification and evaluation of a range of possible solutions or 'planning alternatives'. The following Alternative Solutions are being considered to address the Problems and Opportunities:

- Do Nothing: Maintain existing transportation system within the study area i.e. new development would require an internal road network to connect with other collector or arterial roads.
- Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.
- 3. Improve Other North-South Routes: Upgrade parallel roads such as Grand Park Drive or Confederation Parkway to meet transportation needs.
- **4.** Extend Redmond Road: Redmond Road as a 2-lane road from Webb Drive to Burnhamthorpe Road.

The alternative planning solutions were assessed in their ability to reasonably address the problems and opportunities. Criteria were developed to guide the assessment process so that transportation planning, technical and environmental (socio-economic, community and cultural/heritage) conditions were all factored into the recommendation.

The assessment of alternatives employed a reasoned argument approach which assesses the potential impacts of each alternative and then compares the relative significance of the impacts among the alternatives to select the recommended solution. A summary is provided in Exhibit ES-2.

Exhibit ES-2: Summary of the Evaluation of Alternative Planning Solutions

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend Redmond Road
Transportation and Technical	Does not address Problems and Opportunities Not consistent with City planning policies to create a finer-grained street network Does not improve network connectivity	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network	Would provide additional north-south traffic capacity in other corridors Not consistent with City planning policies to create a finer-grained street network Does not address local transportation needs within the M City community or improve network connectivity	Consistent with City planning policies to create a finer-grained street network Addresses anticipated transportation needs Improves network connectivity for all users Improves road operations and safety Enhances access to transit and downtown walkability
Socio-Economic Environment	No property required Does not create access to new community or support mixed-use development No opportunity to improve walkability and enhance access to transit	 No property required Although supportive of transit, cycling and pedestrian activities, this does not provide the specific infrastructure needed within the study area to support or enhance these forms of transportation. 	Potentially significant property impacts along other corridors Does not address problems and opportunities within the study area Does not meet the multi-modal mobility needs of the M City community Does not support economic development within the study area	Supports mobility for all modes within local community and in downtown Provides opportunity to enhance streetscape Prioritizes a high quality pedestrian environment Provides for on-street parking to support mixed-use development and street-level commercial uses
Natural Environment	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	Not applicable, no natural environmental features are present. Provides sustainable transportation choices to reduce vehicle use.
Cultural Environment	No potential archaeological impacts No cultural heritage resources identified	 No potential archaeological impacts No cultural heritage resources identified 	 Other corridors would require assessment. 	No potential archaeological impacts No cultural heritage resources identified
Evaluation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

Preferred Planning Solution

Based on the results of the evaluation, Alternative 4, Extension of Redmond Road, is preferred because it fully addresses the Problems and Opportunities by:

- Supporting the creation of an urban environment that meets planning objectives, network connectivity and access;
- Fully addressing the City's transportation objectives by creating a fine-grained downtown street network;
- Providing a new north-south collector road within the planned M City community;
- Providing redundancy in the road network for all vehicles;
- Creating smaller, more walkable blocks that enhance pedestrian access to transit;
- Supporting a mixed-use community by offering high-quality pedestrian environment and street-parking for street-level commerce.

Alternative 1 does not address any of the Problems and Opportunities. Alternatives 2 and 3 only partially address the Problems and Opportunities and do not contribute to a fine-grained street network that supports community growth, improved pedestrian options and access to transit.

Future Transportation Conditions

In general, future traffic conditions are not likely to change significantly and operations will not improve with the extension of Redmond Road, given the expected growth in the downtown core. Traffic modeling indicates that the proposed Redmond Road extension would provide north-south access and connectivity within the planned M City community.

It is important to note that the City's objectives of the Downtown Core Local Area Plan are to prioritize the development of a complete community with a compact urban form that is walkable and convenient to public transit and the cycling network.

MiWay Transit currently operates on the road network around Redmond Road, including Webb Drive, Burnhamthorpe Road, Grand Park Drive. MiWay has confirmed that there are no plans to extend local transit onto the proposed new segment of Redmond Road.

The City of Mississauga Cycling Master Plan (2018) does not include plans for dedicated cycling facilities on Redmond Road. However, there will be access to the surrounding cycling network which includes: multi-use path on Burnhamthorpe Road; existing bike lanes on Webb Drive; and existing dedicated and shared facilities on Grand Park Drive.

Road Design Concept

A design concept was developed for the Preferred Planning Solution to extend Redmond Road. The design concept was developed for illustrative purposes only and is subject to refinement during future design phases.

Exhibit ES-3 depicts the proposed typical road cross-sections, which are based on the City's Standard City Centre Cross-Section. Two variations on the cross-section are proposed to reflect the proposed road rights-of-way. Exhibit ES-4 depicts the road alignment concept.

It is anticipated that the road design will be completed by Rogers Real Estate Development Ltd. as part of the M City development phasing. The design will be subject to further review and approval by City staff. The following design aspects will be of particular interest:

- ▶ The use of the City of Mississauga Standard City Centre Road Cross-Section will ensure appropriate space is available for underground utilities, street trees and sidewalk. However, some details of the road cross-section may be subject to minor adjustments during the design phase.
- ► Traffic operations including turning lane requirements and storage length at Webb Drive and Burnhamthorpe Road.
- Design of on-street parking, while maintaining appropriate clearance at intersections.
- Design of mid-block intersections.
- Streetscape design based on the Master Site Plan Agreement (2015) and further review/approval of City staff.

Exhibit ES-3: Redmond Road Cross-Sections

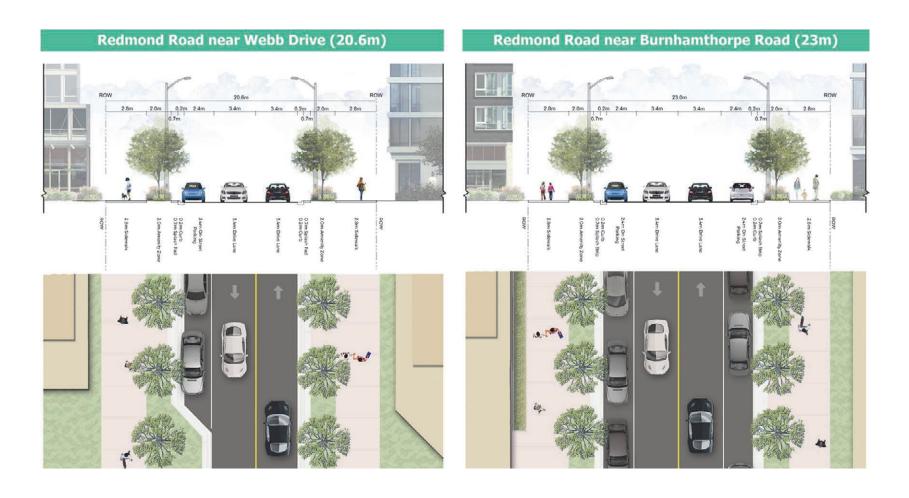
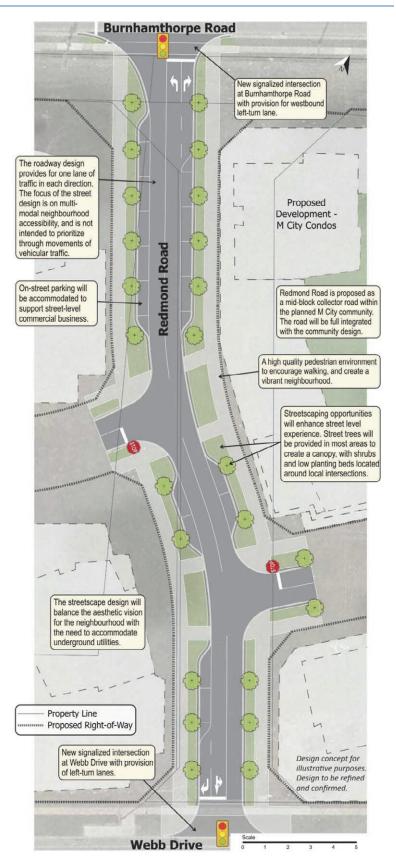


Exhibit ES-4: Redmond Road Design Concept

Note: Streetscape depiction is conceptual only. Green areas are identified for future streetscape design and do not imply the presence of sod. Location of streetscape is subject to further design and integration with building location, utilities and on-street parking considerations.



Consultation

Key Points of Contact

External agencies, utilities, emergency service providers, and residents and business owners were contacted directly at key points during the study and requested to provide input to the study and feedback on the decision-making process. The key points of contact are listed in Exhibit ES-5.

A direct mailing list of residents and businesses, within the defined catchment area, agencies and utilities was developed at the outset of the study. The catchment area for property owners was defined as approximately 300 m on either side of Redmond Road within the study area. The mailing list continued to be updated based on feedback received through the study.

Members of the general public were made aware of the study through notifications in the local newspapers and invited to contact the project team to join the project mailing list. Members of the public requesting to be on the mailing list received direct notification of subsequent study milestones at the key points of contact.

A dedicated website and email address were established through the City of Mississauga's website at the outset of the study.

Various Public Information Centre (PIC) materials were made available on the website (e.g. Notices, display material and comment sheets):

http://www.mississauga.ca/portal/residents/rwek-ea-studies

All notices and study materials contained the dedicated project team email address to facilitate direct contact from interested members of the public.

The potential need for formal Indigenous Community engagement was explored with the Ministry of Environment, Conservation and Parks (MECP). In correspondence dated January 18, 2019, MECP confirmed that, given the urban downtown setting, the absence of natural features and watercourses, Indigenous Communities were unlikely to have an interest in the study and direct outreach was not required.

Exhibit ES-5: Key Points of Public Contact

Date	Notification	Purpose
Notice of Study Commencement December 4, 2018	 Notices sent to property owners / mailing list – December 4, 2018 City project website – December 4, 2018 The Mississauga News – December 6 and December 13, 2018 Letters and Response Forms sent to agencies and utilities – December 10, 2018 Letter and Streamlined EA Project Information Form sent to MECP – December 12, 2018 	To introduce and invite participation in the study and to request any preliminary comments or pertinent information.
Public Information Centre June 12, 2019	 Postcard notices sent to property owners / mailing list – May 27, 2019 City project website – May 31, 2019 City website – June 3, 2019 The Mississauga News – June 6, 2019 PIC Display materials posted on City website on June 13, 2019 	To notify and invite interested parties to attend the first Public Information Centre on June 12, 2019 to review information and provide input regarding: the problem and opportunities being addressed, the collection of background information, the evaluation of planning alternatives and early design concepts.
Notice of Study Completion March 12, 2020	 Notice sent to property owners / mailing list – March 12, 2020 Notice sent to agencies and utilities – March 12, 2020 City project website – March 12, 2020 The Mississauga News – March 12 and March 19, 2020 	To announce the completion of the Class EA Study and notify interested parties of the 30- calendar review period for the Environmental Study Report.

Agency Consultation

The list of technical agencies was assembled based on previous City of Mississauga Class Environmental Assessment studies and Ministry of the Environment, Conservation and Parks (MECP) Government Review Team (GRT) list. External 'agencies' (including regulatory/review agencies, utilities and emergency service providers) were first notified of this Class EA Study through written correspondence on December 10, 2018 which included a copy of the Notice of Study Commencement

and a Response Form. A summary of Agency comments received throughout the study and course of action taken by the Project Team, as appropriate, is provided in Exhibit ES-6.

Exhibit ES-6: Agency Comments

Agency Comment	Course of Action
Ministry of Natural Resources and Forestry Email dated: January 2, 2019 I have received your letter regarding four proposed road extensions in Mississauga. There was no attached notice with a key plan. Please provide.	Notice of Commencement was provided via email.
Ministry of Natural Resources and Forestry Email dated: January 3, 2019 Natural areas to be affected will need to be searched for Butternut trees of all sizes, including seedlings, within 25 metres from proposed works. The woodland areas to be affected will need to be outlined and, if they are at least 0.5 ha averaging at least 30 metres in width with some native oak or maple species, assessed for potential as habitat for endangered bat species (Little Brown Myotis, Northern Myotis, Tri-coloured bat).	An assessment of the natural environment was completed as part of this study.
Ministry of the Environment, Conservation and Parks Letter dated: January 18, 2019 Response to Notice of Commencement providing guidance on consultation with Indigenous Communities.	Given the nature of this project and the existing land uses in the area, separate notification for Indigenous Communities was not required.
Ministry of Natural Resources and Forestry Emailed dated: June 6, 2019 We have received the Notice of Public Information Centre for this project. If you have any questions regarding natural features/systems or impacts on them, please let us know.	No action required.
Region of Peel Public Health Email dated: June 12, 2019 Thank you for sharing the notice of PIC for the environmental assessment process for Redmond Road, Webb Drive, The Exchange and Kariya Drive. We would like to request digital copies of information being shared at tonight's PIC, including the presentation, so that we may review and provide comments.	PIC materials were provided via email on June 17, 2019.

Public Information Centre

A Public Information Centre (PIC) was held on June 12, 2019 from 5:30 pm to 7:30 pm in the Great Hall at the Mississauga Civic Centre, located at 300 City Centre Drive in Mississauga.

The purpose of the PIC was to provide stakeholders and interested members of the public with an opportunity to view study information including project background, the Municipal Class EA process, planning and policy context, assessment and evaluation of alternative planning solutions and the selection of a preliminary preferred solution. A design concept was presented of the preliminary preferred solution, for illustrative purposes.

Twelve people signed in at the PIC. Attendees included local residents/property owners, stakeholders, and staff from the Peel District School Board and City of Mississauga. The PIC materials were made available on the City's website the day after the PIC.

One comment was received via hard copy at the PIC. No additional comments were received during the comment period, ending July 5, 2019. The written comment that was received is provided in Exhibit ES-7, along with the how the feedback was considered in this study. Sensitive information such as names and contact information have been removed.

Exhibit ES-7: Public Feedback Received at the Public Information Centre

Comments	How the feedback has been considered in this study
Add at least 2 overpasses or underpasses to help alleviate traffic, i.e. Mavis & Burn / Burn & Confederation Pkwy. Replace proposed lights @ Redmond & Webb with stop signs.	The consideration of possible improvements to Burnhamthorpe Road are outside of the scope of the Redmond Road Class EA Study. The purpose of this Class EA is to confirm the project need and recommend a preferred planning solution for Redmond Road. All aspects of the design, including specific intersection configuration, will be finalized during detailed design.

Stakeholder Consultation

The proposed Redmond Road extension is located entirely within the M City development and has been previously conceptualized as part of the Master Site Plan Agreement (2015). As such, Rogers Real Estate Development Ltd. has a direct stake

in the planning for the Redmond Road and will be responsible for the future design and implementation of this road as part of the M City development.

A meeting was held with Rogers' representatives on May 30, 2019. Minutes are on file with City staff. A summary of the meeting is provided below:

- ▶ A meeting was held with Rogers' representatives on May 30, 2019, at the City of Mississauga, 201 City Centre Drive.
- ► The purpose of the meeting was to introduce the study, review early design concepts, discuss stakeholder questions and concerts, and review next steps.
- During the meeting it was noted that the design concept was based on the streetscape character described in the Master Site Plan Agreement (2015).
- ▶ Roger's reviewed their timeframes for the next phase of development and confirmed that the completion of the Redmond Road Class EA was on the critical path to their construction phasing.
- ▶ Following the meeting, Rogers' provided comments related to the preliminary design of the design concept. Preliminary design is outside of the scope of the Schedule B Class EA process. No further comments about the study process or design concept were received.

Mitigation and Commitments to Further Work

As noted above, it is anticipated that the road design will be completed by Rogers Real Estate Development Ltd. as part of the M City development phasing. The design will be subject to further review and approval by City staff. While some commitments to further work are highlighted below, it is beyond the scope of this Project File to identify all potential future commitments specifically, since these will be subject to ongoing review and approval processes between Rogers and the City of Mississauga.

Integration with M City Development

Design of the Redmond Road extension will proceed in coordination with the M City development phasing. M City development is subject to the Master Site Plan Agreement (2015) with the City of Mississauga as well as other development requirements/approvals.

Property conveyance will be finalized, as necessary, per the Master Site Plan Agreement (2015).

Excess Soil Management and Sediment and Erosion Control measures will be implemented per Master Site Plan Agreement and other City of Mississauga requirements.

Streetscape design will be completed per the Master Site Plan Agreement and any other requirements/approvals, in consultation with City staff.

Drainage and Stormwater Management

The stormwater management design will appropriately manage water quality and quantity per applicable City of Mississauga and Credit Valley Conservation design criteria. A Ministry of Environment, Conservation and Parks Environmental Clearance Approval (ECA) permit may be required for the new storm sewer system.

Utilities

The City and Rogers Real Estate Development Ltd. will engage with Alectra Utilities, Peel Region and private utility companies to determine needs and coordinate design and installation. Requirements are outlined in the Master Site Plan Agreement (2015).

Noise and Vibration

The potential for Noise Sensitive Areas (NSAs) in close proximity to the proposed Redmond Road extension was reviewed. There are no NSAs immediately adjacent to roadway since the setting is within vacant land that is planned for a new condominium community. Nearby existing condominium towers on Grand Park Drive and Confederation Parkway will be blocked from Redmond Road by new towers. Any potential NSAs located to the north for the study area, on Wallenberg Crescent, back onto Burnhamthorpe Road. Noise levels in the rear yards will be dominated by Burnhamthorpe Road and not Redmond Road. Based on this review, a noise assessment for Redmond Road was deemed to be not warranted.

The potential for construction noise issues will be further reviewed during detailed design when construction methodology and schedule is fully developed. Construction activities will conform to the City of Mississauga Noise Control By-Laws.

There is no existing land uses which are considered to be highly sensitive to vibration impact (e.g. sensitive equipment such as electron microscopes, or laboratory with sensitive scientific equipment, etc.).

Once constructed, the main source of vibration from Redmond Road would be from truck traffic. However, vehicles with pneumatic tires generally do not create significant levels of vibration except at very short distances. This road will function as a minor collector road serving only the local community and truck traffic volumes will be low, as such, vibration levels to the community are not expected to be perceptible or significant.

Some construction activities associated with the road building may at times create vibration levels that are perceptible at nearby land uses. However, the vibration levels produced by the anticipated construction activities will not be large enough to cause structural damage. The potential vibration generated by the building of the road and the surrounding community should be reviewed in detailed design, once construction methodologies and scheduling are developed.

Air Quality

During construction of the roadway, emissions sources will include construction equipment engines and air borne dust from construction vehicles travelling over exposed soils/unpaved surfaces. These impacts will be temporary, during construction. Due to the temporary nature of construction activities, there are no air quality criteria specific to construction activities. Construction emissions can be mitigated by appropriate maintenance of equipment and proper phasing that minimizes activity on unpaved surfaced.

The Environment Canada "Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities" document provides several mitigation measures for reducing emissions during construction activities. Mitigation techniques discussed in the document include material wetting or use of chemical suppressants to reduce dust, use of wind barriers, and limiting exposed areas which may be a source of dust and equipment washing.

Ministry of Environment, Conservation and Parks (MECP) recommends that nonchloride dust suppressants be applied. MECP also recommends referring to the following publication in developing dust control measures: Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities. Report prepared for Environment Canada. March 2005.

Sustainability

The Downtown Core is located within a major designated growth area and identified as an Anchor Hub in the Regional Transportation Plan. The City's objective is to create a high quality, pedestrian friendly, human scaled environment that attracts lasting public and private investment in the Downtown to support existing and planned infrastructure, particularly higher order transit.

The Redmond Road extension is part of this integrated plan to transform the downtown into a sustainable, compact mixed-use area with multi-modal transportation options that seek to reduce single occupant vehicle use by creating a live-work-play community, linked to a multi-tier public transit system.

The existing road pattern is made up of super blocks. An expanded road network is proposed that will create an urban pattern of development blocks that are walkable in scale and well connected. The new road network will result in urban scaled blocks, providing routing options for vehicular, servicing and goods movement, pedestrian and cycling movement within the Core. The scale of the streets is to be narrower with special attention paid to the public realm.

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Appendix A: Consultation Record

Appendix B: Air Quality Assessment Technical Memorandum

1 INTRODUCTION

The City of Mississauga has completed a Municipal Class Environmental Assessment (Class EA) Study to evaluate the need to extend Redmond Road from Webb Drive to Burnhamthorpe Road West. The study was carried out as a Schedule B project in accordance with the Municipal Class EA document (2000, as amended in 2015), as approved under the Ontario Environmental Assessment Act.

The Redmond Road Class EA Study is one of four Class EA studies being undertaken by the City of Mississauga for transportation network improvements in the City Centre. The study areas of the four projects are shown on **Figure 1-1**:

- Project 1 Redmond Road from Webb Drive to Burnhamthorpe Road West
- Project 2 Webb Drive from Duke of York Boulevard to Kariya Drive
- Project 3 The Exchange from City Centre Drive to Webb Drive
- Project 4 Kariya Drive from South of Elm Drive to Central Parkway West

Figure 1-1: City of Mississauga Downtown Municipal Class Environmental Assessment Study Locations



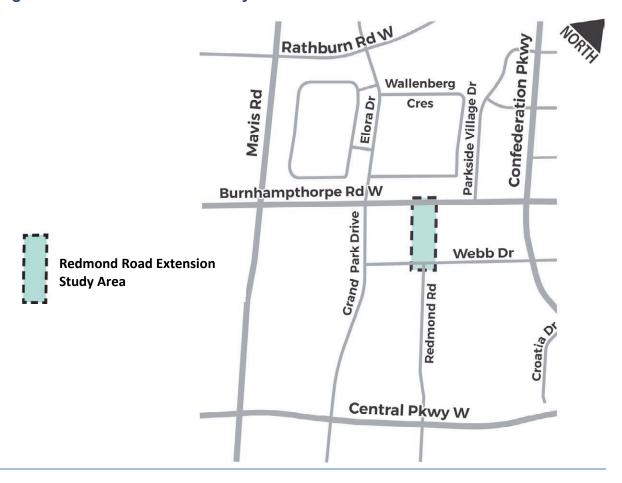
These Class EA studies are being undertaken to support the creation of a pedestrianscale, fine-grained street grid in downtown Mississauga, and support multi-modal mobility by improving pedestrian connections, and in some cases, expanding the cycling and opportunities for the transit networks.

Each of the four Class EA studies are documented separately. This Project File documents the planning process used to identify the problem and opportunities, consider of alternative planning solutions and the preferred solution for Redmond Road between Webb Drive and Burnhamthorpe Road West.

1.1 Study Area

The Redmond Road Class EA study area is generally situated between Grand Park Drive to the west and Confederation Parkway to the east (**Figure 1-2**), within the 'M City' development, owned by Rogers Real Estate Development Limited.

Figure 1-2: Redmond Road Study Area



1.2 Environmental Assessment Process

Municipal infrastructure projects are subject to the Ontario Environmental Assessment Act (EA Act). The Municipal Class EA (Municipal Engineers Association October 2000, as amended in 2015) is an approved self-assessment process under the EA Act that applies to municipal infrastructure projects including roads, water and wastewater.

The Municipal Class EA outlines a planning process to consider the environmental and technical advantages and disadvantages of alternatives in order to determine a preferred solution for addressing problems and opportunities.

The four types of projects/activities to which the Municipal Class EA applies are:

- ▶ Schedule A: Includes normal or emergency operational and maintenance activities, which are limited in scale and have minimal adverse environmental effects and therefore pre-approved.
- Schedule A+: These projects are also pre-approved; however, the public is to be advised prior to the implementation of the project.
- ▶ Schedule B: Includes projects that have the potential for adverse environmental effects. This includes improvements and minor expansions of existing facilities. These projects are approved subject to a screening process which includes consulting with stakeholders who may be directly affected and relevant review agencies.
- ▶ Schedule C: Includes the construction of new facilities and major expansions to existing facilities. These undertakings have the potential for significant environmental effects.

The anticipated environmental impacts of an extension of Redmond Road are minor, considering the study area setting and development context (discussed further in **Chapter 2**). Therefore, this study meets the criteria for a Schedule 'B' process.

As illustrated in **Figure 1-3**, the Municipal Class EA document outlines the planning and design process. Schedule B projects are required to follow Phases 1 and 2 of this process.

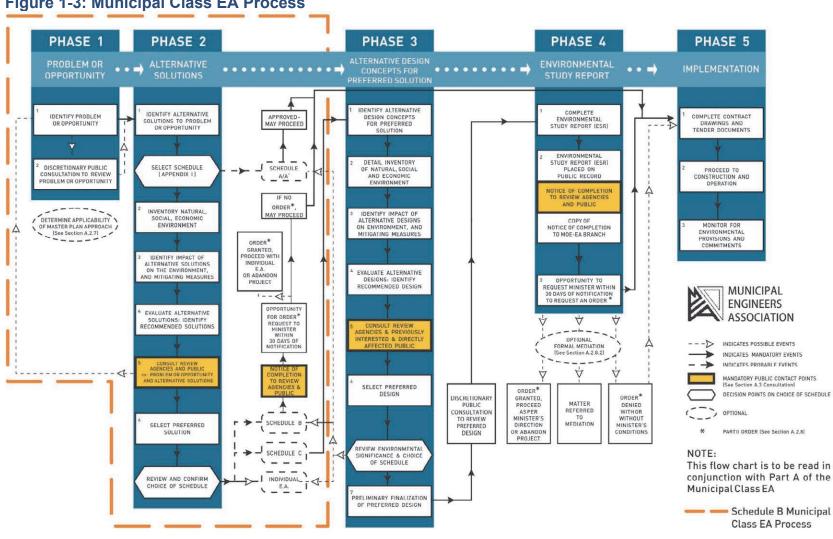


Figure 1-3: Municipal Class EA Process

1.2.1.1 Project File

Phases 1 and 2 of the Schedule B process are documented in a Project File (i.e. this report) which includes:

- Study background and related studies, including planning policies and documents;
- ▶ Description of the existing environment (socio-economic environment, cultural environment, and natural environment);
- Study area problems and opportunities;
- Alternative solutions to the undertaking;
- Evaluation of alternative solutions and identification of the preferred alternative solution;
- Anticipated impacts and proposed mitigation measures;
- Public and agency consultation; and
- Supporting technical reports.

The Project File for this study is available for a thirty-calendar day public review period commencing on March 12, 2020.

A Notice of Completion is published to announce the review period.

Copies of the Project File will be available for review and comment until April 13, 2020, at the following locations during normal business hours, and online at the City of Mississauga website: http://www.mississauga.ca/portal/residents/rwek-eastudies

The City of Mississauga

Office of the City Clerk 300 City Centre Drive, 2nd Floor Mississauga ON L5B 3C1

T: 905-615-4311

Monday to Friday: 8:30 am to 4:30 pm

Weekends: Closed

Note: Subject to holiday hours

Central Library

301 Burnhamthorpe Road West Mississauga ON L5B 33Y3 T: 905-615-4745

Monday to Thursday: 9:00 am to 9:00 pm

Friday: 9:00 am to 6:00 pm Saturday: 9:00 am to 5:00 pm Sunday: 1:00 pm to 5:00 pm

1.2.1.2 Part II Order Request

The Municipal Class EA process includes an appeal provision to change the status of a project from being subject to the Municipal Class EA process to being subject to an Individual Environmental Assessment, per Part II of the Ontario Environmental Assessment Act.

If concerns are raised during the public review period that cannot be resolved through discussions with the City, then stakeholders, agencies, Aboriginal Communities or members of the public may request the Minister of the Environment, Conservation and Parks to issue a Part II Order for the project, thereby requiring an elevated scope of study.

A Part II Order request requires submission of a formal request prior to the end of the 30 calendar-day review period, outlining the unresolved issue and requesting the Minister to review the matter.

Please refer to the following website for further information and specific instruction regarding Part II Order requests:

https://www.ontario.ca/page/class-environmental-assessments-part-ii-order

If no Part II Order requests are outstanding by the end of the 30 calendar-day review period, the project is considered to have met the requirements of the Class EA, and the City of Mississauga may proceed to detailed design and construction.

2 PLANNING CONTEXT

This section reviews the planning and policy framework applicable to the Redmond Road Class EA Study. The planning and policy framework guides infrastructure planning, land use planning, and strategic investment decisions to support Provincial, Regional and Local objectives in growth and transportation.

The identification of the study area problems and opportunities was in consideration of the policy framework, to ensure that the final recommendations are consistent with Provincial, Regional and Local policies and objectives.

2.1 A Place to Grow - Growth Plan for the Greater Golden Horseshoe (2019)

A Place to Grow: Growth Plan for the Greater Golden Horseshoe ("Growth Plan"), 2019, was prepared and approved under the Places to Grow Act (2005) as a legal framework to implement the Province's vision for managing growth within the Greater Golden Horseshoe (GGH).

The GGH is a dynamic and diverse area, and one of the fastest growing regions in North America. By 2041, this area is forecast to grow to 13.5 million people and 6.3 million jobs. The magnitude and pace of this growth necessitates a plan for building healthy and balanced communities and maintaining and improving our quality of life while adapting to the demographic shift underway.

To better co-ordinate planning for growth across the region, this Plan provides population and employment forecasts for all upper- and single-tier municipalities in the GGH. This Plan is about accommodating forecasted growth in complete communities by providing guidance on transportation, infrastructure planning, landuse planning, urban form, housing, natural heritage and resource protection. Complete communities support quality of life and human health by encouraging the use of active transportation and providing high quality public open space, adequate parkland, opportunities for recreation, and access to local and healthy food.

Redmond Road is located within Downtown Mississauga, a designated Urban Growth Centre in the Growth Plan. Urban Growth Centres are focal points for population and employment growth and are to be planned as vibrant, mixed-use, transit-supportive communities. The Growth Plan directs Downtown Mississauga to achieve 200 residents and jobs per hectare by 2041. The City of Mississauga is required to

conform to the Growth Plan through its Official Plan which brings Provincial growth policies down to local level.

Policy 3.2.2 of the Growth Plan provides direction on General Transportation Planning. The following excerpted policies are applicable to this Class EA Study:

The transportation system within the GGH will be planned and managed to:

- a. provide connectivity among transportation modes for moving people and, for moving goods;
- b. offer a balance of transportation choices that reduces reliance upon the automobile and promotes transit and active transportation;
- c. provide connectivity among transportation modes for moving people and, for moving goods;
- d. be sustainable and reduce greenhouse gas emissions by encouraging the most financially and environmentally appropriate mode for trip-making and supporting the use of zero- and low-emission vehicles;
- e. offer multimodal access to jobs, housing, schools, cultural, and recreational opportunities, and goods and services;
- f. provide for the safety of system users.

In the design, refurbishment, or reconstruction of the existing and planned street network, a complete streets approach will be adopted that ensures the needs and safety of all road users are considered and appropriately accommodated.

Policy 3.2.3 of the Growth Plan provides direction on Moving People. The following excerpted policies are applicable to this Class EA Study:

Public transit will be the first priority for transportation infrastructure planning and major transportation investments.

Municipalities will ensure that active transportation networks are comprehensive and integrated into transportation planning to provide:

a. safe, comfortable travel for pedestrians, bicyclists, and other users of active transportation; and

b. continuous linkages between strategic growth areas, adjacent neighbourhoods, major trip generators, and transit stations, including dedicated lane space for bicyclists on the major street network, or other safe and convenient alternatives.

Planning for the extension of Redmond Road is consistent with the policy direction of the Growth Plan by contributing to the development of a compact, mixed-use urban community that prioritizes walkability and creates linkages within the community, into the downtown core and to local, Regional and Provincial public transit.

2.2 Provincial Policy Statement (2014)

The Provincial Policy Statement (PPS) (2014) provides overall policy directions on matters of provincial interest related to land use and development in Ontario. The PPS was prepared under the authority of the Planning Act but may be considered in the planning and policy context of infrastructure planning completed under the Ontario Environmental Assessment Act (OEAA). The PPS is based on three fundamental planning themes: "Building Strong Communities", "Wise Use and Management of Resources", and "Protecting Public Health and Safety". The PPS guidance for Transportation Planning systems within the GGH, as highlighted in the following excerpted policies, are applicable to this Class EA Study:

- Section 1.6.7.1 Transportation systems should be provided which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.
- Section 1.6.7.3 As part of a multimodal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections which cross jurisdictional boundaries.
- Section 1.6.7.5 Transportation and land use considerations shall be integrated at all stages of the planning process.

Planning for the extension of Redmond Road is consistent with the policy direction of the PPS since the extension was first identified as part of the Downtown Core Local Area Plan, the integrated land use plan/policy document developed under the Planning Act (and therefore confirming to PPS policies).

The Redmond Road extension will contribute to the development of a compact, mixeduse urban community that prioritizes walkability and creates linkages within the community, into the downtown core and to local, Regional and Provincial public transit.

2.3 Region of Peel Official Plan (consolidated 2018)

The Region of Peel Official Plan (OP) provides a long-term regional policy framework to guide the lower-tier municipalities, such as the City of Mississauga, in the preparation of their own Official Plans. The Region's OP is based on the key principle of sustainability and recognition of the need to consider and balance social, economic, cultural and natural environmental aspects to create/maintain a healthy community. In the context of the Region's OP, and related City of Mississauga OP and Downtown Core Local Area Plan (both discussed below), the Redmond Road project contributes to the objectives of the Region's OP by supporting the development of a compact and complete community that is built to support walking and access to public transit.

2.4 City of Mississauga Strategic Plan

The City of Mississauga Strategic Plan ("Strategic Plan") directs strategic decision-making based on the five "Strategic Pillars for Change: Move, Belong, Connect, Prosper, and Green." The Redmond Road Class EA Study supports the following strategic strategies as excerpted from the Strategic Plan:

- ▶ Develop Environmental Responsibility to contribute to environmental responsibility by reducing private automobile use and developing compact mixed-use development.
- ▶ Increase Transportation Capacity to add capacity to the transportation system through strategic investments in transit, additional links in the street network and active mobility choices.
- Develop Walkable, Connected, compact, mixed-use Neighbourhoods that will give residents the ability to engage safely in all aspects if their everyday lives, within walking distance and easy access through evaluating development and infrastructure projects against a test of "pedestrian-first".

- ▶ Build Vibrant Communities to link urban areas and neighbourhoods that offer commercial, social, artistic, cultural, civic and recreational experiences accessible to all.
- ▶ Provide Mobility Choices to provide all with the choice to walk, cycle and use transit or active modes of transportation in all seasons, because it is convenient, connected, desirable and healthy.

2.5 City of Mississauga Official Plan (2016)

The current City of Mississauga OP guides the City's growth and development to 2031. The policies are designed to manage and direct growth with a focus on redevelopment and intensification. **Figure 2-1** depicts the OP land use designations around the Redmond Road study area and the study areas for the three other downtown road extensions being contemplated by the City.

Downtown Mississauga is designated as an Intensification Area (**Figure 2-2**), and per Chapter 5 of the City's OP, most of the City's future growth will be directed to Intensification Areas. In addition, designated corridors are to be planned as multi-modal with an attractive public ream and complementing land uses.

Transportation policies in Chapter 8 of the OP support the City's intent to balance the needs of transit, cyclists, pedestrians, goods movement and motorists and recognize that the creation of new roads will be required to support more compact development.

The extension of Redmond Road is designated as a "Future Minor Collector" road in the City's long-term road network (Schedule 5 of the OP), designed to accommodate low levels of traffic and access to private property. **Figure 2-3** depicts the proposed Redmond Road extension and the three other road extensions being contemplated by the City, in the context of the Schedule 5 of the OP.

The proposed Redmond Road extension will provide access to the other parts of the collector road network as well as the Regional arterial road network. Specific transportation polices pertinent to this study include the following:

- Mississauga will strive to create a fine-grained system of roads that seeks to increase the number of road intersections and overall connectivity throughout the City.
- Sidewalks or multi-use trails will be provided on all new roads.

- Mississauga will create a multi-modal road network through providing mobility and accessibility to all users, and through creating pedestrian and cycling access routes. The multi-modal network includes road, transit, cycling and pedestrian facilities. In some locations transportation modes may, to ensure the efficiency and safety of the transportation network and its users, use separate facilities.
- ▶ Through the creation of a multi-modal transportation system, Mississauga will provide transportation choices that encourage a shift in lifestyle toward more sustainable transportation modes, such as transit and active transportation.
- ▶ The City of Mississauga will ensure that the transportation system will provide connectivity among transportation modes for the efficient movement of people and goods, and may identify additional roads during the review of development applications, and may require new road connections.
- Street designs will consider opportunities to maximize on-street parking, where appropriate, and will planned to be balanced with the needs of other modes of transportation sharing the right-of-way.
- Transit will be a priority for transportation infrastructure planning and major transportation initiatives.
- Section 8.3.1.1 The City will design its roads in a manner that:
 - a. has regard for the safe movement of all road users, including transit, cyclists, pedestrians and motorists;
 - b. is context sensitive having regard for existing and planned land uses, urban design, community needs and funding availability;
 - c. minimizes the disruption to the Natural Heritage System and preserves, where appropriate, existing tree canopies.
- Section 8.3.1.2 Within Intensification Areas and Neighbourhoods, the design of roads and streetscapes will create a safe, comfortable and attractive environment for pedestrians, cyclists and motorists by:
 - a. reducing lane width, where appropriate;
 - b. providing streetscaping to reduce the apparent width of the rights-of-way;

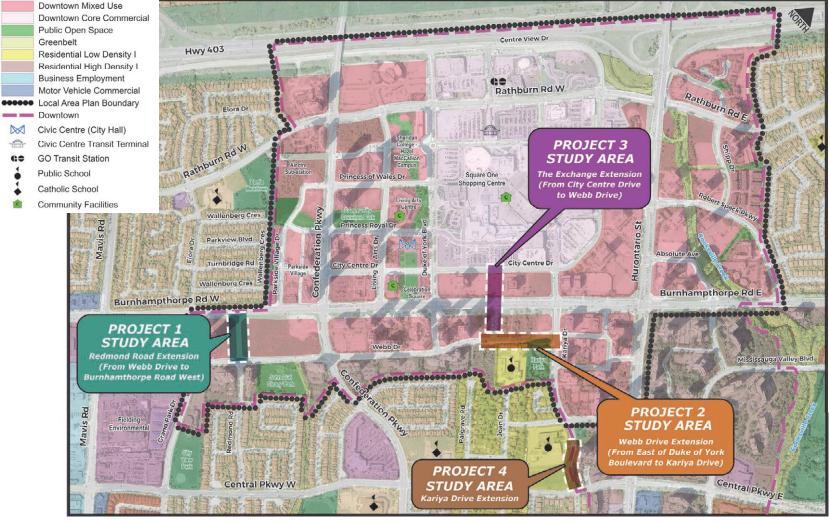
- c. locating sidewalks and cycling facilities where conflicts with motorized traffic are minimized; and
- d. creating safe road crossings for pedestrians and cyclists.

Chapter 9 of the OP directs desirable urban form and growth and directs existing large blocks to be reconfigured to incorporate a fine-grained block structure with public roads and on-street parking to support at grade uses.

The proposed Redmond Road extension is being planned to directly support the OP policies highlighted in the above discussion. The planned road extension will create a finer-grained transportation system to the Downtown area, improving the connectivity among transportation modes to efficiently move people.

Figure 2-1: Official Plan Land Use Designations

Downtown Mixed Use



Sources: Schedule 10 - Land Use, Mississauga Official Plan (2019); Downtown Core Local Area Plan (2015)

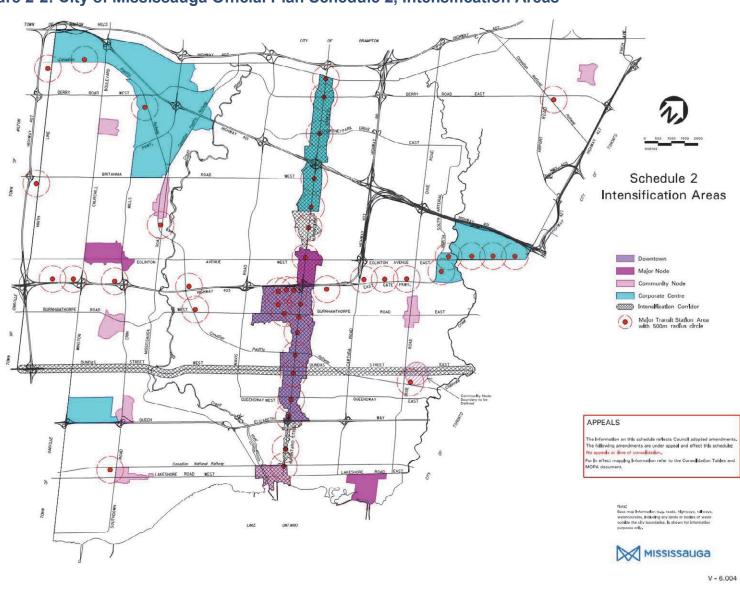


Figure 2-2: City of Mississauga Official Plan Schedule 2, Intensification Areas

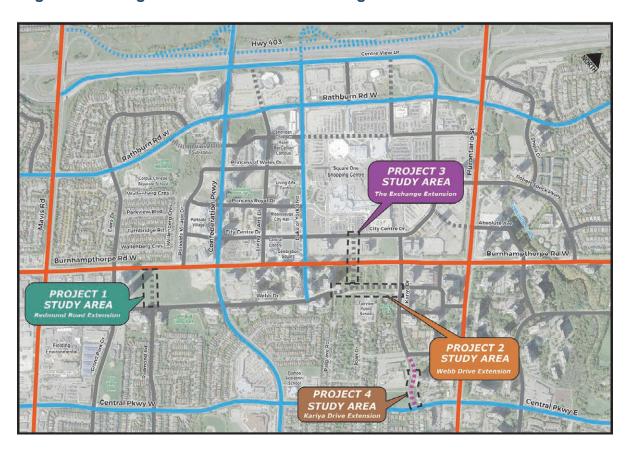


Figure 2-3: Long-Term Downtown Mississauga Road Network



Source: Schedule 5 – Long Term Road Network, Mississauga Official Plan (2019)

2.6 Downtown21 Master Plan (2010)

The City's Downtown21 Master Plan set the visions and early guidance for the intensification of the downtown and the transformation from suburban form to a compact and complete community form. The Downtown21 Master Plan first expressed the objectives for the new downtown form, including:

 Encouraging development of a multi-modal transportation system to create a livable, compact and accessible downtown for Mississauga;

- Prioritize active transportation when designing new streets;
- Providing connections to nearby higher-order transit;
- Ensuring jobs, homes and services are within walking distance of each other;
 and
- Using smaller block sizes for new developments.

Creating smaller blocks benefits the live-work-play experience in the downtown by offering:

- Multiple routing and turning options for vehicles, increasing capacity at intersections;
- Intersections functioning as traffic calming measures through even and frequent spacing of intersection and encouraging vehicle travel at slower speeds;
- Street network redundancy and associated routing options for emergency vehicles;
- Direct and comfortable routing options for pedestrians and cyclists;
- An active and vibrant pedestrian environment; and
- Maximum accessibility to transit stations and flexibility in transit routing and bus routing.

The Downtown21 Master Plan was implemented through the Downtown Core Local Area Plan (Mississauga Official Plan Amendment 8 - "MOPA 8"), discussed in the next section.

2.7 Downtown Core Local Area Plan (2015, under Appeal)

The Downtown Core Local Area Plan (Mississauga Official Plan Amendment 8 - "MOPA 8") builds on the Official Plan and contains more detailed policies and schedules specific to the Downtown Core. At the time of this study, parts of the LAP remain under appeal. The Downtown Core Local Area Plan (DCLAP) policies are intended to promote a high quality of urban design and urban built form. The DCLAP goals and objectives are directly relevant to the Redmond Road Class EA Study:

 Create a vibrant Downtown by strengthening the transportation system, improving linkages/access, and enhancing the pedestrian experience;

- Create a fine-grained, well-connected road network that supports multiple modes of transportation; and
- Develop an urban environment that includes high-quality public spaces.

The proposed Redmond Road extension is consistent with the following policies of the DCLAP:

- Development Objectives outlined in Section 2.1 of DCLAP provide policies intended to plan for the location of streets, provide for a high standard of urban and streetscape design, and develop/enhance of a comprehensible public/private system of pathways and open space.
- Urban Design Objectives outlined in Section 3.1 provide policies intended to, for example:
 - Encourage a built form which has a high level of physical continuity, cohesion and linkage between building;
 - promotes urban scale land blocks, streets and built form appropriate to transit supportive and pedestrian oriented core;
 - achieve elements of linkage to the abutting communities while ensuring compatible integration and context sensitivity; and
 - achieve a balance of vehicular traffic and transit and active transportation needs to achieve pedestrian comfort, convenience, safety and accessibility.
- ▶ Urban Design policies for the public realm outlined in Section 3.2.1 of the DCLAP speak to the design of streets, edge boulevards and public open spaces. Again, these policies emphasize the desire to promote a high level of design tailored to the pedestrian and on-street experience.

The proposed Redmond Road extension is being planned to directly support the DCLAP policies highlighted in the above discussion.

2.8 Mississauga Transportation Master Plan (2019)

The Mississauga Transportation Master Plan (TMP) directs Mississauga's transportation system to provide people with the freedom to move safely, easily and efficiently to anywhere at any time.

Chapter 2 of the TMP considers the modal split within the City of Mississauga. Currently, the surface parking available in the Downtown Core implies that driving is still a popular choice for travelling to the Downtown Core. The TMP sets a vision for Mississauga's downtown core in 2041; the downtown is envisioned to have a population of 70,000, and to act as a regional centre for employment and businesses. Further, the downtown is envisioned to have streets designed for the safety of pedestrians in both old and new neighbourhoods, and new connections will be made to improved and shorter trips for pedestrians.

2.9 City of Mississauga Cycling Master Plan (2018)

The City of Mississauga Cycling Master Plan ("Cycling Master Plan") guides the vision of cycling within the City of Mississauga through the four following goals: Improve safety for cycling; Build a connected, convenient and comfortable bicycle network; Increase the number of cycling trips in Mississauga; and Foster a culture of cycling. The Cycling Master Plan envisions the City as a place where people choose to cycle for recreation, fitness and daily transportation needs. Cycling is envisioned to become a way of life that supports vibrant, safe and connected communities and enhances the overall health and quality of life of residents and visitors. When implemented, the plan will provide an integrated multi-modal approach to transportation throughout the City.

The City's Cycling Master Plan recommended cycling network was reviewed during the Redmond Road Class EA Study. The local existing and proposed network is depicted in **Figure 2-4**. Consistent with the Cycling Master Plan, Redmond Road itself is not identified for dedicated cycling facilities. However, access to the existing cycling network is close by at both Webb Drive and Burnhamthorpe Road.

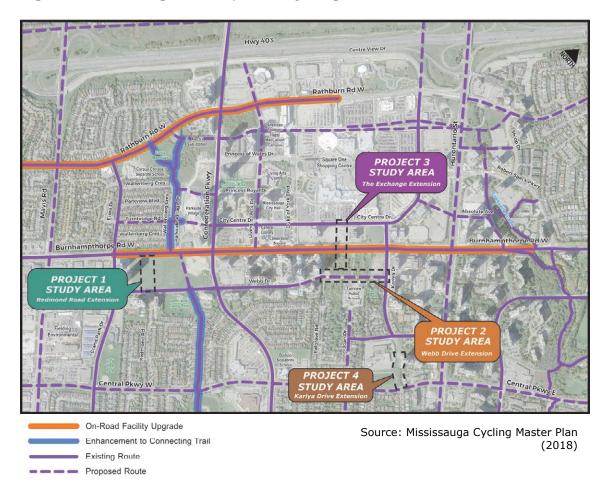


Figure 2-4: Existing and Proposed Cycling Network

2.10 Natural Heritage Policy Documents

City of Mississauga Natural Heritage and Urban Forest Strategy, 2014 & City of Mississauga Urban Forest Management Plan, 2014

The City of Mississauga Natural Heritage and Urban Forestry Strategy ("NHUFS"), 2014, guides the management of Mississauga's Natural Heritage System and Urban Forest within a 20-year framework up to the year 2033. The NHUFS directs natural heritage systems and urban forests within the City of Mississauga to be protected, enhanced, restored and expanded for future generations. The Plan includes the following applicable objectives for municipal operations and capital projects:

▶ Increase effectiveness of tree preservation and establishment practices;

- Creation of improved 'plant-able' areas;
- Avoid last minute retrofitting of designs to try and accommodate trees; and
- ➤ Trees and natural areas in urban settings must, by their very nature, be considered from various perspectives if they are to be successfully integrated into an urban setting.

The Redmond Road Class EA Study has considered the strategies as outlined in the UFMP. No trees or natural areas are present within the study area. Streetscape design and planting will be detailed during future design phases and will consider urban forestry principles and design criteria.

City of Mississauga Natural Area Survey, 2014

The Natural Areas Survey (NAS) identifies the natural areas system, which includes 144 sites representing the best remaining natural features in the City. The intent of the NAS is to provide the current status of natural areas and updated information on flora, fauna, impacts, boundary changes and management needs.

The study area of the Redmond Road Class EA Study is not within or adjacent to any identified Natural Area survey.

2.11 Approved Development

The proposed Redmond Road extension will be entirely situated on lands owned by Rogers Real Estate Development Limited and approved for development per the M City Master Site Plan Agreement (2015).

The proposed Redmond Road extension between Webb Drive and Burnhamthorpe Road West has been incorporated into the planned M City development plan and the roadway will serve as a minor collector road within the development. This is discussed further in **Section 3.1**.

3 EXISTING CONDITIONS

3.1 Land Use

The proposed Redmond Road extension will be entirely situated on lands approved for the M City development, owned by Rogers Real Estate Development Limited. The proposed Redmond Road extension between Webb Drive and Burnhamthorpe Road West has been incorporated into the planned M City development and the roadway will serve as a minor collector road within the development.

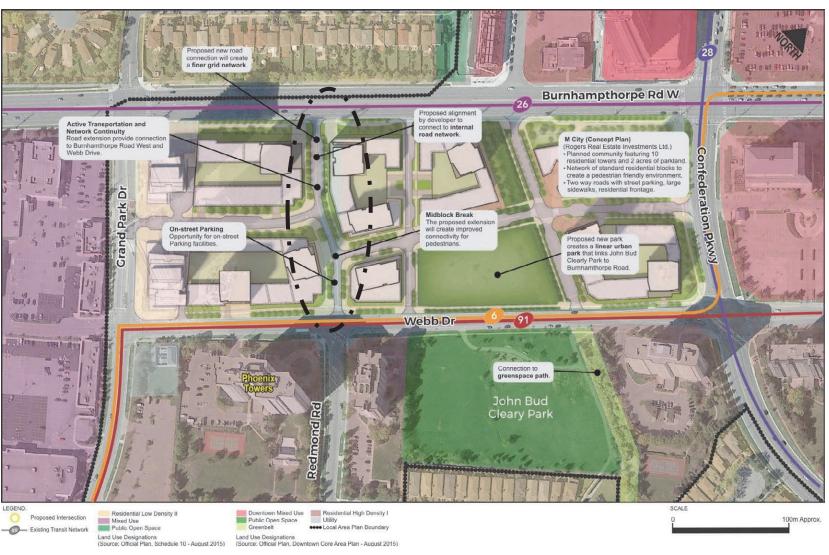
Land use in the broader surrounding area is a mix of established residential communities to the south (along existing Redmond Road) and to the north of Burnhamthorpe Road West. New condominium communities have developed east and west of the study area, reflecting the City's plan for high density, mixed-use developments within the downtown core, per the Downtown Core Local Area Plan.

Figure 3-1 is a Google Earth image depicting early development and earthworks activities within the M City site (2018). **Figure 3-2** illustrates existing and proposed land use conditions and existing transit service, as well as a conceptual layout of the M City development.

Figure 3-1: M City Development Site (2018)



Figure 3-2: Redmond Road Study Area Existing and Proposed Land Use



3.2 Cultural Heritage Resources

3.2.1 Built Cultural Heritage

A Cultural Heritage Assessment was conducted as part of the four road Class EA studies that the City has undertaken concurrently in the City Centre (Redmond Road, Webb Drive, The Exchange and Kariya Drive), and is on file with the City. The assessment, undertaken by Unterman McPhail and Associates, identified potential built heritage and cultural heritage landscapes within or adjacent to the each of the four study areas.

Based on this work, there are no built heritage resources or cultural heritage landscapes within or adjacent to the Redmond Road study area.

3.2.2 Archaeology

A Stage 1 Archeological Assessment was conducted as part of the four road Class EA studies that the City has undertaken concurrently in the City Centre (Redmond Road, Webb Drive, The Exchange and Kariya Drive), and is on file with the City. The assessment was carried out by Archaeological Research Associates Ltd (ARA) in accordance with the *Ministry of Tourism, Culture and Sport (MTCS) Standards and Guidelines for Consultant Archaeologists* (2011) to:

- Provide information concerning the geography, history and current land condition of the study area;
- Determine the presence of known archaeological sites in the study area;
- Present strategies to mitigate project impacts to such sites, if they are located;
- Evaluate in detail the archaeological potential of the study area; and
- Recommend appropriate strategies for Stage 2 archaeological assessment, if some or all of the study area has archaeological potential.

The findings indicate that the Redmond Road Class EA study area has been previously assessed and/or disturbed. Therefore, no further archaeological assessment is required.

A copy of the Stage 1 Archeological Assessment Report was submitted in October 2019 to MTCS, for registration into the Ontario Public Register of Archaeological Reports.

3.3 Natural Environment

A Natural Heritage assessment was conducted as part of the four road Class EA studies that the City has undertaken concurrently in the City Centre (Redmond Road, Webb Drive, The Exchange and Kariya Drive), and is on file with the City. The natural environmental assessment included background review and field studies to characterize existing natural heritage features and functions. For any natural areas present, the assessment included: delineating existing vegetation communities, a botanical survey, general wildlife habitat survey, identification of potential Species at Risk (SAR) habitat, documentation of all incidental wildlife observations including bird calls, and confirmation of no surface drainage features in the four project areas. Field surveys were carried out in July 2019.

The review confirmed that there are no natural environmental features within the Redmond Road Class EA study area.

3.4 Tree Inventory and Assessment

A Tree Inventory and Assessment was completed as part of the four road Class EA studies that the City has undertaken concurrently in the City Centre (Redmond Road, Webb Drive, The Exchange and Kariya Drive), and is on file with the City. The purpose of the assessment was to identify individual trees that may be impacted and document existing health, condition and diameter at breast height (DBH).

The review confirmed that there are no trees within the Redmond Road Class EA study area.

3.5 Source Water Protection

Ministry of Environment, Conservation and Parks' Source Protection Information Atlas was queried to identify any potential sensitivities of the Redmond Road study area with respect source water protection and potential for drinking water threats. The results are summarized in **Table 3-1**. It is noted that the water supply for the area is from Lake Ontario and that study area sensitivities and risks are low/none. Therefore, specific Source Water Protection policies are not elaborated upon here.

Table 3-1: Source Water Protection Areas

Vulnerable Areas	Definition	Within Study Area?	Notes
Wellhead Protection Area	Land area around a well where contaminants from land activities can reach and pollute the well water supply.	No	-
Wellhead Protection Area E GUDI	The area around a well where water quality could be impacted by surface water.	No	-
Intake Protection Zone	The area around an intake pipe in a lake or river that draws in the surface water used to supply the municipal drinking water system. Three zones, from the closest to the farthest from the intake, rate the vulnerability threat.	No	-
Issue Contributing Area	An area where land-based activities contribute to the presence of an unwanted substance in the water source. Activities producing the substance may be prohibited or need to be managed more effectively.	No	-
Significant Groundwater Recharge Area	The areas where precipitation recharges the groundwater source or aquifer.	No	-
Highly Vulnerable Aquifer	An underground water supply, or aquifer, that can easily be contaminated because overlaying soil layers are thin or permeable.	No/Yes	Small portions of study area are within HVA, Score = 6 (high). Runoff from the proposed Redmond Road will be conveyed via the storm sewer system to an appropriate outlet and therefore will not permeate to aquifer.

Vulnerable Areas	Definition	Within Study Area?	Notes
Event Based Area	An area within a watershed where a spill could pollute the drinking water supply because of sanitary sewers, sewage treatment plants or pipelines that are close to rivers, streams or other water bodies.	No	Event based area associated with Mary Fix Creek, to the east.
Wellhead Protection Area Q1	The WHPA-Q1 was delineated as the combined area that is the cone of influence of a well and the whole of the cones of influence of all other wells that intersect that area	No	-
Wellhead Protection Area Q2	The WHPA-Q2 is defined by the Technical Rules as the WHPA-Q1 area plus any area where a future reduction in recharge may have a measurable effect on the wells inside the WHPA-Q1.	No	-
Intake Protection Zone Q	Corresponds to the drainage area that contributes surface water to an intake, and the area that provides recharge to an aquifer that contributes groundwater discharge to the drainage area. Part VI.7 of the Technical Rules specifies the rules with respect to the delineation of IPZ-Q (Matrix, 2016).	No	-

3.6 Drainage and Stormwater

The study area falls within the Mary Fix Creek watershed and is under the jurisdiction of the Credit Valley Conservation Authority.

Mary Fix Creek is an intermittent surface water feature north of Burnhamthorpe Road. Surface water flow drops into a catch basin on the north side of Burnhamthorpe Road and remerges south of Webb Drive, just east of Confederation Parkway West.

There are no surface water features or areas regulated under Credit Valley Conservation Authority Regulation 160/06, in the Redmond Road Class EA study area. Currently, surface water runoff from the undeveloped parcel drains as overland flow to the surrounding street network where it enters the storm sewer system.

A complete internal storm sewer system will be implemented as the block develops, which will tie into the existing storm system. Road drainage has been accounted for in the drainage design for the development. Further information regarding the M City stormwater management plan can be obtained from the City.

3.7 Municipal Services and Utilities

The Region of Peel is making watermain and sanitary sewer improvements on numerous streets in the Mississauga City Centre. The Region has planned this work to improve water supply through water infrastructure upgrades, in support of approved growth in the Mississauga City Centre.

Specific work underway in the vicinity of the Redmond Road Class EA study area includes: A new 1500 mm watermain along Burnhamthorpe Road, between Grand Park Drive and Cawthra Road; and new 400 mm and 600 mm local distribution watermains planned for Webb Drive and Duke of York Boulevard, respectively. Sanitary improvements are also identified in these areas. Construction is ongoing through 2020. More information about the work being undertaken by the Region is available here:

http://www.peelregion.ca/pw/construction/miss/bwp.htm

https://www.peelregion.ca/pw/construction/miss/pdf/13-15/131125-area-map-2018.pdf

Other local municipal services and utilities will be installed as part of the M City development. This work will be planned and designed in accordance with the City approved Master Site Plan Agreement (2015).

3.8 Transportation

3.8.1 Existing Transportation Network

The proposed road extensions currently being contemplated by the City, including Redmond Road, are depicted within the context of the existing and planned downtown core transportation network.

Redmond Road currently exists as a 2-lane north-south roadway between Webb Drive (in the north) and Fairview Road West (in the South). The existing road, south of Webb Drive traverses an older neighbourhood with primarily low density/ single family residential development. Other north-south transportation links in the immediate area include: Grand Park Drive and Confederation Parkway, both City collector roads.

Key east-west transportation links in the area include Webb Drive and Central Parkway west, City collector roads, and Burnhamthorpe Road West, a Region of Peel arterial road.

3.8.2 Traffic and Transportation Assessment

An assessment of existing (2018) traffic conditions was undertaken to assess the overall transportation network performance which incorporated the study areas of the four downtown EA studies (Redmond Road, Webb Drive, The Exchange and Kariya Drive). A detailed description of existing and future traffic conditions and associated methodology in included in the Transportation and Traffic Analysis Report, available upon request from City of Mississauga staff.

The micro-simulation assessment included an analysis of existing conditions and operational performance for the area bounded by Elora Drive, Webb Drive/Central Parkway West, Hurontario Street, as well as Burnhamthorpe Road West/City Centre Drive.

Based on the findings of this assessment, minor approaches of signalized intersections along Burnhamthorpe Road (northbound and southbound) and Hurontario Street (eastbound and westbound) experience high delays due to traffic signal coordination on major approaches and long cycle time (160 seconds). Existing traffic conditions at all intersections in all four Class EA study areas are generally operating at an overall acceptable level of service (i.e. Level of Service "D" or better).

Results from the future (2031) traffic analysis indicated that without the Redmond Road extension from Webb Drive to Burnhamthorpe Road, traffic exiting from the M City development is expected to experience heavy delays at the adjacent intersections during the morning peak hour. Many movements are expected to operate at very congested level (i.e. Level of Service 'F') with queues backing up to the property accesses (e.g., northbound left movement at Burnhamthorpe Road and Elora Drive/Grand Park Drive intersection, northbound movements at Burnhamthorpe Road and Parkside Village Drive/Street A intersection, and southbound movements at Webb Drive and Street A intersection). The proposed Redmond Road extension would provide an essential connection between the M City development and the overall road network.

Downtown Mississauga Road Improvements Living Arts Drive Extension Master Plan (2015) Reconfigure existing signalized intersection Project 1: Square One Drive at Living Arts Drive and Rathburn Road West, Hwy 403 · Cross-section narrows to provide more pedestrian platforms and reduce crossing distance. intersection at Living Arts Drive and Centre Completes a street network that will improve nedestrian circulation Rathburn Rd W Square One Drive from Duke of York Boulevard · Flush street design around centre island from Living Arts Drive to roundabout at Duke of York Blvd Two lanes with bike lanes, parking and landscaping between Living Arts Drive and Confederation Parkway Downtown Mississauga Road Improve Master Plan (2015) Square One Drive Extension Project 3: The Exchange [in use] · Extend Square One Drive to form new · All-way stop controlled intersection where The intersection with Rathburn Road West. Exchange meets the Square One driveway. Campus - Multi use trail, on street parking, sidewalks · Traffic signals at City Centre Drive Intersection to with streetscaping and landscaping. Princess of Wales Dr be installed when warranted Square One Rathburn Rd W PROJECT 3 Wallenberg Cres STUDY AREA Primary On-Road / **Boulevard Routes** Parkview Blvd Bus Rapid Transit Corridor Turnbridge Rd Puk Puk Interim Bus Rapid Transit Corridor Wallenberg Cres ≥ Burnhampthorpe Rd W Light Rail Transit Square Burnhampthorpe Rd W Light Rail Transit Station Area PROJECT 1 STUDY AREA Transit Terminal Webb Dr Anchor Hub Proposed Roundabout PROJECT 2 Downtown Mississauga Road Improvements Master Plan (2015) Proposed Grade Fielding · Project 2: Princess Royal Drive Separated Crossing Environmental [in use] · Project 4: Mercer Street [in use] STUDY AREA **Future Transportation** Project Central Pkwy E Central Pkwy W Central Pkwy W

Figure 3-3: Transportation Network

Sources: Schedule 6 - Long Term Transit Network, Schedule 7 - Long Term Cycling Routes, Mississauga Official Plan (2019)

3.9 Problems and Opportunities

Based on a review of the planning context and policy framework and the existing traffic conditions, safety issues and multi-modal transportation deficiencies, the following problems and opportunities have been identified:

- Downtown Mississauga is transitioning to an urban, high-density, mixed use community that is oriented toward pedestrian mobility and access to public transit;
- ▶ A key objective of the City's Downtown Core Local Area Plan is to create complete communities that have a compact urban form, are walkable and provide convenient access to a variety of land uses and public transit;
- A new north-south collector road is needed for the M City community to provide access within the community as well as into and beyond the downtown;
- ► A new roadway will provide additional routing in the downtown and make for more pedestrian-friendly environment; and
- ► There is an opportunity to contribute to a vibrant urban core through the creation of high-quality public realm/pedestrian environmental that supports street-level commerce and encourages street activity.

Problem and Opportunity Statement:

A new City of Mississauga collector road is required to provide north-south access and connectivity within the planned M City community.

A new segment of Redmond Road will facilitate multi-modal movement between the internal road system and the surrounding road network. The new road will also provide for on-street parking and a vibrant pedestrian environment to support street-level commercial uses.

The proposed Redmond Road extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, fine-grained street network with a high-quality public realm and a range of transportation choices.

4 PLANNING ALTERNATIVES

Phase 1 of the Municipal Class EA process involves the identification of the transportation problems and opportunities to be addressed by the study and Phase 2 involves the identification and evaluation of a range of possible solutions or 'planning alternatives'.

4.1 Alternative Planning Solutions

The following Alternative Solutions are being considered to address the Problems and Opportunities:

- Do Nothing: Maintain existing transportation system within the study area i.e. new development would require an internal road network to connect with other collector or arterial roads.
- Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.
- 3. Improve Other North-South Routes: Upgrade parallel roads such as Grand Park Drive or Confederation Parkway to meet transportation needs.
- **4.** Extend Redmond Road: Redmond Road as a 2-lane road from Webb Drive to Burnhamthorpe Road.

4.2 Evaluation of Planning Solutions

The alternative planning solutions were assessed in their ability to reasonably address the problems and opportunities. Criteria were developed to guide the assessment process so that transportation planning, technical and environmental (socio-economic, community and cultural / heritage) conditions were all factored into the recommendation.

The assessment of alternatives employed a reasoned argument approach which assesses the potential impacts of each alternative and then compares the relative significance of the impacts among the alternatives to select the recommended solution. A detailed assessment of alternatives is provided in **Table 4-1**. A summary is provided in **Table 4-2**.

Table 4-1: Assessment of Alternative Planning Solutions

Evaluation Criteria	Alternative 1 Do Nothing	Alternative 2 Manage Transportation Demand	Alternative 3 Upgrade Parallel Roads	Alternative 4 Extend Redmond Road
Planning and Transportation				
 Provincial and Municipal Planning Objectives Consistent with Growth Plan for the Greater Golden Horseshoe Satisfies the goals and objectives of the City's Official Plan Supports planned / approved development 	 Does not reflect Provincial policies to develop compact and multi-modal communities Does not reflect City Downtown Core Local Area Plan policies for a fine-grained multi-modal transportation network in the downtown Does not support approved development at M City 	 Consistent with Provincial policies to promote active transportation and transit but does not support compact community development Currently being implemented through City policies Does not address problems and opportunities within the study area Does not directly support M City development 	 Would provide additional north-south traffic capacity in other corridors Does not reflect City Downtown Core Local Area Plan policies for a fine-grained multi-modal transportation network in the downtown Does not address local transportation needs within the M City community or improve network connectivity Widening other roads may not be consistent with City collector road policies 	 Directly supports development of compact, multi-modal communities Creates smaller urban blocks that encourage walking to access local transit network Fully addresses City' objectives for the study area Fully integrates with approved M City development
Pedestrian and Cycling Accommodation - Provides safe and comfortable pedestrian access to area amenities - Supports active transportation (walking and cycling)	 Does not provide an opportunity to enhance pedestrian environment within the study area Does not support development of multi- modal transportation system for future land uses 	 Does not provide an opportunity to enhance pedestrian environment within the study area Somewhat supports development of multi-modal transportation system for future land uses 	 Does not provide an opportunity to enhance pedestrian environment within the study area Supports development of multi-modal transportation system for future land uses, but not within the study area 	 Provides opportunity to enhance the pedestrian environment within the study area Provides safe and comfortable pedestrian environment within planned mixed-use community Creates new pedestrian connections
 Transit Facilitates improved integration of transit services into the existing and planned system 	- Does not enhance access to transit services in the downtown	 Facilitates overall improved integration of transit services 	 Potential for limited improvements to the integration of transit serviced in the overall transportation system 	 Improves pedestrian access to transit network from the M City community No transit service planned on Redmond Road extension directly
Network Connectivity Facilitates improved access to, from and within downtown Mississauga	- Does not provide improved multi-modal access in the downtown	 May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network Does not provide alternative multimodal routing and access in the downtown 	 May provide modest improvement in network capacity in short-term Does not address the primary transportation problem of the need for a finer grid collector road network within the study area Does not provide alternative multimodal routing and access in the downtown 	 Provides alternative multi-modal routing and access in the downtown Offers redundancy in the road network to improve access for pedestrians and vehicles

Evaluation Criteria	Alternative 1 Do Nothing	Alternative 2 Manage Transportation Demand	Alternative 3 Upgrade Parallel Roads	Alternative 4 Extend Redmond Road
 Emergency Response Provides opportunity to improve response time and/or emergency service vehicle access 	 Does not provide opportunity to improve emergency vehicle access and / or response time 	 If TDM achieves a slight reduction in auto use, there may be some improvements to network operations and associated emergency vehicle response time in the short-term No change to existing vehicle access – no opportunity to improve access 	 No change to existing vehicle access – no opportunity to improve access in the study area 	- Offers improved access and routing for emergency response vehicles
Socio-Economic Environment				
 Public Realm Provides streetscape enhancement opportunities Creates smaller urban blocks Supports a more dynamic urban core 	- No opportunity to create new public space	 Improvements to transit ridership and other modes of transportation assist in supporting a dynamic downtown core however, does not address needs and opportunities within the study area 	 Does not provide opportunity to enhance the existing public realm, create smaller urban blocks and/or support a dynamic urban environment within the study area 	 Consistent with City Downtown planning policies to create a finer-grained street network Addresses anticipated transportation needs Improves network connectivity for all users Improves road operations and safety Enhances access to transit and downtown walkability
Residential/Business Property/Operations - Requires acquisition of private property - Changes in access - Supports local commerce	 No property required. Does not support local commerce, does not provide opportunity to improve local access/businesses 	 No property required. Limited opportunity to support local commerce, does not provide opportunity to improve local access/businesses 	 Potentially significant property impacts along other corridors Does not address problems and opportunities within the study area Does not meet the multi-modal mobility needs of the M City community Does not support economic development within the study area 	 Does not require property beyond what has already been identified in the M City development. Provides for on-street parking and high-quality pedestrian environment to support mixed-use development and street-level commercial uses Provides access for deliveries to local businesses
 Accessibility Provides opportunity to improve accessibility and reduce barriers in the built environment Facilitates implementation of AODA/City accessibility design guidelines 	 No opportunity to improve accessibility and accommodate AODA/ City Guidelines 	- Limited opportunity to improve accessibility: measures are policy based rather than actual implementation within the study area	 Does not provide opportunities for improvements within the study area. Does not address study area accessibility needs 	 Improves accessibility within the M City community and in the downtown All facilities will be developed to meet AODA/City Guidelines

Evaluation Criteria	Alternative 1 Do Nothing	Alternative 2 Manage Transportation Demand	Alternative 3 Upgrade Parallel Roads	Alternative 4 Extend Redmond Road
Cultural Heritage				
ArchaeologyImpacts areas identified as having archaeological potential	- No potential archaeological impacts	- No potential archaeological impacts	 Potential heritage impacts, depending on road and features present 	- No potential archaeological impacts
 Built Cultural Heritage Impacts to designated/listed heritage resources Impacts to potential heritage resources 	- No Built Heritage features identified	- No Built Heritage features identified	- No Built Heritage features identified	- No Built Heritage features identified
Natural Environment				
 Climate Change/Sustainability Ability to increase resilience to climate change within study area Supportive of sustainable transportation modes 	- No change	 Supports sustainable growth through policies that encourage behavioural shifts in reducing single occupant vehicle use 	 Does not address opportunities within the study area No opportunity to provide sustainable modes of transportation in the study area 	 Opportunity to improve resilience of the study area through appropriate stormwater management measures Supportive of more compact and mixeduse development within M City Pedestrian facilities to encourage walking for access nearby transit
Vegetation/TreesPotential impact to vegetation communitiesPotential impacts to individual trees	- None	No natural environmental features are present.No trees are present	 Low potential for impacts, depending on road and features present 	No natural environmental features are present.No trees are present
WildlifePotential impact to wildlife and habitat.	- None	- No wildlife habitat present	 Low potential for impacts, depending on road and features present 	- No wildlife habitat present
Technical				
 Construction Disruption to existing traffic and property access Potential to coordinate with other initiatives 	- No disruption	- No disruption	 Likely temporary disruption to traffic, private property and businesses during construction 	 Minimal impacts since the road will be constructed as part of the new community – integrated development

Evaluation Criteria	Alternative 1 Do Nothing	Alternative 2 Manage Transportation Demand	Alternative 3 Upgrade Parallel Roads	Alternative 4 Extend Redmond Road
				 Construction will be coordinated with installation of services and utilities (per Master Site Plan Agreement)
Utilities - Potential impacts to utilities	- No impacts to existing utilities	- No impacts to existing utilities	- Anticipated impacts to utilities on other corridors, if they are widened	 Integrates with planned utilities within M City development (per Master Site Plan Agreement) No impacts to current Peel Region watermain and sanitary upgrades
CostsRelative costs for comparison purposes	No direct cost	\$	\$\$\$	\$\$
Addresses Project Problem and Opportunity Statement	No	No	No	Yes
Evaluation Result	Not Carried Forward	Already Being Implemented Through City Policies	Not Carried Forward	Carried Forward

Table 4-2: Alternative Solutions Evaluation Summary

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend Redmond Road
Transportation and Technical	Does not address Problems and Opportunities Not consistent with City planning policies to create a finer-grained street network Does not improve network connectivity	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network	Would provide additional north-south traffic capacity in other corridors Not consistent with City planning policies to create a finer-grained street network Does not address local transportation needs within the M City community or improve network connectivity	Consistent with City planning policies to create a finer-grained street network Addresses anticipated transportation needs Improves network connectivity for all users Improves road operations and safety Enhances access to transit and downtown walkability
Socio-Economic Environment	No property required Does not create access to new community or support mixed-use development No opportunity to improve walkability and enhance access to transit	 No property required Although supportive of transit, cycling and pedestrian activities, this does not provide the specific infrastructure needed within the study area to support or enhance these forms of transportation. 	Potentially significant property impacts along other corridors Does not address problems and opportunities within the study area Does not meet the multi-modal mobility needs of the M City community Does not support economic development within the study area	Supports mobility for all modes within local community and in downtown Provides opportunity to enhance streetscape Prioritizes a high quality pedestrian environment Provides for on-street parking to support mixed-use development and street-level commercial uses
Natural Environment	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	Not applicable, no natural environmental features are present. Provides sustainable transportation choices to reduce vehicle use.
Cultural Environment	No potential archaeological impacts No cultural heritage resources identified	 No potential archaeological impacts No cultural heritage resources identified 	 Other corridors would require assessment. 	No potential archaeological impacts No cultural heritage resources identified
Evaluation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

4.3 Preferred Planning Solution

Based on the results of the evaluation, Alternative 4, Extension of Redmond Road, is preferred because it fully addresses the Problems and Opportunities by:

- Supporting the creation of an urban environment that meets planning objectives, network connectivity and access;
- Fully addressing the City's transportation objectives by creating a fine-grained downtown street network;
- Providing a new north-south collector road within the planned M City community;
- Providing redundancy in the road network for all vehicles;
- Creating smaller, more walkable blocks that enhance pedestrian access to transit; and
- Supporting a mixed-use community by offering high-quality pedestrian environment and street-parking for street-level commerce.

Table 4-1 illustrates that Alternative 1 does not address any of the Problems and Opportunities. Alternatives 2 and 3 only partially address the Problems and Opportunities and do not contribute to a fine-grained street network that supports community growth, improved pedestrian options and access to transit.

4.4 Future Transportation Conditions

In general, future traffic conditions are not likely to change significantly and operations will not improve with the extension of Redmond Road, given the expected growth in the downtown core. Traffic modeling indicates that the proposed Redmond Road extension would provide north-south access and connectivity within the planned M City community.

It is important to note that the City's objectives of the Downtown Core Local Area Plan are to prioritize the development of a complete community with a compact urban form that is walkable and convenient to public transit and the cycling network.

MiWay Transit currently operates on the road network around Redmond Road, including Webb Drive, Burnhamthorpe Road, Grand Park Drive. MiWay has

confirmed that there are no plans to extend local transit onto the proposed new segment of Redmond Road.

The City of Mississauga Cycling Master Plan (2018) does not include plans for dedicated cycling facilities on Redmond Road. However, there will be access to the surrounding cycling network which includes: multi-use path on Burnhamthorpe Road; existing bike lanes on Webb Drive; and existing dedicated and shared facilities on Grand Park Drive.

4.5 Road Design Concept

A design concept was developed for the Preferred Planning Solution to extend Redmond Road. The design concept was developed for illustrative purposes only and is subject to refinement during future design phases.

Figure 4-1 depicts the proposed typical road cross-sections, which are based on the City's Standard City Centre Cross-Section. Two variations on the cross-section are proposed to reflect the proposed road rights-of-way. **Figure 4-2** depicts the road alignment concept.

It is anticipated that the road design will be completed by Rogers Real Estate Development Ltd. as part of the M City development phasing. The design will be subject to further review and approval by City staff. The following design aspects will be of particular interest:

- ▶ The use of the City of Mississauga Standard City Centre Road Cross-Section will ensure appropriate space is available for underground utilities, street trees and sidewalk. However, some details of the road cross-section may be subject to minor adjustments during the design phase.
- ► Traffic operations including turning lane requirements and storage length at Webb Drive and Burnhamthorpe Road.
- Design of on-street parking, while maintaining appropriate clearance at intersections.
- Design of mid-block intersections.
- Streetscape design based on the Master Site Plan Agreement (2015) and further review/approval of City staff.

Figure 4-1: Redmond Road Typical Cross-Sections

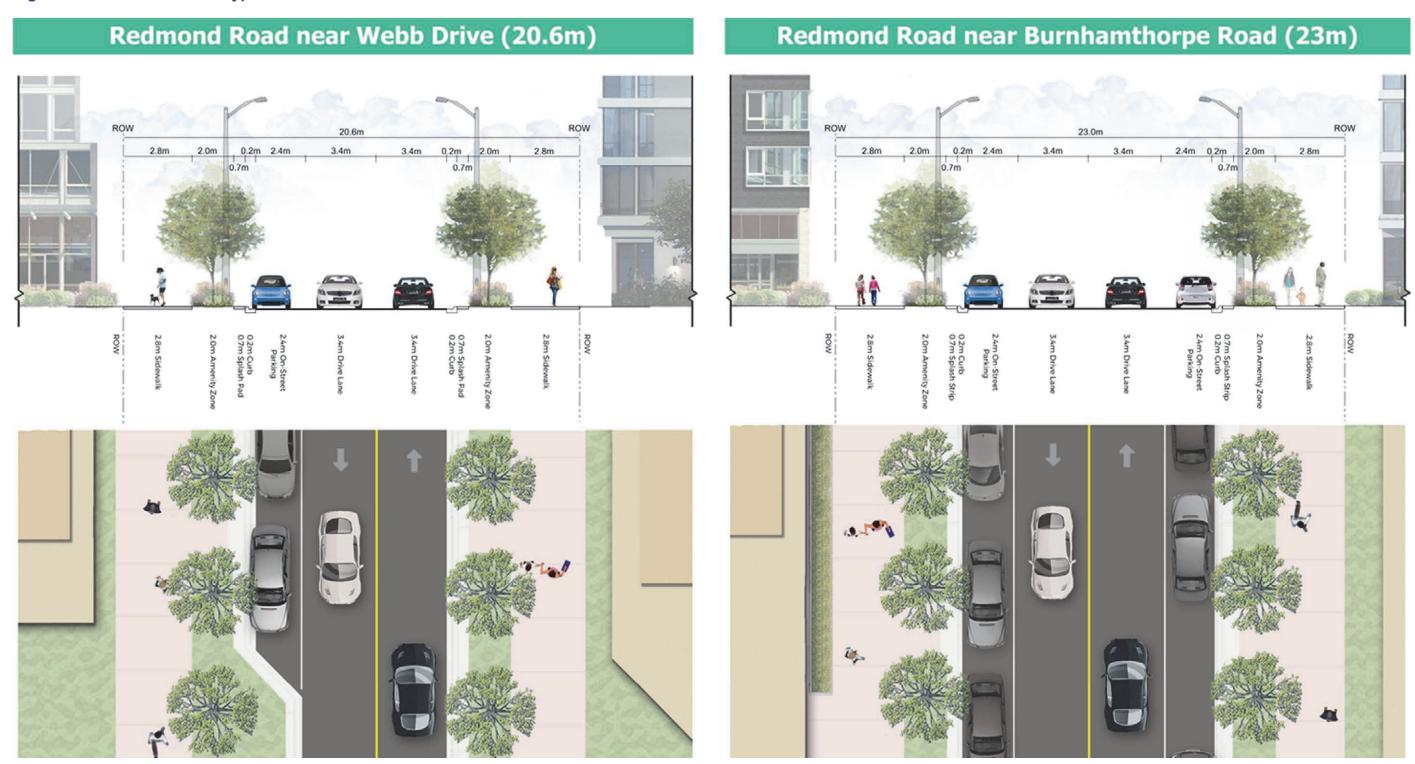
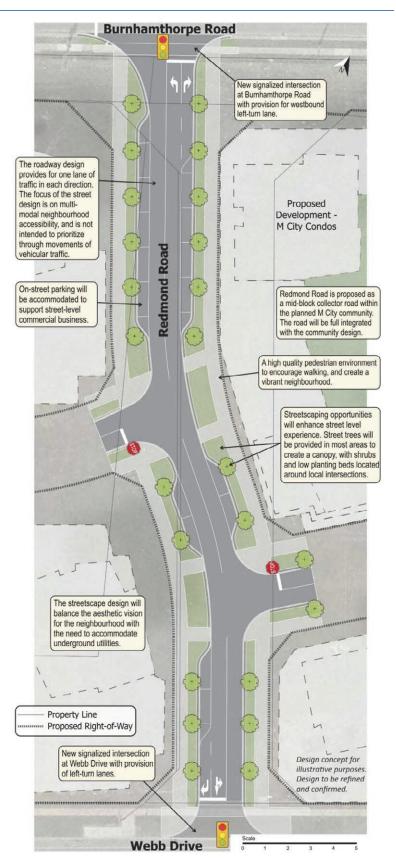


Figure 4-2: Redmond Road Design Concept

Note: Streetscape depiction is conceptual only. Green areas are identified for future streetscape design and do not imply the presence of sod. Location of streetscape is subject to further design and integration with building location, utilities and on-street parking considerations.



5 CONSULTATION

5.1 Key Points of Contact

External agencies, utilities, emergency service providers, and residents and business owners were contacted directly at key points during the study and requested to provide input to the study and feedback on the decision-making process. The key points of contact are listed in **Table 5-1**.

A direct mailing list of residents and businesses, within the defined catchment area, agencies and utilities was developed at the outset of the study. The catchment area for property owners was defined as approximately 300 m on either side of Redmond Road within the study area.

Project notices for all four downtown Mississauga road extension Class EA studies (i.e. Redmond Road, Kariya Dive, Webb Drive and The Exchange) were coordinated and sent concurrently. As such the catchment areas overlapped and the mailing list consolidated, as appropriate. The mailing list continued to be updated based on feedback received through the study.

Members of the general public were made aware of the study through notifications in the local newspapers and invited to contact the project team to join the project mailing list. Members of the public requesting to be on the mailing list received direct notification of subsequent study milestones at the key points of contact listed in **Table 5-1**.

A dedicated website and email address were established through the City of Mississauga's website at the outset of the study:

http://www.mississauga.ca/portal/residents/rwek-ea-studies

Information about Redmond Road and the other three downtown Class EA studies was posted to this website and updated through the study with Notices of Study Commencement, Public Information Centre and Study Completion.

Various Public Information Centre (PIC) materials were made available on the website (e.g. Notices, display material and comment sheets). All notices and study materials contained the dedicated project team email address to facilitate direct contact from interested members of the public.

The potential need for formal Indigenous Community engagement was explored with the Ministry of Environment, Conservation and Parks (MECP). In correspondence dated January 18, 2019, MECP confirmed that, given the urban downtown setting, the absence of natural features and watercourses, Indigenous Communities were unlikely to have an interest in the study and direct outreach was not required.

Table 5-1: Key Points of Contact

Date	Notification	Purpose
Notice of Study Commencement December 4, 2018	 Notice sent to property owners / mailing list – December 4, 2018 City project website – December 4, 2018 The Mississauga News – December 6 and December 13, 2018 Letters and Response Forms sent to agencies and utilities – December 10, 2018 Letter and Streamlined EA Project Information Form sent to MECP – December 12, 2018 	To introduce and invite participation in the study and to request any preliminary comments or pertinent information.
Public Information Centre June 12, 2019	 Postcard notices sent to property owners / mailing list – May 27, 2019 City project website – May 31, 2019 City website – June 3, 2019 The Mississauga News – June 6, 2019 PIC Display materials posted on City website on June 13, 2019 	To notify and invite interested parties to attend the first Public Information Centre on June 12, 2019 to review information and provide input regarding: the problem and opportunities being addressed, the collection of background information, the evaluation of planning alternatives and early design concepts.
Notice of Study Completion March 12, 2020	 Notices sent to property owners / mailing list – March 10 Notices sent to agencies and utilities – March 10 City project website – March 12 	To announce the completion of the Class EA Study and notify interested parties of the 30- calendar review period for the Environmental Study Report.

Date	Notification	Purpose
	- The Mississauga News – March 12 and March 19, 2020	

5.2 Agency Consultation

The list of technical agencies was assembled based on previous City of Mississauga Class Environmental Assessment studies and Ministry of the Environment, Conservation and Parks (MECP) Government Review Team (GRT) list.

External 'agencies' (including regulatory/review agencies, utilities and emergency service providers) were first notified of this Class EA Study through written correspondence on December 10, 2018 which included a copy of the Notice of Study Commencement and a Response Form (a copy of the Notice and letter are provided in **Appendix A**). These agencies were:

Provincial

- Ministry of the Environment, Conservation and Parks
- Ministry of Natural Resources and Forestry
- Ministry of Tourism, Culture and Sport
- Ministry of Municipal Affairs and Housing
- Ontario Heritage Trust
- Metrolinx
- Credit Valley Conservation (CVC)

Municipal

- Mississauga Accessibility Advisory Committee
- Mississauga Cycling Advisory Committee
- Mississauga Board of Trade
- Dufferin-Peel Catholic District School Board
- Region of Peel District School Board
- Region of Peel Student Transportation
- Region of Peel Public Works
- Region of Peel Public Health

- Region of Peel Paramedic Services
- Region of Peel Police Road Safety Services
- Mississauga Fire and Emergency Services

Elected Officials

- Member of Provincial Parliament Mississauga Centre
- Member of Provincial Parliament Mississauga East Cooksville

Utilities

- Hydro One Networks Inc.
- Enbridge Gas Distribution Inc.
- o Rogers Communication Inc.
- Alectra Utilities
- o Bell Canada

A summary of agency comments received throughout the study and course of action taken by the Project Team, as appropriate, is provided in **Table 5-2**. Copies of correspondence with agencies are included in **Appendix A**.

Table 5-2: Agency Comments

Agency Comment	Course of Action
Ministry of Natural Resources and Forestry Email dated: January 2, 2019 I have received your letter regarding four proposed road extensions in Mississauga. There was no attached notice with a key plan. Please provide.	Notice of Commencement was provided via email.
Ministry of Natural Resources and Forestry Email dated: January 3, 2019 Natural areas to be affected will need to be searched for Butternut trees of all sizes, including seedlings, within 25 metres from proposed works. The woodland areas to be affected will need to be outlined and, if they are at least 0.5 ha averaging at least 30 metres in width with some native oak or maple species, assessed for potential as habitat for	An assessment of the natural environment was completed as part of this study.

Agency Comment	Course of Action
endangered bat species (Little Brown Myotis, Northern Myotis, Tri-coloured bat).	
Ministry of the Environment, Conservation and Parks Letter dated: January 18, 2019 Response to Notice of Commencement providing guidance on consultation with Indigenous Communities.	Given the nature of this project and the existing land uses in the area, separate notification for Indigenous Communities was not required.
Ministry of Natural Resources and Forestry Emailed dated: June 6, 2019 We have received the Notice of Public Information Centre for this project. If you have any questions regarding natural features/systems or impacts on them, please let us know.	No action required.
Region of Peel Public Health Email dated: June 12, 2019 Thank you for sharing the notice of PIC for the environmental assessment process for Redmond Road, Webb Drive, The Exchange and Kariya Drive. We would like to request digital copies of information being shared at tonight's PIC, including the presentation, so that we may review and provide comments.	PIC materials were provided via email on June 17, 2019.

5.3 Public Information Centre

A Public Information Centre (PIC) was held on June 12, 2019 from 5:30 pm to 7:30 pm in the Great Hall at the Mississauga Civic Centre, located at 300 City Centre Drive in Mississauga.

The PIC was an open house format. A presentation to introduce the study was scheduled from 5:30 pm to 5:45 pm, however, due to low attendance at 5:30 pm, the presentation was cancelled.

The purpose of the PIC was to provide stakeholders and interested members of the public with an opportunity to view study information including project background, the Municipal Class EA process, planning and policy context, assessment and evaluation

of alternative planning solutions and the selection of a preliminary preferred solution. A design concept was presented of the preliminary preferred solution, for illustrative purposes.

Twelve people signed in at the PIC. Attendees included local residents/property owners, stakeholders, and staff from the Peel District School Board and City of Mississauga. The PIC was not attended by any Elected Officials or City staff outside of the Project Team. The PIC materials were made available on the City's website the day after the PIC.

One comment was received via hard copy at the PIC. No additional comments were received during the comment period, ending July 5, 2019. The written comment that was received is provided verbatim in **Table 5-3**, along with the how the feedback was considered in this study. Sensitive information such as names and contact information have been removed.

Table 5-3: Public Feedback Received at the Public Information Centre

Comments	How the feedback has been considered in this study
Add at least 2 overpasses or underpasses to help alleviate traffic, i.e. Mavis & Burn / Burn & Confederation Pkwy. Replace proposed lights @ Redmond & Webb with stop signs.	The consideration of possible improvements to Burnhamthorpe Road are outside of the scope of the Redmond Road Class EA Study. The purpose of this Class EA is to confirm the project need and recommend a preferred planning solution for Redmond Road. All aspects of the design, including specific intersection configuration, will be finalized during detailed design.

5.4 Stakeholder Consultation

The proposed Redmond Road extension is located entirely within the M City development and has been previously conceptualized as part of the Master Site Plan Agreement (2015). As such, Rogers Real Estate Development Ltd. has a direct stake in the planning for the Redmond Road and will be responsible for the future design and implementation of this road as part of the M City development.

A meeting was held with Rogers' representatives on May 30, 2019. Minutes are on file with City staff. A summary of the meeting is provided on the following page:

- ▶ A meeting was held with Rogers' representatives on May 30, 2019, at the City of Mississauga, 201 City Centre Drive.
- ► The purpose of the meeting was to introduce the study, review early design concepts, discuss stakeholder questions and concerts, and review next steps.
- During the meeting it was noted that the design concept was based on the streetscape character described in the Master Site Plan Agreement (2015).
- Roger's reviewed their timeframes for the next phase of development and confirmed that the completion of the Redmond Road Class EA was on the critical path to their construction phasing.
- ▶ Following the meeting, Rogers' provided comments related to the preliminary design of the design concept. Preliminary design is outside of the scope of the Schedule B Class EA process. No further comments about the study process or design concept were received.

6 POTENTIAL IMPACTS, MITIGATION MEASURES AND COMMITMENTS TO FURTHER WORK

As noted above, it is anticipated that the road design will be completed by Rogers Real Estate Development Ltd. as part of the M City development phasing. The design will be subject to further review and approval by City staff. While some commitments to further work are highlighted below, it is beyond the scope of this Project File to identify all potential future commitments specifically, since these will be subject to ongoing review and approval processes between Rogers and the City of Mississauga.

6.1 Integration with M City Development

Design of the Redmond Road extension will proceed in coordination with the M City development phasing. M City development is subject to the Master Site Plan Agreement (2015) with the City of Mississauga as well as other development requirements/approvals.

Property conveyance will be finalized, as necessary, per the Master Site Plan Agreement (2015).

Excess Soil Management and Sediment and Erosion Control measures will be implemented per Master Site Plan Agreement and other City of Mississauga requirements.

Streetscape design will be completed per the Master Site Plan Agreement and any other requirements/approvals, in consultation with City staff.

6.2 Drainage and Stormwater Management

The stormwater management design will appropriately manage water quality and quantity per applicable City of Mississauga and Credit Valley Conservation design criteria. A Ministry of Environment, Conservation and Parks Environmental Clearance Approval (ECA) permit may be required for the new storm sewer system.

6.3 Utilities

The City and Rogers Real Estate Development Ltd. will engage with Alectra Utilities, Peel Region and private utility companies to determine needs and coordinate design and installation. Requirements are outlined in the Master Site Plan Agreement (2015).

6.4 Noise and Vibration

6.4.1 Noise Assessment

The potential for Noise Sensitive Areas (NSAs) in close proximity to the proposed Redmond Road extension was reviewed. There are no NSAs immediately adjacent to roadway since the setting is within vacant land that is planned for a new condominium community. Nearby existing condominium towers on Grand Park Drive and Confederation Parkway will be blocked from Redmond Road by new towers. Any potential NSAs located to the north for the study area, on Wallenberg Crescent, back onto Burnhamthorpe Road. Noise levels in the rear yards will be dominated by Burnhamthorpe Road and not Redmond Road. Based on this review, a noise assessment for Redmond Road was deemed to be not warranted.

6.4.2 Noise During Construction

The potential for construction noise issues will be further reviewed during detailed design when construction methodology and schedule is fully developed. Construction activities will conform to the City of Mississauga Noise Control By-Laws.

All equipment shall be properly maintained to limit noise emissions. As such, all construction equipment will be operated with effective muffling devices that are in good working order.

Through contract/agreements the developer, the City may include a noise complaint system. In the presence of persistent complaints and subject to the results of a field investigation, alternative noise control measured during construction may be required, where reasonably available. In selecting appropriate noise control and mitigation measures, consideration will be given to the technical, administrative and economic feasibility of the various alternatives.

6.4.3 Vibration

The potential of vibration impacts is described qualitatively in this section as there are no current City of Mississauga, provincial or federal guidelines, standards or protocols for assessing vibration.

Within the study area, lands on either side of the proposed Redmond Road are vacant and are proposed for future community development. In the surrounding area, condominium towers are present on Grand Park Drive, Webb Drive, and low-density residential areas are located beyond Webb Drive to the south and Burnhamthorpe Road to the north.

There are no existing land uses considered to be highly sensitive to vibration impact (e.g. sensitive equipment such as electron microscopes, or laboratory with sensitive scientific equipment, etc.).

Once constructed, the main source of vibration from Redmond Road would be from truck traffic. However, vehicles with pneumatic tires generally do not create significant levels of vibration except at very short distances. This road will function as a minor collector road serving only the local community and truck traffic volumes will be low, as such, vibration levels to the community are not expected to be perceptible or significant.

6.4.4 Construction Vibration

Some construction activities associated with the road building may at times create vibration levels that are perceptible at nearby land uses. However, the vibration levels produced by the anticipated construction activities will not be large enough to cause structural damage. The potential vibration generated by the building of the road and the surrounding community should be reviewed in detailed design, once construction methodologies and scheduling are developed.

6.5 Air Quality

6.5.1 Air Quality Assessment

An air quality assessment was undertaken to evaluate the potential change in air quality associated with the extension of four downtown roads, including Redmond Road. The Air Quality Assessment Technical Memorandum is provided in **Appendix B**.

Based on the findings, background air quality levels for the primary contaminants were below the air quality thresholds, indicating that the ambient air quality in the vicinity of the study area is good. Benzo(a)Pyrene exceeds the threshold, a condition which is common in southern Ontario and not unique to the study area.

The project involves extending Redmond Road and includes considerations of improved traffic access and routing options and enhanced access to transit and downtown walkability. As such, no substantial change in road traffic emissions or in existing air quality is expected.

6.5.2 Air Quality During Construction

During construction of the roadway, emissions sources will include construction equipment engines and air borne dust from construction vehicles travelling over exposed soils/unpaved surfaces. These impacts will be temporary, during construction. Due to the temporary nature of construction activities, there are no air quality criteria specific to construction activities. Construction emissions can be mitigated by appropriate maintenance of equipment and proper phasing that minimizes activity on unpaved surfaced.

The Environment Canada "Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities" document provides several mitigation measures for reducing emissions during construction activities. Mitigation techniques discussed in the document include material wetting or use of chemical suppressants to reduce dust, use of wind barriers, and limiting exposed areas which may be a source of dust and equipment washing.

Ministry of Environment, Conservation and Parks (MECP) recommends that nonchloride dust suppressants be applied. MECP also recommends referring to the following publication in developing dust control measures: Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities. Report prepared for Environment Canada, March 2005.

6.6 Sustainability

The Downtown Core is located within a major designated growth area and identified as an Anchor Hub in the Regional Transportation Plan. The City's objective is to create a high quality, pedestrian friendly, human scaled environment that attracts

lasting public and private investment in the Downtown to support existing and planned infrastructure, particularly higher order transit.

The Redmond Road extension is part of this integrated plan to transform the downtown into a sustainable, compact mixed-use area with multi-modal transportation options that seek to reduce single occupant vehicle use by creating a live-work-play community, linked to a multi-tier public transit system.

The existing road pattern is made up of super blocks. An expanded road network is proposed that will create an urban pattern of development blocks that are walkable in scale and well connected. The new road network will result in urban scaled blocks, providing routing options for vehicular, servicing and goods movement, pedestrian and cycling movement within the Core. The scale of the streets is to be narrower with special attention paid to the public realm.



Redmond Road Extension Schedule B Municipal Class Environmental Assessment

PROJECT FILE (FINAL)

APPENDICES

March 2020

Prepared for: City of Mississauga

Prepared by: WSP

Appendix A

Consultation Record

City of Mississauga | Redmond Road Municipal Class Environmental Assessment Project File | March 2020

Appendix A – Consultation Record

Appendix A materials should be considered within the context of the Project File.

A1 Notice of Commencement

- Notice of Commencement
- Agency Letter Template
- Utility Letter Template
- Agency / Utility Letter Response Form
- Agency / Elected Official / Utility Letter Mailing List

A2 Notice of Public Information Centre

- Summary Report
- Public Information Centre Materials
- Notice of Public Information Centre Mailout
- Agency / Utility / Elected Official Notice Template
- Notice of Public Information Centre (Mississauga News)

A3 Public, Agency & Utilities Consultation Record

- Master Tracking Table
- Correspondence Records

A4 Stakeholder Consultation Record

Stakeholder Meeting Materials

A5 Notice of Completion

Notice of Completion

Appendix A1 Notice of Commencement

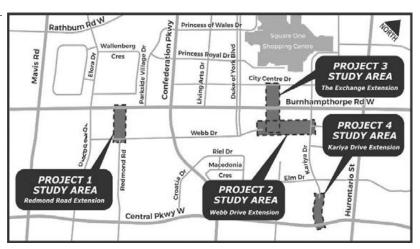


NOTICE OF STUDY COMMENCEMENT

Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive

WHAT?

- The City of Mississauga has initiated four studies to plan for the existing and future transportation needs of Mississauga's City Centre. The study areas, as shown on the key plan, include:
 - Project 1 Redmond Road from Webb Drive to Burnhamthorpe Road West
 - Project 2 Webb Drive from Duke of York Boulevard to Kariya Drive
 - Project 3 The Exchange from City Centre Drive to Webb Drive
 - Project 4 Kariya Drive from Elm Drive to Central Parkway West



WHY?

- The City's vision for the Downtown area is a mixed-use, higher density, dynamic urban core, with a new finer street grid, smaller block sizes, and an emphasis on a high quality public realm.
- The studies will consider the City's planning principle to build a multi-modal city, which will support a successful, vibrant and active community with a reliance on a range of transportation modes including walking, cycling, transit and vehicles.

HOW?

- These studies are being planned under Schedule B of the Municipal Class Environmental Assessment (October 2000, as amended in 2015), which is approved under the Ontario Environmental Assessment Act.
- The studies will define the problems and opportunities, identify alternative planning solutions and evaluate solutions based on the potential impacts to the surrounding environments.
- In consultation with the public and technical agencies, the preferred improvements will be determined for each project.
- At the end of the studies, Project Files will be prepared to document the decision-making process of each study and will be available for public review.

GET INVOLVED!

- A key component of these studies is public and agency consultation.
- One Public Information Centre (PIC) will be held to present the study progress and obtain public input. Public Information Centre details will be advertised closer to the date, under a separate notice.

To find out more about project announcements and other information please visit the project website:

www.mississauga.ca/portal/residents/rwek-ea-studies

If you have any questions about these studies, or would like to be included on the mailing list please send us an email at **rwekea@wsp.com** or contact one of the project team members below:

Emily Pelleja, P.Eng.

Project Manager City of Mississauga Transportation & Works Department 201 City Centre Drive, Suite 800 Mississauga ON L5B 2T4

Phone: 905-615-3200 Ext. 3699

Katherine Jim, M.Eng., P.Eng. Consultant Project Manager

WSP Group Canada Limited 610 Chartwell Road, Suite 300 Oakville ON L6J 4A9

Phone: 905-823-8500

Personal information is collected under the authority of the Environmental Assessment Act and will be used in the assessment process. With exception of personal information, all comments shall become part of the public records. Questions about this collection should be directed to the Project Manager listed in the notice. This Notice first issued on December 4, 2018.



Date

Name Company name Address 1 Address 2

RE: City of Mississauga

Redmond Road, Webb Drive, The Exchange and Kariya Drive

Class Environmental Assessment Studies

Dear Madam/Sir:

The City of Mississauga has initiated four Class Environmental Assessment (Class EA) studies for proposed road extensions of:

- 1. Redmond Road from Webb Drive to Burnhamthorpe Road West
- 2. Webb Drive from Duke of York Boulevard to Kariya Drive
- 3. The Exchange from City Centre Drive to Webb Drive
- 4. Kariya Drive from Elm Drive to Central Parkway West

WSP Canada Group Limited has been retained to undertake the Class EA and preliminary design assignments. These studies are being conducted in accordance with the planning and design process for 'Schedule B' projects as outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment," (October 2000, as amended in 2015), which is approved under the Ontario Environmental Assessment Act.

Additional information and a key plan of the study areas are provided on the attached notice that will be posted on the City's website and mailed to residents starting December 4, 2018 and will appear in the Mississauga News on Thursday December 6 and Thursday December 13, 2018.

If your agency has any initial interests or comments regarding this project, please return the attached Response Form by January 10, 2019.

It is recognized that this project may not impact your agency mandate or programs. Should this be the case, we would appreciate you advising appropriately using the attached Response Form.

610 Chartwell Road Suite 300 Oakville, ON, Canada L6J 4A5

T: +1 905-823-8500 F: +1 905-823-8503 wsp.com



Similarly, if you are not the correct contact for your organization, kindly redirect us so that we may update our study mailing list.

We thank you for your co-operation. If you have any questions, or wish to obtain additional information about the project or provide input at any point during the study, please contact the undersigned by email at Katherine.Jim@wsp.com or by phone at 289-835-2511.

Yours truly, WSP Canada Group Limited

KJim

Katherine Jim, P.Eng. Consultant Project Manager

encl.

cc. Emily Pelleja, City of Mississauga



Name Company name Address 1 Address 2

RE: City of Mississauga Redmond Road, Webb Drive, The Exchange and Kariya Drive Class Environmental Assessment Studies

Dear Madam/Sir:

The City of Mississauga has initiated four Class Environmental Assessment (Class EA) studies for proposed road extensions of:

- 1. Redmond Road from Webb Drive to Burnhamthorpe Road West
- 2. Webb Drive from Duke of York Boulevard to Kariya Drive
- 3. The Exchange from City Centre Drive to Webb Drive
- 4. Kariya Drive from Elm Drive to Central Parkway West

WSP Canada Group Limited has been retained to undertake the Class EA and preliminary design assignments. These studies are being conducted in accordance with the planning and design process for 'Schedule B' projects as outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment," (October 2000, as amended in 2015), which is approved under the Ontario Environmental Assessment Act.

Additional information and a key plan of the study areas are provided on the attached notice that will be posted on the City's website and mailed to residents starting December 4, 2018 and will appear in the Mississauga News on Thursday December 6 and Thursday December 13, 2018.

The purpose of this letter is to request utility information. One of the key study activities is to identify potential impacts to existing and future utilities as the result of any improvements proposed as part of this study. We would appreciate if you could provide us with plans (preferable digital) indicating the description and location (including type, size, depths, clearances, offsets from roadway or property line, etc.) of all existing underground and aboveground utilities within the project limits that should be considered.

610 Chartwell Road Suite 300 Oakville, ON, Canada L6J 4A5

T: +1 905-823-8500 F: +1 905-823-8503 wsp.com



We would greatly appreciate receiving your feedback by January 10, 2019.

If this study falls under the jurisdiction of another representative of your office, please forward this letter to them, and advise us at your earliest convenience. Thank you for your assistance.

We thank you for your co-operation. If you have any questions, or wish to obtain additional information about the project or provide input at any point during the study, please contact the undersigned by email at Katherine.Jim@wsp.com or by phone at 289-835-2511.

Yours truly, WSP Canada Group Limited

KJ:m

Katherine Jim, P.Eng. Consultant Project Manager

encl.

cc. Emily Pelleja, City of Mississauga



City of Mississauga Redmond Road, Webb Drive, The Exchange and Kariya Drive Class Environmental Assessment Studies Notice of Study Commencement Utility / Agency Response Form

Agency Name &					
Division/Branch					
Name:					
Address:					
Phone:					
Email:					
COMMENTS:					
1. Does your orga	nization wish to participate in this project?	□ YES	□ NO		
2. Delete from con	ntact list?	□ YES	□ NO		
3. Please identify	3. Please identify any concerns your agency may have at this time.				
					_

Please return this form by January 10, 2019 to:

Katherine Jim, P.Eng. Consultant Project Manager 610 Chartwell Road, Suite 300 Oakville, Ontario L6J 4A9 Phone: 289-835-2511

Email: katherine.jim@wsp.com



TECHNICAL AGENCIES MAILING LIST

Ms. Stephanie Smith Legislative Coordinator Mississauga Cycling Advisory Committee 300 City Centre Dr Mississauga ON L5B 3C1 Mr. Sheldon Leiba President and CEO Mississauga Board of Trade 701-77 City Centre Dr Mississauga ON L5B 1M5

Mr. Liam Marray Manager, Planning Ecology Credit Valley Conservation Authority 1255 Old Derry Rd Mississauga ON L5R 6R4 Mr. Keith Hamilton Planner Dufferin-Peel Catholic District School Board 40 Matheson Blvd W Mississauga ON L5R 1C5

Ms. Bianca Bielski Manager of Planning Peel District School Board 5650 Hurontario St Mississauga ON L5R 1C5

Mr. Tom Howe Student Transportation of Peel Region 5685 Keaton Cres Mississauga ON L5R 3H5

Mr. Paul Callanan Director Peel Public Health Environmental Health 7120 Hurontario St, 8th floor Mississauga ON L5W 1N4 Chief Peter Dundas
Director of Ambulance and Emergency Programs
Peel Regional Paramedic Services
5299 Maingate Dr
Mississauga ON L4W 1G6

Mr. Dana Banke Supervisor, Risk and Audit Peel Regional Paramedic Services 5299 Maingate Dr Mississauga ON L4W 1G6 Inspector Rob Orr Peel Regional Police Road Safety Services 7750 Hurontario St Brampton ON L6V 3W6

Tim Beckett
Fire Chief
Mississauga Fire and Emergency Services
15 Fairview Road W
Mississauga ON L5B 1K7

Ms. Liz Brock
Technical Analyst
Regional Municipality of Peel Infrastructure
Programming
& Studies, Transportation, Public Works
10 Peel Centre Dr
Brampton ON L6T 4B9

Mr. Jeremy Collins Provincial Ministries and Agencies 10 Adelaide St E Toronto M5C 1E3 Mr. Darcy Wiltshire
Jr. Project Coordinator
Metrolinx
Environmental Programs & Assessment,
Capital Projects Group
600-20 Bay St
Toronto ON M5J 2W3

Mr. Michael Barnycz Senior Planner Ministry of Municipal Affairs and Housing Municipal Services Office - Central 777 Bay St, 13th floor Toronto ON M5G 2E5 Mr. Bohdan Kowalyk District Planner Ministry of Natural Resources and Forestry Aurora District 50 Bloomington Rd W Aurora ON L4G 0L8 Mr. Trevor Bell
Environmental Resource Planner & EA
Coordinator
Ministry of the Environment, Conservation &
Parks
Technical Support Section, Central Region
5775 Yonge St, 8th floor
Toronto ON M2M 4J1

Ms. Rosi Zirger Heritage Planner Ministry of Tourism, Culture & Sport Culture Div, Programs & Services, Heritage Programs Unit 1700-401 Bay St Toronto ON M7A 0A7

Rasul Kassam Supervisor Accessibility Planning Mississauga Accessibility Advisory Committee 300 City Centre Dr Mississauga ON L5B 3C1

ELECTED OFFICIALS MAILING LIST

Mr. Omar Alghabra MP Member of Parliament Mississauga Centre 151 City Centre Dr, Suite 400 Mississauga ON L5B 1M7 Natalia Kusendova MPP Member of Provincial Parliament Mississauga East -- Cooksville 10 Kingsbridge Garden Circle. Unit 708 Mississauga ON L5R 3K7

UTILITIES MAILING LIST

Mr. Mike McGivery Special Project Supervisor Enbridge 500 Consumers Rd North York ON M2J 1P8 Mr. Chris Kafel Senior Manager, Design Alectra 3240 Mavis Rd Mississauga ON L5C 3K1

Mr. Rick Schatz Hydro One Real Estate Management Hydro One Networks Inc. 185 Clegg Road Markham ON L6G 1B7 Ms. Marian Wright Planning Coordinator Rogers Communications 3573 Wolfdale Rd Mississauga ON L5C 3T6

Ms. Wendy Lefebvre
Design Manager - Access Network
Bell Canada
5115 Creekbank Rd, 3rd floor
Mississauga ON L4W 3R1

City of Mississauga | Redmond Road Municipal Class Environmental Assessment Project File | March 2020

Appendix A2 Notice of Public Information Centre

Municipal Class Environmental Assessment Studies

THE EXTENSIONS OF REDMOND ROAD, WEBB DRIVE, THE EXCHANGE AND KARIYA DRIVE MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STUDIES					
PU	PUBLIC INFORMATION CENTRE (PIC) SUMMARY REPORT				
Purpose of PIC:	The purpose of the PIC was to introduce the project to the public and to present the problems and opportunities in the study area, an evaluation of the alternative planning solutions, and the conceptual design of the preferred improvements.				
	Venue				
Location:	The Great Hall, Mississauga Civic Centre 300 City Centre Drive, Mississauga, ON L5B 3C1				
Date:	Wednesday, June 12, 2019				
Time:	5:30 p.m. to 7:30 p.m				
Presentation:	A brief presentation was scheduled to be held from 5:30 p.m. to 5:45 p.m. The presentation outlines the overall study process, schedule, background information and the planning context. Due to the low turnout at 5:30 p.m. the presentation was cancelled. The Project Manager offered to present the information to attendees individually. Specific questions were answered by Project Team staff and Peel Regional School Board representatives.				
	Notification				
Newspaper	 PIC 1 Notice published in the Mississauga News on May 30, 2019* and June 6, 2019. 				
	*Due to technical issues the Notice of PIC was not posted in the Mississauga News on May 30, 2019. Mitigation measures included posting Notice of the PIC on the home page of www.mississauga.com . Study information appeared on www.mississauga.com from June 3 to June 12, 2019.				
Mail / Email	 Provincial government agencies, utilities, and MPP notification letter sent via direct mail on May 28, 2019. Interest groups and public (on the project mailing list) notification post card sent via direct mail on May 27, 2019. 				
Project Website	 PIC 1 Notice posted on the City of Mississauga website on May 31, 2019 PIC Display materials posted on City of Mississauga website on June 13, 2019. 				

Municipal Class Environmental Assessment Studies

Project Team Attendees				
City of Mississauga	Lin Rogers Emily Pelleja Zain Zia			
Peel District School Board	Mahmud Garda Ken MacSporran			
WSP	Katherine Jim James Schofield Olivia Falcone Kate Barclay			
Media Attendance				
No media attendar	ice.			
	Attendance and Comment Sheets			
Attendance:	Public – 6 signed in Stakeholders (Developers and their associates) – 6 signed in The PIC was not attended by any Elected Officials or City staff outside of the Project Team.			
Comment Deadline:	July 5, 2019			
Comment Sheets:	2 comment sheets were received at the PIC on June 12, 2019. 1 additional emails or letters were received by the end of the comment period.			
Summary of Verbal Comments at PIC 1	 General questions about the school redevelopment on Elm Drive. Concerned about the operation of a signalized intersection at the intersection of Redmond Road and Webb Drive. Comment that school buses park on Redmond Road during the day making it difficult for vehicles to drive on Redmond Road. 			

Municipal Class Environmental Assessment Studies

Survey Data Summary current as of July 5, 2019 (Two comment sheets received. The comments were related to the extension of Redmond Road and Kariya Drive.)

My interest is: (please check all that apply)	Count
Redmond Road	1
Webb Drive	1
The Exchange	1
Kariya Drive	2





WELCOME

City of Mississauga Class Environmental Assessment Studies for:

Redmond Road Webb Drive The Exchange Kariya Drive



Public Information Centre

About This Public Information Centre (PIC)



Please take your time and walk through the display material.



Project Team members are available to answer questions.



Please take and fill out a Comment Sheet.



Please ensure you have signed in so we can keep you informed of the study progress.



Thank you for your interest in this study.

Purpose of Public Information Centre Introduce the studies Outline the Class EA process Review background information, planning policies and existing conditions Review problems and opportunities, alternative solutions and preferred solutions Review design considerations Present design concepts that depict the proposed roadway and streetscape Obtain community feedback and identify next steps

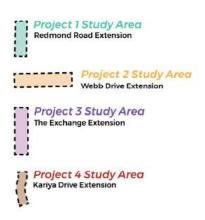
Introduction What are the Studies?

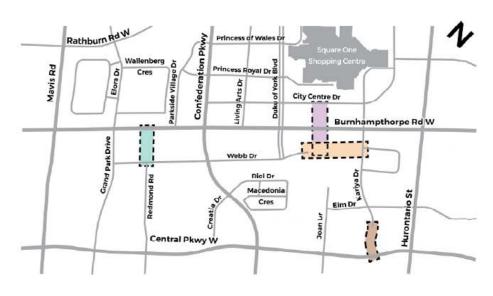


The City of Mississauga is undertaking 4 separate studies to consider road extensions in the downtown area in order to:

- Complete the collector road network and create a 'finer grid' transportation system; and
- Enhance access to downtown neighbourhoods, improve walkability and provide for new cycling opportunities.

The studies are being completed at the same time because they share common elements.





Introduction Study Process & Schedule



The Municipal Class Environmental Assessment (Class EA) process enables the planning and implementation of municipal infrastructure.

Social, cultural and natural environments are considered as well as community interests, agency requirements and unique project issues.

These studies are following a 'Schedule B' Class EA process, which consists of two distinct Phases:

Phase 1 – Defining the Problems and Opportunities (Justification for the Project)

Phase 2 – Considering alternative approaches to addressing the Problems and Opportunities.

A description of these Phases, other study components and overall study schedule are depicted on this display.

EA Phase 1: Problem and Opportunity

- ✓ Existing Conditions Review
- ✓ Traffic Analysis
- ✓ Identify problems and opportunities

EA Phase 2: Alternative Planning Solutions

- ✓ Identify and evaluate the planning alternatives
- ✓ Identify a Preferred Planning Solution
- ✓ Consult agencies and the public
- ✓ Select Preferred Planning Solution

EA Documentation

- Prepare a Project File for each of the 4 studies
- Document all aspects of decisionmaking and public feedback
- · 30 day public review period

Preliminary Design Complete preliminary design including stormwater management, cycling facilities, sidewalks, streetscape/landscape design

Implementation (Future)

- Proceed to detailed design of the project
- Property acquisition and utility relocation
- · Initiate construction

Study Commencement May 2018

- · PIC 1 June 12, 2019
- Problems and Opportunities
- · Planning Solutions
- Design Concepts

Consultation

Continuous

Study Completion Fall 2019

Place Project Files on Public Record for 30 day review period

Complete Preliminary Design

Present Study to Council Fall 2019

Background and Planning Context Plans and Policies



Numerous Plans and Policies are the basis of these Class EA studies:

Provincial Growth Plan for the Greater Golden Horseshoe (2017)

- Directs population and employment growth throughout the Greater Golden Horseshoe (GGH) by setting growth targets
 and quidance for municipalities. Policies encourage safe, comfortable travel for all road users and prioritize transit.
- Supports improved linkages among strategic growth areas, neighbourhoods and transit stations.
- Downtown area of Mississauga is identified as an urban growth centre.

City of Mississauga Strategic Plan (2016)

 Provides a Vision for the City of Mississauga's future set by Council based on: sustainability; reliable and convenient transit; developing walkable, connected and compact mixed-use neighbourhoods; providing for mobility choices; creating a vibrant downtown.

City of Mississauga Official Plan (2015)

- Directs and manages growth within the City of Mississauga.
- Encourages the growth of a safe and vibrant communities that accommodate a range of mobility choices.
- Plans for new roads to support future density developments and increased traffic volumes.

Downtown Core Local Area Plan (2013)

- Based on the Downtown21 Master Plan (2010), this Plan directs and manages growth in downtown Mississauga.
- Policies encourage development of a multi-modal transportation system to create a livable, compact, and accessible community. Priority is placed on walking, cycling and access to transit.
- A fine-grid network of streets and smaller blocks make for a more walkable and pedestrian-friendly environment.









Background and Planning Context Land Use



Planned land uses are broadly identified in the City's Official Plan and detailed in the Downtown Core Local Area Plan.

- The Redmond Road study area is Downton Mixed Use, intended to support both commercial/retail and residential uses.
- The Exchange is also Downtown Mixed Use and will create an important linkage from the Core Commercial area (Square One) to Residential areas to the south.
- The Webb Drive study area has Downtown Mixed Use to the north, Residential, and Public Open Space (Kariya Park) to the south.
- The Kariya Drive study area is within the Downtown Fairview Character Area, with a Peel Region School Board property along the west side.



Sources: Schedule 10 - Land Use, Mississauga Official Plan (2019; Downtown Core Local Area Plan (2015)

STUDY AREA

Background and Planning Context Transportation Network

Primary On-Road / Boulevard Routes

Light Rail Transit ight Rail Transit

Proposed Grade

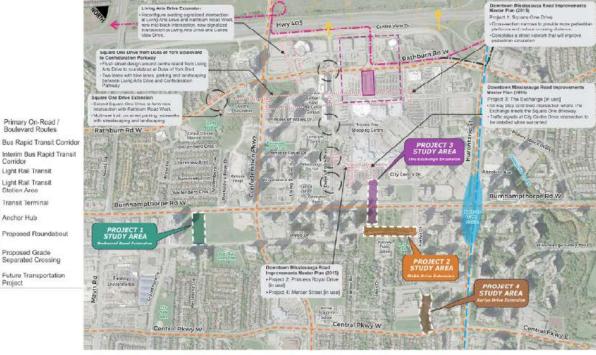
Separated Crossing Future Transportation

Station Area Transit Terminal Anchor Hub

Corridor



- This display illustrates the location of the current Class FA studies within the broader multi-modal transportation network.
- Other downtown road improvement projects have focused north of Burnhamthorpe Road.
- Through the current studies, the City looks to continue building a fine-grid road network to improve multi-modal connectivity and support downtown growth.



- Long Term Transit Network, Schedule 7 - Long Term Cycling Routes, Mississauga Off

Background and Planning Context Road Network and Active Transportation



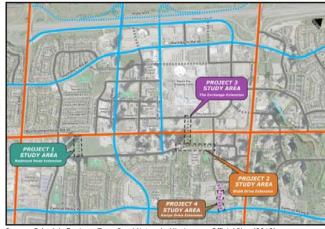
Redmond Road, Webb Drive, The Exchange and Kariya Drive are all classified as minor collector roads. Each study area will consider intended the particular range of uses identified in the Downtown Core Local Area Plan (e.g. future transit, on-street parking, cycling

The Mississauga Cycling Master Plan (2018) aims to:

- Create a viable and safe network for cyclists and pedestrians of all abilities; and
- Establish cycling routes that connect key city destinations.



Long Term Road Network



Source: Schedule 5 - Long Term Road Network, Mississauga Official Plan (2019)

Cycling Network





Source: Mississauga Cycling Master Plan (2018)



Supporting Technical Work Study Inputs



Traffic Analysis

Traffic analysis is being carried out to:

- Review existing and assess future transportation demand in the downtown area, based on planned population and employment growth.
- Assess how the proposed improvements (road extensions) will support future growth and accommodate access needs.
- Assess operational conditions at all intersections and identify required improvements.



Burnhamthorpe Road West, City of Mississauga

Stormwater Management

- There are no surface water features such as creeks or rivers present within any of the study areas.
- Existing road drainage is captured and conveyed via stormwater sewer system.
- A stormwater management plan will be developed for each proposed road extension.
- Low Impact Development (LID) that uses infiltration, filtering, storage measures to protect water quality near the source may be recommended, where appropriate.



LID on Elm Drive, City of Mississauga



LID on Central Parkway, City of Mississauga

Supporting Technical Work Study Inputs



Natural Environment

- There are no significant natural features present within the study areas.
- Potential for wildlife habitat on existing vacant lands will be assessed.
- A tree inventory will be undertaken in accordance with City standards to record species, size and condition of trees. The inventory will be used to assess potential impacts to trees.



Webb Drive, City of Mississauga

Cultural Heritage

- A Stage 1 Archaeological Assessment has been completed.
- Further archaeological work is recommended for some areas.
- There are no properties listed or designated under the Ontario Heritage Act, within the study areas.
- Kariya Park is on the City's Heritage Register and Cultural Landscape Inventory. The Garden will not be impacted.



Karıya Park, City of Mississauga

Streetscape Design

A streetscaping design will be developed for each study area that will consider:

- The surrounding community setting including schools, nearby parks, residential and mixed-use areas;
- The various activities that will occur including walking, cycling, driveway entrances, commercial deliveries etc.; and
- Integrating public transit infrastructure into the overall streetscape environment.

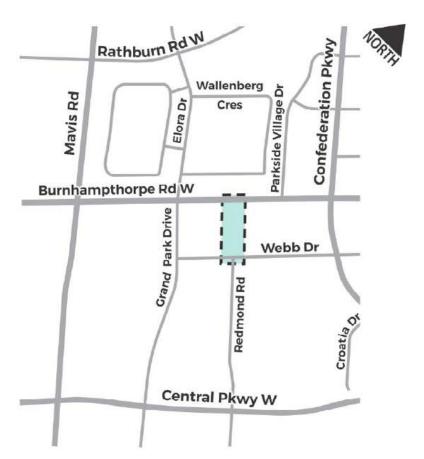


Downtown21 Master Plan



Project 1 Redmond Road





Project 1 – Redmond Road Existing Conditions Overview





Project 1 – Redmond Road Problems & Opportunities



Based on the existing conditions and approved future land use, the **Problems and Opportunities** for the Redmond Road study area are:



Problem & Opportunity Statement

A new City of Mississauga collector road is required to provide north-south access and connectivity within the planned M City community.

A new segment of Redmond Road will facilitate multi-modal movement between the internal road system and the surrounding road network. The new road will also provide for on-street parking and a vibrant pedestrian environment to support street-level commercial uses.

The Redmond Road extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, finegrained street network with a high quality public realm and a range of transportation choices.

Project 1 – Redmond Road

Alternative Solutions & Evaluation Criteria



The following **Alternative Solutions** are being considered to address the Problems and Opportunities:

- 1. Do Nothing: Maintain existing transportation system within the study area i.e. new development would require an internal road network to connect with other collector or arterial roads.
- 2. Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.
- 3. Improve Other North-South Routes: Upgrade parallel roads such as Grand Park Drive or Confederation Parkway to meet transportation needs.
- 4. Extend Redmond Road: Extend Redmond Road as a 2-lane road with from Webb Drive to Burnhamthorpe Road.

We use the following factors to guide our decision-making:

Category	Considerations
Transportation	 Consistency with Provincial and Mississauga Downtown planning objectives and policy framework Contribution to fine-grained road network and City objective of creating smaller blocks Improved accessibility to new communities Improved active transportation options (walking, cycling) Improved access to transit Improved traffic operations, road safety and emergency response
Socio-Economic	 Amount and type of property required Supports intensification and mixed-use growth Potential nuisance impacts to residences and businesses (noise) Opportunity to enhance streetscape, pedestrian environments and accessibility Integration with planned communities
Natural Environment	 Potential impacts to existing natural environmental features including vegetation and wildlife Potential impacts to Species at risk and their habitat Potential impacts to urban tree canopy Climate Change
Cultural Heritage	 Potential impacts to archaeological resources Potential impacts to cultural heritage resources

Project 1 – Redmond Road

Alternative Solutions Evaluation Summary



Alternative 4 – Extension of Redmond Road is the Preliminary Preferred Solution because:

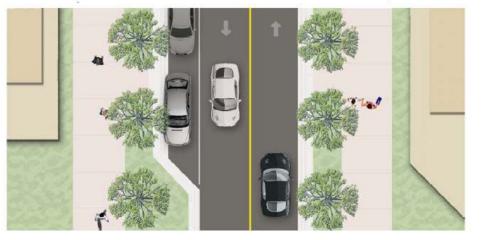
- Alternative 1 does not address any of the Problems and Opportunities.
- Alternatives 2 and 3 only partially address the Problems and Opportunities and does not contribute to a fine-grained street network that supports community growth, improved walking options and access to transit.
- Alternative 4 fully addresses the Problems and Opportunities by:
 - Providing a new north-south collector road within the planned M City community
 - Fully addressing the City's transportation and growth objectives for Downtown by creating finer-grid street network
 - Creating smaller, more walkable blocks that enhance access to transit
 - Supporting a mixed-use community by offering street-parking for street-level retail

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Alternative 1 Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend Redmond Road
	Does not address Problems and Opportunities Not consistent with City planning policies to create a finer-grained street network Does not improve network connectivity	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network	- Would provide additional north-south traffic capacity in other corridors - Not consistent with City pluming policies to create a finer-grained street notwork - Does not address local transportation needs within the M City community or improve network connectivity	- Consistent with City planning policies to create a finer-grained street network - Addresses unticipated transportation needs - Improves network connectivity for all users - Improves road operations and safety - Enhances access to transit and downtown walkability
	No property required Does not create access to new community or support mixed-use development No opportunity to improve walkability and enhance access to transit	No property required Although supportive of transit, cycling and pedestrian activities, this does not provide the specific infrastructure meeded within the study area to support or enhance these forms of transportation.	Potentially significant property impacts along other corridors Does not address problems and opportunities within the study area Dues not meet the multimodal mobility needs of the M City community Does not support economic development within the study area	Supports mobility for all modes within local community and in downtown Provides opportunity to enhance streetscape Prioritizes a high quality pedestrian environment Provides for on street parking to support mixeduse development and street-level commercial uses
3	Not applicable, no natural environmental features are present.	Not applicable, no natural environmental features are present.	Not applicable, no natural environmental features are present.	Not applicable, no natural environmental features are present. Provides sustainable transportation choices to reduce vehicle use
ERITAGE	No potential archaeological Impacts No cultural heritage resources identified	No potential archaeological Impacs No cultural heritage resources identified	Other corridors would require assessment.	No potential archaeological Impacts No cultural heritage resources identified
valuation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

Project 1 – Redmond Road Typical Road Cross-Section



Redmond Road near Webb Drive (20.6m)

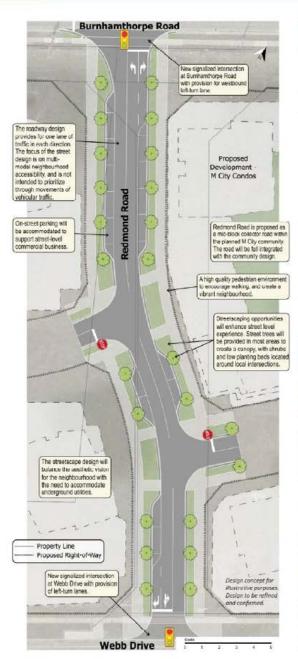


Redmond Road near Burnhamthorpe Road (23m)





Redmond Road Design Concept



Tree Pit Planting



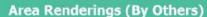


Streetscape Components













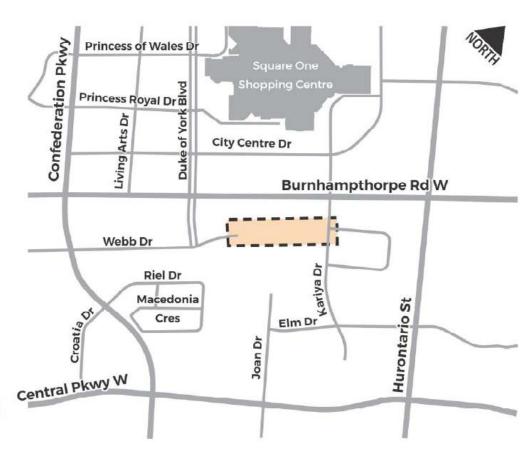








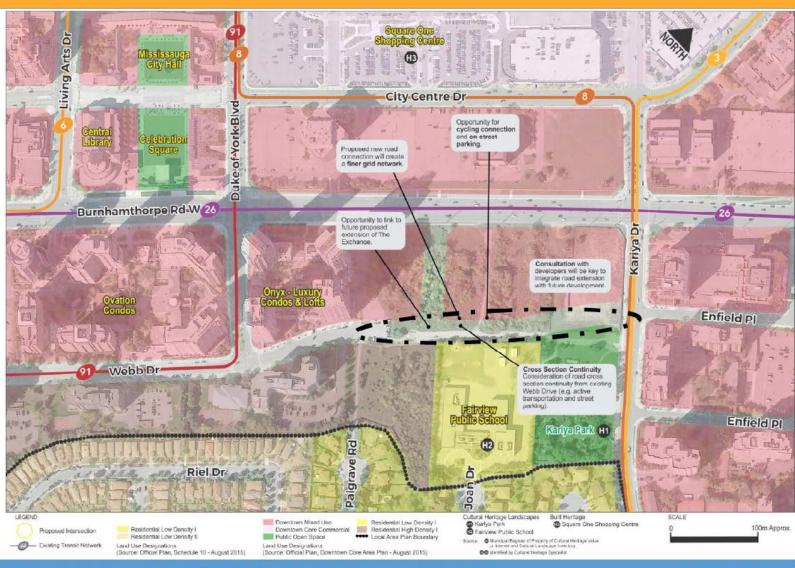
Project 2 Webb Drive





Project 2 – Webb Drive Existing Conditions Overview





Project 2 – Webb Drive Problems & Opportunities



Based on the existing conditions and approved future land use, the **Problems and Opportunities** for the Webb Drive study area are:



Problem & Opportunity Statement

A new City of Mississauga collector road is required to provide east-west access and connectivity within the existing and planned community south of Burnhamthorpe Road.

A new segment of Webb Drive will facilitate multi-modal movement between the internal road system and the surrounding road network. The new road will also provide for on-street parking and a vibrant pedestrian and cycling environment to support the local community.

The Webb Drive extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, finegrained street network with a high quality public realm and a range of transportation choices.

Project 2 – Webb Drive

Alternative Solutions & Evaluation Criteria



The following **Alternative Solutions** are being considered to address the Problems and Opportunities:

- 1. Do Nothing: Maintain existing transportation system within the study area.
- 2. Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.
- 3. Improve Other East-West Routes: Upgrade parallel roads such as Burnhamthorpe Road or Central Parkway West to support transportation needs.
- 4. Extend Webb Drive: Extend Webb Drive as a 2-lane road with from Duke of York Boulevard to Kariya Drive.

We use the following factors to guide our decision-making:

Category	Considerations
Transportation	 Consistency with Provincial and Mississauga Downtown planning objectives and policy framework Contribution to fine-grained road network and City objective of creating smaller blocks Improved accessibility to new communities Improved active transportation options (walking, cycling) Improved access to transit Improved traffic operations, road safety and emergency response
Socio-Economic	 Amount and type of property required Supports intensification and mixed-use growth Potential nuisance impacts to residences and businesses Opportunity to enhance streetscape, pedestrian environments and accessibility Integration with planned communities
Natural Environment	 Potential impacts to existing natural environmental features including vegetation and wildlife Potential impacts to Species at risk and their habitat Potential impacts to urban tree canopy Climate Change
Cultural Heritage	 Potential impacts to archaeological resources Potential impacts to cultural heritage resources

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Project 2 – Webb Drive

Alternative Solutions Evaluation Summary



Alternative 4 – Extension of Webb Drive is the Preliminary Preferred Solution because:

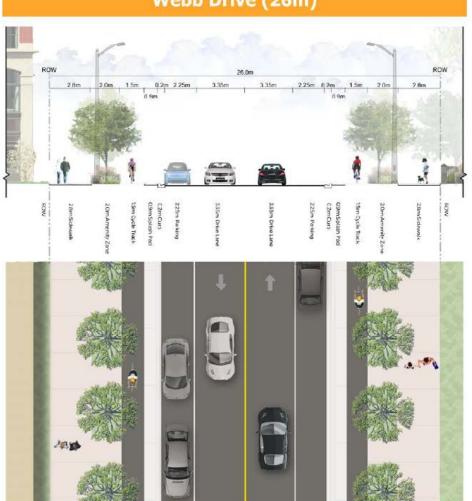
- Alternative 1 does not address any of the Problems and Opportunities.
- Alternatives 2 and 3 only partially address the Problems and Opportunities and does not contribute to a fine-grained street network that supports community growth, improved walking options and access to transit.
- Alternative 4 fully addresses the Problems and Opportunities by:
 - Providing a new east-west collector road within the downtown
 - Fully addressing the City's transportation and growth objectives for downtown by creating finer-grid street network
 - Creating smaller, more walkable blocks and expanding the City's cycling network and improving connectivity in the downtown
 - Providing for future expansion of MiWay transit system

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend Webb Drive
	Does not address Problems and Opportunities Not consistent with City planning policies to create a finer-grained street network Does not improve network rannertivity	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network.	- Widening Burnhamthorpe Road not feasible due to planned high-order transit - Not consistent with City planning policies to create a finer-grained street network - Does not address loral transportation needs or improve network connectivity	Consistent with City planning policies to create a finer-grained street network Addresses anticlpared transportation needs Improves natwork connectivity for all users Improves road operations and safety Enhances access to transit and downtown walkability
	No property required Does support existing and future community No opportunity to improve walkability and orhance access to transit	No property required Although supportive of transt, cycling and pedestrium activities, this does not provide the specific infrastructure needed within the study area to support or enhance these forms of transportation.	Potentially significant property impacts along other corridors Dues not adultess problems and opportunities within the study area Does not meet the multimodal mobility needs of the community Does not support economic development within the study area	Supports mobility for all modes within local community and in downton provides opportunity to enhance streetscape Prioritizes a high-quality pedestrian environment Provides for on-street parking and off-road cyding Provides for future expansion of MiWay
3	 Not applicable, no natural environmental features are present 	Not applicable, no natural environmental features are present	Not applicable, no natural environmental features are present	Not applicable, no natura environmental features ar present Provides for sustainable transportation choices to reduce vehicle use.
HERITAGE	No potential archaeological impacts No cultural heritage impacts.	No potential archaeological impacts No cultural heritage impacts.	Other corridors would require assessment.	Some areas will be subject to Stage 2 Archeological Assessment Koriya Park is a Cultural Heritage Landscape. No impacts to Kariya Park
Evaluation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

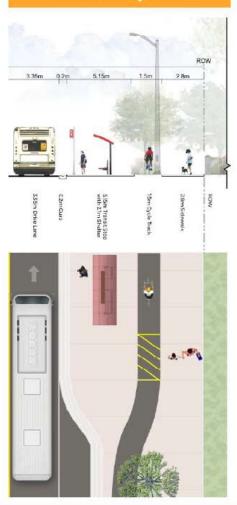
Project 2 – Webb Drive Typical Road Cross-Section



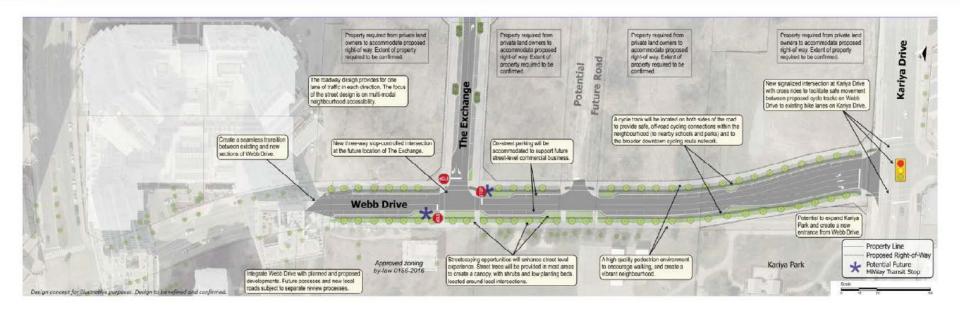
Webb Drive (26m)



Transit Option

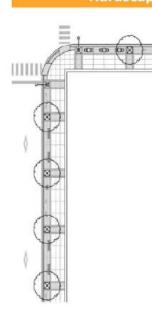


Webb Drive Design Concept



Hardscape Boulevard

Streetscape Components















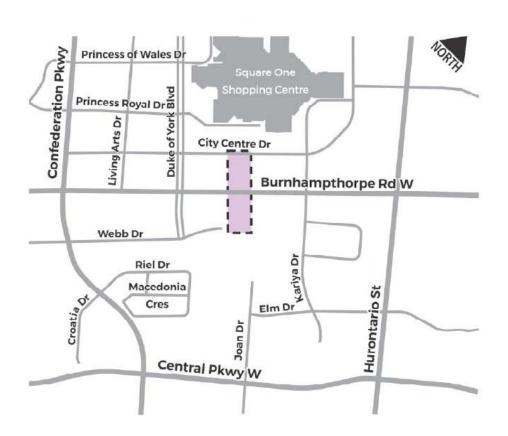






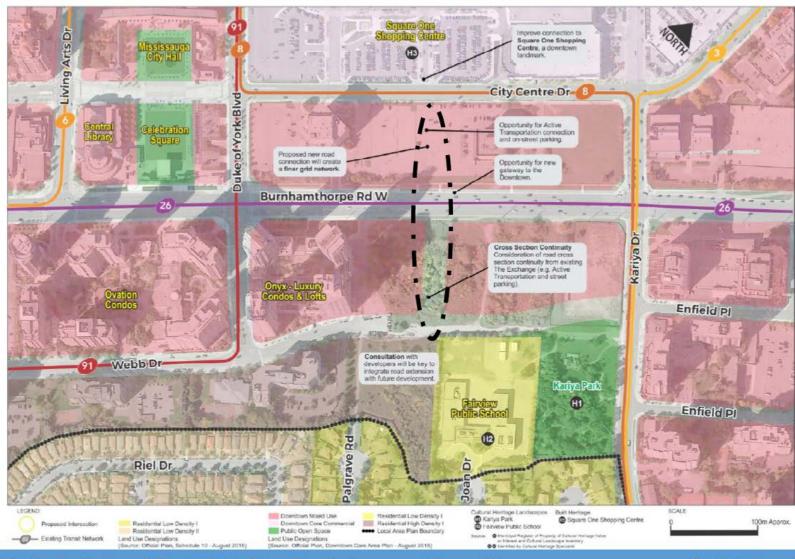
Project 3 The Exchange





Project 3 – The Exchange Existing Conditions Overview





Project 3 – The Exchange Problems & Opportunities



Based on the existing conditions and approved future land use, the **Problems and Opportunities** for The Exchange study area are:



Problem & Opportunity Statement

The Exchange is already being planned as the heart of the transitioning downtown.

The extension of The Exchange will build on its presence as a main street within the Downtown, linking residents and visitors to residential, commercial, employment, recreational and civic uses. The Exchange will provide an important link between the heart of the downtown, Square One, and neighbourhoods to the south. In addition to being an important community link, The Exchange is intended as a venue and a destination for community events and open air markets.

The success of The Exchange relies on providing pedestrian-oriented, smaller scale retail and entertainment opportunities; maximizing access and walkability; creating an aesthetically pleasing streetscape supported by transit, public spaces, residences and commerce.

Project 3 – The Exchange

Alternative Solutions & Evaluation Criteria



The following **Alternative Solutions** are being considered to address the **Problems and Opportunities:**

- 1. Do Nothing: Maintain existing transportation system within the study area.
- 2. Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.
- 3. Improve Other North-South Routes: Upgrade parallel north-south roads (e.g. Joan Drive or Hurontario Street) to support transportation needs.
- 4. Complete The Exchange: Complete The Exchange as a 2-lane road from City Centre Drive to the proposed extension of Webb Drive.

We use the following factors to guide our decision-making:

Category	Considerations
Transportation	 Consistency with Provincial and Mississauga Downtown planning objectives and policy framework Contribution to fine-grained road network and City objective of creating smaller blocks Improved accessibility to new communities Improved active transportation options (walking, cycling) Improved access to transit Improved traffic operations, road safety and emergency response
Socio-Economic	 Amount and type of property required Supports intensification and mixed-use growth Potential nuisance impacts to residences and businesses Opportunity to enhance streetscape, pedestrian environments and accessibility Integration with planned communities
Natural Environment	 Potential impacts to existing natural environmental features including vegetation and wildlife Potential impacts to Species at risk and their habitat Potential impacts to urban tree canopy Climate Change
Cultural Heritage	 Potential impacts to archaeological resources Potential impacts to cultural heritage resources

Project 3 – The Exchange

Alternative Solutions Evaluation Summary



Alternative 4 – Extension of The Exchange is the Preliminary Preferred Solution because:

- Alternative 1 does not address any of the Problems and Opportunities.
- Alternatives 2 and 3 only partially address the Problems and Opportunities and does not contribute to a fine-grained street network that supports community growth, improved walking options and access to transit.
- Alternative 4 fully addresses the Problems and Opportunities by:
 - Building on the existing portion of The Exchange to continue to create a vibrant main street that supports mixed-uses and becomes a destination in the downtown
 - Creating a pleasing streetscape and pedestrian-oriented environment that encourage walkability
 - Providing an important community link between the downtown core and neighbourhoods to the south

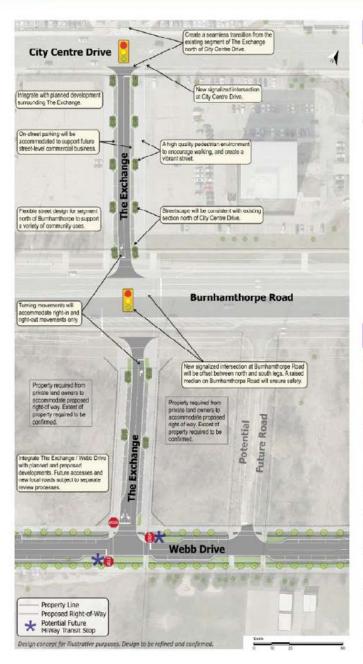
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend The Exchange
	Does not address Problems and Opportunities Not consistent with City planning policies Does not improve network connectivity Does not contribute to downtown main street environment	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network and City's vision for downtown main street	Does nor address the Problems and Opportunities Not consistent with City planning policies Does not address local transportation and community needs or improve network connectivity	- Consistent with City planning policies to create a finer-grained street network Improves network connectivity for all users Provides an important community link between the downtown core and neighbourhoods to the south
	No property required Does not support existing and future community No opportunity to contribute to "heart of downtown" and community vibrancy, public space uses	No property required Although supportive of pedestrian activities, this does not provide the specific infrastructure needed within the study area to support or enhance walkability.	Does not support existing and future community No opportunity to contribute to 'heart of downrown' and community vibrancy, public space uses	Contributes to vibrant and community-oriented main street Prioritzes a high-quality pedestrian environment Provides for an street parking Will provide a flexible space that supports mixeduses and becomes a destination in the downtown
9	 Not applicable, no natural environmental features are present. 	Not applicable, no natural environmental features are present.	Not applicable, no natural environmental features are present.	Not applicable, no natural environmental features are present. Provides for sustainable transportation choices to reduce vehicle use.
HERITAGE	No potential archaeological impacts No cultural heritage resources identified	No potential archaeological impacts No authural heritage resources identified	Other corridors would require assessment.	No potential archaeologica impacts No cultural heritage resources identified
Evaluation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

Project 3 – The Exchange Typical Road Cross-Section

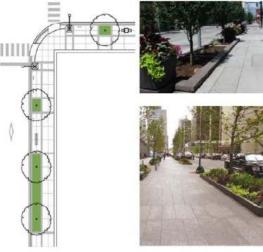




The Exchange Design Concept



Planters



Streetscape Components







Streetscape Furnishings







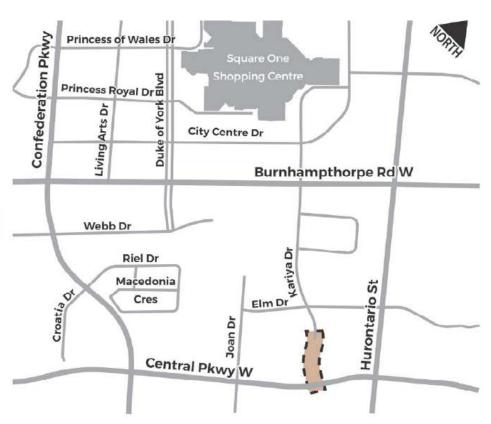






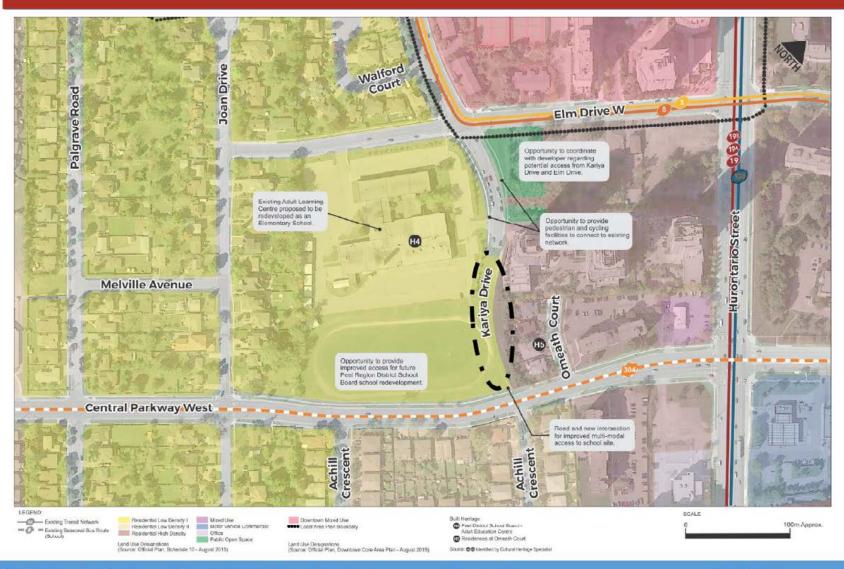
Project 4 Kariya Drive





Project 4 – Kariya Drive Existing Conditions Overview





Project 4 – Kariya Drive Problems & Opportunities



Based on the existing conditions and approved future land use, the **Problems and Opportunities** for the Kariya Drive study area are:



Problem & Opportunity Statement

The City has an opportunity to protect a road right-of-way for a future extension of Kariya Drive as part of the Peel District School Board's proposed redevelopment of the Adult Education Centre.

The extension of Kariya Drive allows the City of Mississauga to continue to enhance the downtown collector road system, contributing to a finer-grid street network and expanding opportunities for walking and cycling. A context-sensitive design approach will ensure that the new road fits well with its surroundings including the new school site, existing low density neighbourhoods and new high density condominium blocks.

The Kariya Drive extension will support the City's vision for Downtown Mississauga that includes: a high-density, dynamic urban core with smaller block sizes, fine-grained street network with a high quality public realm and a range of transportation choices.

Project 4 – Kariya Drive

Alternative Solutions & Evaluation Criteria



The following **Alternative Solutions** are being considered to address the

Problems and Opportunities:

 Do Nothing: Maintain existing transportation system within the study area.

2. Manage Transportation Demand: Improve access within the downtown by: discouraging single-occupant vehicles and encouraging carpooling; shifting travel demand to off-peak hours; and encouraging walking, cycling and transit use.

- Improve Other North-South Routes: Upgrade parallel roads to meet transportation needs.
- 4. Extend Redmond Road: Extend Kariya Drive as a 2-lane road with from Elm Street to Central Parkway West.

We use the following factors to guide our decision-making:

Category	Considerations		
Transportation	 Consistency with Provincial and Mississauga Downtown planning objectives and policy framework Contribution to fine-grained road network and City objective of creating smaller blocks Improved accessibility to new communities Improved active transportation options (walking, cycling) Improved access to transit Improved traffic operations, road safety and emergency response 		
Socio-Economic	 Amount and type of property required Supports intensification and mixed-use growth Potential nuisance impacts to residences and businesses (noise) Opportunity to enhance streetscape, pedestrian environments and accessibility Integration with planned communities 		
Natural Environment	 Potential impacts to existing natural environmental features including vegetation and wildlife Potential impacts to Species at risk and their habitat Potential impacts to urban tree canopy Climate Change 		
HERITAGE Cultural Heritage	 Potential impacts to archaeological resources Potential impacts to cultural heritage resources 		

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Project 4 – Kariya Drive Alternative Solutions Evaluation Summary



Alternative 4 - Extension of Kariya Drive is the Preliminary Preferred Solution because:

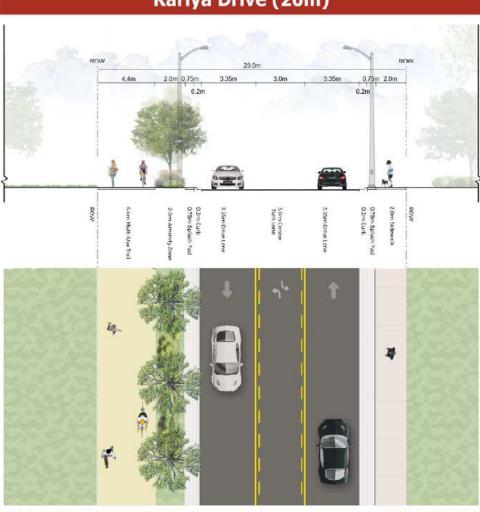
- Alternative 1 does not address any of the Problems and Opportunities.
- Alternatives 2 and 3 only partially address the Problems and Opportunities and does not contribute to a fine-grained street network that supports community growth, improved walking options and access to transit.
- Alternative 4 fully addresses the Problems and Opportunities by:
 - Providing a new north-south collector road within an existing community that is transitioning to a mix of higherdensity residential areas and a proposed new elementary school
 - Fully addressing the City's transportation and growth objectives for Downtown by creating finer-grid street network
 - Creating smaller, more walkable blocks that enhances access within the community, to the proposed school site and new park, and to potential future expanded transit

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Category	Do Nothing	Manage Transportation Demand	Upgrade Parallel Roads	Extend Kariya Drive
	Does not address Problems and Opportunities Not consistent with City planning policies to create a finer-grained street network Does not improve network connectivity	May result in some shift in travel demand to improve road operations. Does not address the primary transportation problem of the need for a finer grid collector road network.	- Widening Hurontario Road not feasible due to planned high-order transit - Nor consistent with City planning policies to create a finer grained street network - Does not address local transportation needs or improve network connectivity	- Consistent with City planning policies to create a finer-grained street nerwork - Addresses anticipated transportation needs - Improves network connectivity for all users - Improves road operations and safety - Enhances access to transit and downtown walkability
	No property required Does not create access to new community or support mixed use development No apportunity to improve walkability and enhance access to transit	No property required Although supportive of trumit, cycling and pedestrian activities, this does not provide the specific infrastructure needed within the study area to support or enhance these forms of transportation.	Potentially significant property Impacts along other curridors Does not address the opportunities within the study area Does not meet the multimodal mobility needs of the community	Supports mobility for all modes within local community Opportunity to provide enhanced access to Peel District School Board proposed redevelopment of the existing Adult Learning Centre Provides for off-road cycling in school zone Provides for possible future expansion of MiWay
8	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	 Not applicable, no natural environmental features are present. 	Not applicable, no natural environmental features are present. Provides sustainable transportation choices to reduce vehicle use.
HERITACE	No potential archaeological impacts No cultural heritage resources identified	No potential archaeological impacts No cultural heritage resources identified	Other corridors would require assessment.	Some areas will be subject to Stage 2 Archaeological Assessment No cultural heritage resources identified
Evaluation Result	Not Preferred	Already Being Implemented Through City Policies	Not Preferred	Preferred

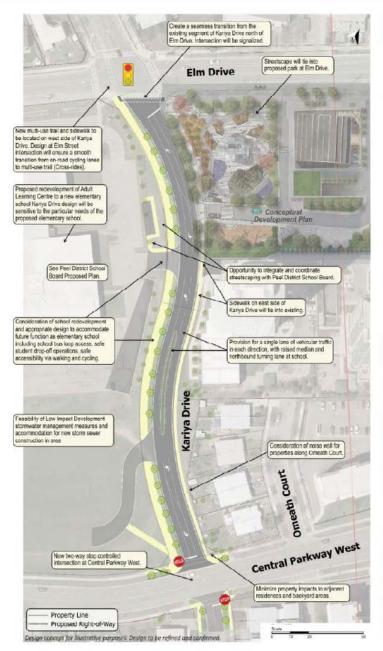
Project 4 – Kariya Drive Typical Road Cross-Section



Kariya Drive (20m)



Kariya Drive Design Concept



Green Boulevard



Streetscape Components













Consultation

Next Steps and How to Stay Involved



Following this PIC, the Project Team will:

- Review all public and agency comments received
- Confirm the Preferred Planning Solution for each study
- Incorporate public feedback on the design concepts into the Preliminary Design phase
- Prepare a Project File for each study to document decision-making and public/agency consultation
- Make the Project Files available for a 30 day public review period
- Respond to public feedback throughout the study

How to Stay Involved:



Sign-In

So we can keep you informed as the study progresses



Provide your Feedback

Please fill out a Comment Sheet at this PIC



Contact the Project Team

Reach out to us by email at rwekea@wsp.com



Review Study Materials at

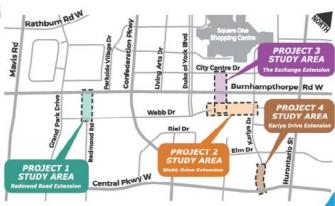
www.mississauga.ca/portal/residents/rwek-ea-studies

Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive

PUBLIC MEETING

Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive.

The City of Mississauga has initiated four road extension studies in the downtown area, as shown on the key plan, to create a finer road network and improve walking and cycling opportunities.



Please join us for a public meeting to review background information and what problems we are trying to solve, share information about our preliminary preferred solutions and seek your input on these topics.



Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive

PUBLIC MEETING

WEDNESDAY JUNE 12, 2019

The Great Hall, Mississauga City Hall

300 City Centre Drive, Mississauga

Brief Presentation 5:30 PM Public Meeting 5:45 - 7:30 PM



Label Here



For more information please visit:

www.mississauga.ca/portal/residents/rwek ea studies

or contact us directly with your questions or comments at rwekea@wsp.com



May 28, 2019

Name Company name Address 1 Address 2

RE: City of Mississauga

Class Environmental Assessment Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive

Notice of Public Information Centre

The City of Mississauga has retained WSP to undertake four Class Environmental Assessment (Class EA) studies for the proposed extension of the following roads:

- 1. Redmond Road from Webb Drive to Burnhamthorpe Road West
- 2. Webb Drive from Duke of York Boulevard to Kariya Drive
- 3. The Exchange from City Centre Drive to Webb Drive
- 4. Kariya Drive from Elm Drive to Central Parkway West

The locations of the study areas are shown on the attached notice.

These studies are being carried out in accordance with the approved environmental planning process for Schedule 'B' projects as outlined in the Municipal Engineers Association "Municipal Class Environmental Assessment," (October 2000, as amended in 2015), which is approved under the Ontario Environmental Assessment Act.

The purpose of this letter is to notify you of the Public Information Centre (PIC) for these studies. This PIC has been arranged to provide an overview of the problems and opportunities in the study areas, the evaluation of alternative planning solutions, and identification of preferred improvements.

The PIC will be held on Wednesday, June 12, 2019 from 5:30 pm to 7:30 pm at The Great Hall at 300 City Centre Drive in Mississauga, Ontario. A presentation providing an overview of the study process will commence at 5:30 pm, followed by an open house from 5:45 to 7:30 pm. Members of the Project Team will be available at the PIC to discuss the project and answer any questions that you may have. At the end of the studies, Project Files will be prepared to document the decision-making process of each study and will be made available for public review.

610 Chartwell Road Suite 300 Oakville, ON, Canada L6J 4A5

T: +1 905-823-8500 F: +1 905-823-8503 wsp.com



Please be advised that the attached notice advertising the PIC will be published in the Mississauga News on May 30 and June 6, 2019.

If you are unable to attend the PIC but wish to obtain additional information, or to submit comments, please feel free to contact the undersigned by email at Katherine.Jim@wsp.com or by phone at (905) 823-8500.

If you are not the correct contact for your organization, kindly redirect us so that we may update our study mailing list. We thank you for your co-operation.

Yours truly, WSP Canada Group Limited



Katherine Jim, P.Eng., M.Eng. Consultant Project Manager

encl.

cc. Emily Pelleja, P.Eng., City of Mississauga

Mississauga News | Thursday, June

6, 2019



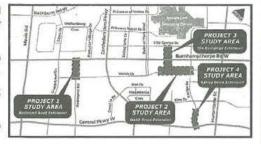
NOTICE OF PUBLIC INFORMATION CENTRE

Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive

WHAT?

- . The City of Mississauga is studying the need to extend four downtown streets in the City Centre. The study areas are:
- Project 1 Redmond Road from Webb Drive to Burnhamthorpe Road West
- Project 2 Webb Drive from Duke of York Boulevard to Kariya Drive
- Project 3 The Exchange from City Centre Drive to Webb Drive





- . To support the creation of smaller, urban-scale blocks and a fine-grained street grid in downtown Mississauga.
- To support "multi-modal" transportation by providing additional pedestrian and bicycle connections, as well as access to existing and planned transit.

- . The study is examining how traffic operates on nearby roadways both now, and in the future. Opportunities to improve the transportation linkages and intersections within the study area, as well as accommodate future land uses, were explored as part of this study.
- Alternative Solutions have been developed and evaluated against a broad range of criteria, related to topics such as transportation, land use, and the natural and cultural environments.
- . In consultation with the public and technical agencies, the preferred improvements will be determined for each project. At the end of the studies, Project Files will be prepared to document the decision-making process of each study and will be available for public review.

GET INVOLVED!

YOU ARE INVITED TO ATTEND A PUBLIC INFORMATION CENTRE

DATE:

Wednesday June 12, 2019

TIME:

Presentation on Process 5:30 pm

Open House/Questions 5:45 - 7:30 pm

LOCATION:

The Great Hall, Mississauga City Hall 300 City Centre Drive

For more information, please visit the project website: www.mississauga.ca/portal/residents/rwek-ea-studies.

If you have any questions about these studies, or would like to be included on the mailing list please send us an email at rwekea@wsp.com or contact one of the project team members below:

Emily Pelleja, P.Eng.

Project Manager

City of Mississauga Transportation & Works Department

201 City Centre Drive, Suite 800

Mississauga ON L5B 2T4

Phone: 905-615-3200 Ext. 3699

Katherine Jim, M.Eng., P.Eng.

Consultant Project Manager WSP Group Canada Limited 610 Chartwell Road, Suite 300

Oakville ON L6J 4A9 Phone: 905-823-8500

The study is being undertaken in accordance with the planning and design process for Schedule 'B' projects, as outlined in the Municipal Class Environmental Assessment" document (October 2000, amended in 2015), which is approved under the Ontario Environmental Assessment Act.

Notice of Collection of Personal Information:

Personal information is collected under the authority of the Environmental Assessment Act and will be used in the assessment process. With exception of personal information, all comments shall become part of the public records. Questions about this collection should be directed to the Project Manager listed above.

This Notice first issued on May 29, 2019.

Appendix A3 Public, Agency, and Utilities Consultation Record

Point of Contact	Date		
Notice of Commencement	December 4, 2018		
Notice of Public Information Centre	May 27, 2019		
Notice of Completion	March 12, 2020		

1. Notice of Commencement

Notice of Commencement - December 4, 2018

The following table includes public and agency comments. Comments have been formatted and spelling errors corrected, otherwise the content is "as submitted".

ID	Stakeholder	Correspondence Received	Response
		AGENCY COMMENTS	
A-1-1	Contact:	Email received January 2, 2019	Email response sent January 3, 2019
	Bohdan Kowalyk, R.P.F.	Hello,	Hello Bohdan,
	District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry 50 Bloomington Road, Aurora, Ontario L4G 0L8 905-713-7387 Bohdan.Kowalyk@ontario.ca	I have received your letter regarding four proposed road extensions in Mississauga: 1. Redmond Road from Webb Drive to Burnhamthorpe Road West 2. Webb Drive from Duke of York Boulevard to Kariya Drive 3. The Exchange from City Centre Drive to Webb Drive 4. Kariya Drive from Elm Drive to Central Parkway West There was no attached notice with a key plan. Please provide. Thank you, Bohdan Kowalyk, R.P.F.	I apologize for the oversight. Please find attached a copy of the Notice of Commencement for the Redmond Road/Webb Drive / The Exchange/ Kariya Drive EA Study. Please do not hesitate to contact us if you have any questions. Thanks Katherine
A-1-2		Email received January 3, 2019 Thanks. I have previously indicated to Sophie Gibbs at WSP that natural areas to be affected will need to be searched for Butternut (endangered) trees of all sizes, including seedlings, within 25 metres from proposed works. The woodland areas to be affected will need to be outlined and, if they are at least 0.5 ha averaging at least 30 metres in width with some native oak or maple species, assessed for potential as habitat for endangered bat species (Little Brown Myotis, Northern Myotis, Tri-colored Bat). Regards, Bohdan Kowalyk, R.P.F.	No response required.



Note: All comments are tracked verbatim

A 1 2	Contact
A-1-3	Contact:

Trevor Bell, B.Sc., M.Env.
Regional Environmental Assessment Coordinator
Air, Pesicides and Environmental Planning,
Ministry of the Environment, Conservation and Parks

trevor.bell@ontario.ca

Letter dated January 18, 2019

Dear Ms. Pelleja,

This letter is in response to the Notice of Commencement for the above noted projects. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Mississauga has indicated that these studies are following the approved environmental planning process for Schedule B projects under the Municipal Engineers Association's Municipal Class Environmental Assessment (Class EA).

The attached "Areas of Interest" document provides guidance regarding the Ministry's interests with respect to the Class EA process. Please identify the areas of interest which are applicable to the project and ensure they are addressed. Proponents who address all of the applicable areas of interest can minimize potential delays to the project schedule.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

Given the nature of this project and the existing land uses in this area, it does not appear that there is a need for separate notification to Indigenous Communities for these Class EAs. However, if the road extensions have a potential to impact archeological resources then the following communities should be notified:

- Six Nations of the Grand River;
- Haudenosaunee Confederacy Chiefs Council;
- Mississaugas of the New Credit First Nation; and
- Huron-Wendat Nation

Please contact me directly if during the course of the studies the potential to impact archaeological resources is determined.

Draft copies of the Project File Reports (PFRs) should be sent to this office prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments. Please also forward the Notices of Completion and final PFRs to me when completed.

Note: This response was considered in the Class Environmental Assessment process. The road extensions were not found to have potential impacts to archaeological resources.



P-1-1	Should you or any members of your project team have any questions regarding the material above, please contact me at trevor.bell@ontario.ca or 416-326-3577. Sincerely, Trevor Bell, B.Sc., M.Env PUBLIC / INTERESTED STAKEHOLDER COMMENT Email received December 7, 2018 Good morning — We represent a number of clients with landholdings in the City of Mississauga. We are in receipt of the attached notice of study commencement and advise that our clients do have a direct interest in the EA studies contemplated. By way of this email, we specifically request that we be included on the mailing list for the contemplated studies and be notified of any and all draft reports, public meetings or other opportunities to be involved in this EA process. Thank you,	Email response sent December 13, 2018 Good morning Thank you for your interest in the Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive. I am confirming that you have been added to the study mailing list and will receive future study notices directly. If you have any further questions, please do not hesitate to reach out to us at rwekEA@wsp.com. Sincerely,
P-1-2	Email received December 8, 2018 I am responding in receipt of your mail regarding the Study commencement. Project 2 - Webb Dr from Duke of York Blvd to Kariya Dr and Project 3 - The exchange from City Centre Drive to Webb Dr These projects are of interest to me and hence would like to be added to the mailing list. I will also like my husband to receive a copy of these development along with me. Regards Address: Postal Address:	Email response sent December 13, 2018 Hello Thank you for your interest in the Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive. I am confirming that the study mailing list and will receive future study notices directly. If you have any further questions, please do not hesitate to reach out to us at rwekEA@wsp.com . Sincerely, Kate Barclay, EIT



P-1-3	Email received December 11, 2018	Email response sent December 13, 2018
	I received the notice of this study and would like to be included on the mailing list for any future updates regarding this study Thank you	Thank you for your interest in the Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive. I am confirming that you have been added to the study mailing list and will receive future study notices directly. If you have any further questions, please do not hesitate to reach out to us at rwekEA@wsp.com . Sincerely, Kate Barclay, EIT
P-1-4	I would appreciate if you would include my name for participation in the environmental study regarding road extensions in the 4 Project areas in Mississauga. I would like to be involved in the public consultation process. Sincerely,	Contact name was added to corresponding address on study mailing list.
3	UTILITY COMMENTS	
	No comments were received.	



2. Notice of Public Information Centre

Notice of Public Information Centre - May 27, 2019

The following table includes public and agency comments. Comments have been formatted and spelling errors corrected, otherwise the content is "as submitted".

ID	Stakeholder	Correspondence Received	Response
		AGENCY COMMENTS	
A-2-1	Contact:	Email received June 6, 2019	No response required at the time.
	Bohdan Kowalyk, R.P.F.	Hello,	
	District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry	We have received the Notice of Public Information Centre for this project.	
	50 Bloomington Road, Aurora, Ontario L4G 0L8	If you have any questions or findings regarding natural features/systems or impacts on them, please let us know.	
	905-713-7387 Bohdan.Kowalyk@ontario.ca	Regards, Bohdan Kowalyk, R.P.F.	
A-2-2	Contact:	Email received June 12, 2019	Email response sent June 17, 2019
	Michael Bennington, MPH	Good morning Katherine,	Hello Michael,
	Analyst, Research and Policy Built Environment Team, Chronic Disease and Injury Prevention Region of Peel 7120 Hurontario St., Mississauga	Thank you for sharing the notice of the PIC for the environmental assessment process for Redmond Rd, Webb Dr, The Exchange and Kariya Dr. We would like to request digital copies of information being shared at tonight's PIC, including the presentation, so that we may review and provide comments.	I tried to respond to your email last week per below with an attachment. However, I received a bounce back email. It appears the email attachment for the electronic file of the PIC displays are too large for email transfer. I will have Kate Barclay, our Project EIT, forward the file to you via an FTP site.
	(905) 791-7800 ext. 2014	Thanks in advance. Best, Michael Bennington, MPH	Regards, Katherine
		Email received June 17, 2019	Email response sent June 17, 2019
		Hello Katherine,	Hi Michael,
		Thank you for following up. We look forward to reviewing the documents.	Please find the PIC Displays on the FTP site linked below:
		Best, Michael	FTP Site Credentials
			Username: Password:



	T		
			Simple access via Web Browser: Access with FTP client via port 22: The login above will expire on 2019-07-17 00:00:00, the site and all its data are deleted automatically after it expires. Let me know if you have any trouble accessing the site or downloading the information. Thanks, Kate Barclay, EIT
		Email received June 17, 2019	No response required.
		Hi Kate,	
		Thanks so much. I was able to download the information without any issues.	
		Best, Michael	
		PUBLIC / INTERESTED STAKEHOLDER COMM	ENTS
P-2-1		PIC Comment Sheet received June 12, 2019 Add at least two overpasses or underpasses to help alleviate traffic ie: Mavis Road & Burnhamthorpe Road / Burnhamthorpe Road & Confederation Parkway. Replace proposed lights @ Redmond & Webb with stop signs.	Comment noted. Any improvements to Burnhamthorpe Road are outside of the scope of the Redmond Road Class EA study. The purpose of this Class EA is to confirm the project need and recommend a preferred planning solution. All aspects of the design, including specific intersection configuration, will be finalized during detailed design.
		UTILITY COMMENTS	
		No comments were received.	



Redmond Road Municipal Class Environmental Assessment Study Notification Comment / Response Tracking Table Note: All comments are tracked verbatim

3. Notice of Completion

Notice of Completion – March 12, 2020

The Project File is being placed on the public record for a 30-day review period from and including March 12, 2020 to April 13, 2020.



From: Kowalyk, Bohdan (MNRF)

 bohdan.kowalyk@ontario.ca>

Sent: January 3, 2019 12:52 PM

To: Jim, Katherine Cc: Barclay, Kate

Subject: RE: Mississauga Class EA studies of four proposed road extensions in City Centre

including Webb Drive

Thanks. I have previously indicated to Sophie Gibbs at WSP that natural areas to be affected will need to be searched for Butternut (endangered) trees of all sizes, including seedlings, within 25 metres from proposed works. The woodland areas to be affected will need to be outlined and, if they are at least 0.5 ha averaging at least 30 metres in width with some native oak or maple species, assessed for potential as habitat for endangered bat species (Little Brown Myotis, Northern Myotis, Tri-colored Bat).

Regards,

Bohdan Kowalyk, R.P.F.

District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry

50 Bloomington Road, Aurora, Ontario L4G 0L8

Phone: 905-713-7387; Email: Bohdan.Kowalyk@Ontario.ca

From: Jim, Katherine < Katherine.Jim@wsp.com>

Sent: January-03-19 11:13 AM

To: Kowalyk, Bohdan (MNRF)

bohdan.kowalyk@ontario.ca>

Cc: Barclay, Kate <katherine.barclay@wsp.com>

Subject: RE: Mississauga Class EA studies of four proposed road extensions

Hello Bohdan,

I apologize for the oversight. Please find attached a copy of the Notice of Commencement for the Redmond Road/Webb Drive / The Exchange/ Kariya Drive EA Study.

Please do not hesitate to contact us if you have any questions.

Thanks Katherine

Katherine Jim, M.Eng., P. Eng. Senior Project Manager Transportation Planning



610 Chartwell Road, Suite 300 Oakville, ON Canada L6J 4A5 Direct: +1 289-835-2511

Phone: +1 905-823-8500

Fax: +1 905-823-8503

Email: Katherine.Jim@wsp.com

wsp.com

Please consider the environment before printing...

From: Kowalyk, Bohdan (MNRF) [mailto:bohdan.kowalyk@ontario.ca]

Sent: January-02-19 10:09 AM

To: Jim, Katherine < Katherine.Jim@wsp.com>

Subject: Mississauga Class EA studies of four proposed road extensions

Hello,

I have received your letter regarding four proposed road extensions in Mississauga:

- 1. Redmond Road from Webb Drive to Burnhamthorpe Road West
- 2. Webb Drive from Duke of York Boulevard to Kariya Drive
- 3. The Exchange from City Centre Drive to Webb Drive
- 4. Kariya Drive from Elm Drive to Central Parkway West

There was no attached notice with a key plan. Please provide.

Thank you,

Bohdan Kowalyk, R.P.F.

District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry

50 Bloomington Road, Aurora, Ontario L4G 0L8

Phone: 905-713-7387; Email: Bohdan.Kowalyk@Ontario.ca

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Ministry of the Environment, Conservation and Parks

Central Region 5775 Yonge Street, 8th Floor North York ON M2M 4J1 Phone: 416.326.6700

Fax: 416.325.6345

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Région du Centre 8e étage, 5775, rue Yonge North York ON M2M 4J1 Tél: 416 326-6700

Téléc : 416 325-6345



File No.: EA 01-06-05

January 18, 2019

Emily Pelleja, P.Eng.
Project Manager
City of Mississauga Transportation & Works Department
201 City Centre Drive, Suite 800
Mississauga, ON L5B 2T4
emily.pelleja@mississauga.ca

BY EMAIL ONLY

Re: Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive
City of Mississauga
Schedule B Municipal Class EAs
Response to Notice of Commencement

Dear Ms. Pelleja,

This letter is in response to the Notice of Commencement for the above noted projects. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Mississauga has indicated that these studies are following the approved environmental planning process for Schedule B projects under the Municipal Engineers Association's Municipal Class Environmental Assessment (Class EA).

The attached "Areas of Interest" document provides guidance regarding the Ministry's interests with respect to the Class EA process. Please identify the areas of interest which are applicable to the project and ensure they are addressed. Proponents who address all of the applicable areas of interest can minimize potential delays to the project schedule.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

Given the nature of this project and the existing land uses in this area, it does not appear that there is a need for separate notification to Indigenous Communities for these Class EAs. However, if the road extensions have a potential to impact archeological resources then the following communities should be notified:

- Six Nations of the Grand River;
- Haudenosaunee Confederacy Chiefs Council;
- Mississaugas of the New Credit First Nation; and
- Huron-Wendat Nation

Please contact me directly if during the course of the studies the potential to impact archaeological resources is determined.

Draft copies of the Project File Reports (PFRs) should be sent to this office prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments. Please also forward the Notices of Completion and final PFRs to me when completed.

Should you or any members of your project team have any questions regarding the material above, please contact me at trevor.bell@ontario.ca or 416-326-3577.

Sincerely,

Trevor Bell, B.Sc., M.Env.

Regional Environmental Assessment Coordinator

Air, Pesticides and Environmental Planning

cc: Paul Martin, Supervisor, Technical Support Section, MECP

Tina Dufresne, Manager, Halton Peel District Office, MECP

Katherine Jim, Consultant Project Engineer, WSP Group Canada Limited

Central Region EA File

A & P File

Attach: Areas of Interest

AREAS OF INTEREST

It is suggested that you check off each applicable area after you have considered / addressed it.

□ Source Water Protection (all projects)

The Clean Water Act, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- As you may be aware, in October 2015, the MEA Parent Class EA document was amended to include reference to the Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. Given this requirement, please include a section in the PFR on source water protection.
 - The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area. If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the PFR how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.
- While most source protection plans focused on including policies for significant drinking water threats
 in the WHPAs and IPZs it should be noted that even though source protection plan policies may not
 apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these
 areas, activities may impact the quality of sources of drinking water for systems other than municipal
 residential systems.
- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: http://www.applications.ene.gov.on.ca/swp/en/index.php.The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be

applicable in the vulnerable area.

For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. Please consult with the local source protection authority to discuss potential impacts on drinking water. The contact for this project is Jennifer Stephens at 416-661-6600 ext. 5568 or jstephens@trca.on.ca. Please document the results of that consultation within the Report and include all communication documents/correspondence.

More Information

For more information on the Clean Water Act, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to Conservation Ontario's website where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in section 1.1 of Ontario Regulation 287/07 made under the Clean Water Act. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

□ Climate Change

Ontario is leading the fight against climate change through the Climate Change Action Plan. Recently released, the plan lays out the specific actions Ontario will take in the next five years to meet its 2020 greenhouse gas reduction targets and establishes the framework necessary to meet its long-term targets. As a commitment of the action plan, the province has now finalized a guide, "Considering Climate Change in the Environmental Assessment Process" (Guide), which is found online at: www.ontario.ca/page/considering-climate-change-environmental-assessment-process

The Guide is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. **Proponents should review this Guide in detail.**

- The MECP expects proponents to:
 - 1. Take into account during the assessment of alternative solutions and alternative designs, the following:
 - a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
 - b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
 - 2. Include a discrete section in the PFR detailing how climate change was considered in the EA.

How climate change is considered can be qualitative or quantitative in nature, and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered. Please ensure climate change is considered in the report.

• The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "Community Emissions Reduction Planning: A Guide for Municipalities" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

□ Planning and Policy

- Parts of the study area may be subject to the Oak Ridges Moraine Conservation Plan, Niagara
 Escarpment Plan, Greenbelt Plan, Lake Simcoe Protection Plan, or Growth Plan for the Greater
 Golden Horseshoe. Applicable policies should be <u>referenced</u> in the PFR, and the proponent should
 <u>describe</u> how the proposed study adheres to the relevant policies in these plans. The <u>new 2017</u>
 <u>provincial plans</u> are now in effect.
- The <u>Provincial Policy Statement</u> (2014) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be <u>referenced</u> in the PFR, and the proponent should <u>describe</u> how this proposed project is consistent with these policies.

□ Air Quality, Dust and Noise

• If there are sensitive receptors in the surrounding area of this project, an air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern. Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.

• If a full Air Quality Impact Assessment is not required for the project, the PFR should still contain:

- A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
- A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
- A discussion of local air quality impacts that could arise from this project during both construction and operation; and
- A discussion of potential mitigation measures.
- As a common practice, "air quality" should be used an evaluation criterion for all road projects.
- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.
- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of
 fugitive dust prevention and control measures that could be applied, refer to Cheminfo Services Inc.
 Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities. Report
 prepared for Environment Canada. March 2005. http://www.bv.transports.gouv.gc.ca/mono/1173259.pdf
- The PFR should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

□ Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The PFR should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.
- All natural heritage features should be identified and described in detail to assess potential impacts and

to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:

- Areas of Natural and Scientific Interest (ANSIs)
- Rare Species of flora or fauna
- Watercourses

- Wetlands
- Woodlots

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, you may consider the provisions of the Rouge Park Management Plan if applicable.

Surface Water

- The PFR must include a sufficient level of information to demonstrate that there will be no negative
 impacts on the natural features or ecological functions of any watercourses within the study area.
 Measures should be included in the planning and design process to ensure that any impacts to
 watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as
 part of the proposed undertaking.
- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's Stormwater <a href="Management Planning and Design Manual (2003) should be referenced in the PFR and utilized when designing stormwater control methods. A Stormwater Management Plan should be prepared as part of the Class EA process that includes:
 - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
 - Watershed information, drainage conditions, and other relevant background information
 - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
 - Information on maintenance and monitoring commitments.
- Ontario Regulation 60/08 under the Ontario Water Resources Act (OWRA) applies to the Lake Simcoe
 Basin, which encompasses Lake Simcoe and the lands from which surface water drains into Lake
 Simcoe. If the proposed sewage treatment plant is listed in Table 1 of the regulation, the PFR should
 describe how the proposed project and its mitigation measures are consistent with the requirements of
 this regulation and the OWRA.
- Any potential approval requirements for surface water taking or discharge should be identified in the PFR. In particular, a Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

□ Groundwater

• The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the

PFR.

- If the potential construction or decommissioning of water wells is identified as an issue, the PFR should refer to Ontario Regulation 903, Wells, under the OWRA.
- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to
 groundwater flow or quality from groundwater taking may interfere with the ecological processes of
 streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of
 groundwater to these features may have direct impacts on their function. Any potential effects should
 be identified, and appropriate mitigation measures should be recommended. The level of detail
 required will be dependent on the significance of the potential impacts.
- Any potential approval requirements for groundwater taking or discharge should be identified in the PFR. In particular, a Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation O. Reg. 63/16. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information.

□ Contaminated Soils

- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the ministry's District Offices for further consultation if contaminated sites are present.
- Any current or historical waste disposal sites should be identified in the PFR. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites.
- The location of any underground storage tanks should be investigated in the PFR. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.
- The PFR should identify any underground transmission lines in the study area. The owners should be consulted to avoid impacts to this infrastructure, including potential spills.

□ Excess Materials Management

- Activities involving the management of excess soil should be completed in accordance with the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014) available online (http://www.ontario.ca/document/management-excess-soil-guide-best-management-practices).
- All waste generated during construction must be disposed of in accordance with ministry requirements.

Servicing and Facilities

Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface
water, provides potable water supplies, or stores, transports or disposes of waste must have an
Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with the
Environmental Approvals Access and Service Integration Branch (EAASIB) to determine whether a
new or amended ECA will be required for any proposed infrastructure.

• We recommend referring to the ministry's "D-Series" guidelines – Land Use Compatibility to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

Mitigation and Monitoring

Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the PFR and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.

- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.
- The proponent's construction and post-construction monitoring plans must be documented in the PFR, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

□ Consultation

The PFR must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the PFR that identifies concerns that were raised and <u>describes how</u> they have been addressed by the proponent throughout the planning process. The Class EA also directs proponents to include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments.

□ Class EA Process

- The PFR should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.
- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. The Master Plan should clearly indicate the selected approach for conducting the plan, in particular by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the Environmental Assessment Act (EAA), although the plan itself would not be.
- The Class EA requires the consideration of the effects of each alternative on all aspects of the
 environment. The PFR should include a level of detail (e.g. hydrogeological investigations, terrestrial
 and aquatic assessments) such that all potential impacts can be identified and appropriate mitigation
 measures can be developed. Any supporting studies conducted during the Class EA process should
 be referenced and included as part of the PFR.
- Please include in the PFR a list of all subsequent permits or approvals that may be required for the
 implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR
 Registrations and ECAs, conservation authority permits, species at risk permits, and approvals under
 the Canadian Environmental Assessment Act (CEAA).
- Ministry guidelines and other information related to the issues above are available at http://www.ontario.ca/environment-and-energy/environment-and-energy. We encourage you to review all the available guides and to reference any relevant information in the PFR.

From: rwekEA

Sent: December 13, 2018 8:36 AM

To:

Cc:

Subject: RE: Notice of Study Commencement - Municipal Class EA for Extension of Roads

Good morning

Thank you for your interest in the Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive.

I am confirming that you have been added to the study mailing list and will receive future study notices directly.

If you have any further questions, please do not hesitate to reach out to us at rwekEA@wsp.com.

Sincerely,

Kate Barclay, EIT

Transportation Planning Planning | Transportation



T: +1 289-835-2680

610 Chartwell Road, Suite 300 Oakville, Ontario L6J 4A5 Canada

wsp.com

Please consider the environment before printing...

From:

Sent: December-07-18 11:16 AM

To: rwekEA <rwekEA@wsp.com>; 'emily.pelleja@mississauga.ca' <emily.pelleja@mississauga.ca>

Cc:

Subject: Notice of Study Commencement - Municipal Class EA for Extension of Roads

Good morning -

We represent a number of clients with landholdings in the City of Mississauga. We are in receipt of the attached notice of study commencement and advise that our clients do have a direct interest in the EA studies contemplated.

By way of this email, we specifically request that we be included on the mailing list for the contemplated studies and be notified of any and all draft reports, public meetings or other opportunities to be involved in this EA process.

Thank you,

From:	rwekEA
Sent:	December 13, 2018 8:41 AM
То:	
Cc:	Emily Pelleja; Jim, Katherine; Thompson, Gillie;
Subject:	RE: Notice of Study Commencement
Hello	
Thank you for your interest in the Road, Webb Drive, The Exchange	Municipal Class Environmental Assessment Studies for the Extensions of Redmond and Kariya Drive.
I am confirming that	has been added to the study mailing list and will receive future study notices directly.
If you have any further questions	, please do not hesitate to reach out to us at rwekEA@wsp.com .
Sincerely,	
Kate Barclay, EIT Transportation Planning Planning Transportation	
wsp	
T: +1 289-835-2680	
610 Chartwell Road, Suite 300 Oakville, Ontario L6J 4A5 Canada	
wsp.com Please consider the environment	before printing
From:	
Sent: December-08-18 1:17 PM	
To: rwekEA < rwekEA@wsp.com>	
Subject: Notice of Study Commer	icement
I am in receipt of your mail regard Project 2 - Webb Dr from Duke of Project 3 - The exchange from Cit	York Blvd to Kariya Dr and
	would like to be added to the mailing list. eive a copy of these development along with me.
Regards	

From: rwekEA

Sent: December 13, 2018 8:38 AM

To:

Cc: Emily Pelleja; Jim, Katherine; Thompson, Gillie

Subject: RE: Notice of Study commencement - Redmond Road, Webb Dr, The Exchange and

Kariya Dr.

Good morning

Thank you for your interest in the Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive.

I am confirming that you have been added to the study mailing list and will receive future study notices directly.

If you have any further questions, please do not hesitate to reach out to us at rwekEA@wsp.com.

Sincerely,

Kate Barclay, EIT

Transportation Planning Planning | Transportation



610 Chartwell Road, Suite 300 Oakville, Ontario L6J 4A5 Canada

wsp.com

Please consider the environment before printing...

From:

Sent: December-11-18 5:06 PM **To:** rwekEA <rwekEA@wsp.com>

Subject: Notice of Study commencement - Redmond Road, Webb Dr, The Exchange and Kariya Dr.

I received the notice of this study and would like to be included on the mailing list for any future updates regarding this study

Thank you



rwekEA

From:

Sent: December 17, 2018 10:14 AM

To: rwekEA

Subject: Study inclusion

Follow Up Flag: Follow up Flag Status: Flagged

I would appreciate if you would include my name for participation in the environmental study regarding road extensions in the 4 Project areas in Mississauga. I would like to be involved in the public consultation process. Sincerely

rwekEA

From: Kowalyk, Bohdan (MNRF) <bohdan.kowalyk@ontario.ca>

Sent: June 6, 2019 9:57 AM **To:** Jim, Katherine; rwekEA

Subject: Class EA for Extensions of Redmond Rd, Webb Dr, The Exchange and Kariya Dr in

Mississauga

Hello,

We have received the Notice of Public Information Centre for this project.

If you have any questions or findings regarding natural features/systems or impacts on them, please let us know.

Regards,

Bohdan Kowalyk, R.P.F.

District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry 50 Bloomington Road, Aurora, Ontario L4G 0L8

Phone: 905-713-7387; Email: Bohdan.Kowalyk@Ontario.ca

From: Bennington, Michael <michael.bennington@peelregion.ca>

Sent: June 17, 2019 3:05 PM

To: Barclay, Kate

Subject: RE: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr,

The Exchange and Kariya Dr.

Hi Kate,

Thanks so much. I was able to download the information without any issues.

Best,

Michael

From: Barclay, Kate <katherine.barclay@wsp.com>

Sent: June 17, 2019 1:53 PM

To: Bennington, Michael <michael.bennington@peelregion.ca>

Cc: Brown, Kathie <kathie.brown@peelregion.ca>; 'Emily Pelleja' <Emily.Pelleja@mississauga.ca>; Jim, Katherine

<Katherine.Jim@wsp.com>; Thompson, Gillie <Gillian.Thompson@wsp.com>

Subject: FW: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr, The Exchange and

Kariya Dr.

Hi Michael,

Please find the PIC Displays on the FTP site linked below:

FTP Site Credentials

Username: Password:



The login above will expire on 2019-07-17 00:00:00 , the site and all its data are deleted automatically after it expires.

Let me know if you have any trouble accessing the site or downloading the information.

Thanks,

Kate Barclay, EIT

Designer Planning and Advisory Services | Transportation



T: +1 289-835-2680

610 Chartwell Road, Suite 300

Oakville, Ontario L6J 4A5 Canada

wsp.com

Please consider the environment before printing...

From: Bennington, Michael [mailto:michael.bennington@peelregion.ca]

Sent: June-17-19 11:04 AM

To: Jim, Katherine < Katherine. Jim@wsp.com>

Cc: Brown, Kathie <kathie.brown@peelregion.ca>; Emily Pelleja <Emily.Pelleja@mississauga.ca>; Thompson, Gillie <<u>Gillian.Thompson@wsp.com</u>>; Barclay, Kate <<u>katherine.barclay@wsp.com</u>>

Subject: RE: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr, The Exchange and Kariya

Dr.

Hello Katherine,

Thank you for following up. We look forward to reviewing the documents.

Best.

Michael

From: Jim, Katherine < Katherine.Jim@wsp.com>

Sent: June 17, 2019 10:55 AM

To: Bennington, Michael <michael.bennington@peelregion.ca>

Cc: Brown, Kathie <kathie.brown@peelregion.ca>; Emily Pelleja <Emily.Pelleja@mississauga.ca>; Thompson, Gillie <Gillian.Thompson@wsp.com>; Barclay, Kate <katherine.barclay@wsp.com>

Subject: RE: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr, The Exchange and Kariya Dr.

Hello Michael.

I tried to respond to your email last week per below with an attachment. However, I received a bounce back email. It appears the email attachment for the electronic file of the PIC displays are too large for email transfer. I will have Kate Barclay, our Project EIT, forward the file to you via an FTP site.

Regards, Katherine

Katherine Jim, M.Eng., P. Eng. Acting Manager Transportation Planning



610 Chartwell Road, Suite 300 Oakville, ON Canada L6J 4A5 Direct: +1 289-835-2511

Phone: +1 905-823-8500 Fax: +1 905-823-8503 Email: Katherine.Jim@wsp.com

wsp.com

Please consider the environment before printing...

From: Jim, Katherine Sent: June-17-19 10:23 AM

To: 'Bennington, Michael' <michael.bennington@peelregion.ca>

Cc: Brown, Kathie <<u>kathie.brown@peelregion.ca</u>>; 'Emily Pelleja' <<u>Emily.Pelleja@mississauga.ca</u>>; Thompson, Gillie

<<u>Gillian.Thompson@wsp.com</u>>; Barclay, Kate <<u>katherine.barclay@wsp.com</u>>

Subject: RE: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr, The Exchange and Kariya

Dr.

Hello Michael,

Thank you for your email and interest in the Redmond Rd, Webb Dr, The Exchange and Kariya Dr. Class EA Studies. Please find attached a copy of the PIC displays shown at the PIC on June 12 for your information.

Please let us know if you have any comments or questions.

Regards, Katherine

Katherine Jim, M.Eng., P. Eng. Acting Manager Transportation Planning



610 Chartwell Road, Suite 300 Oakville, ON Canada L6J 4A5 Direct: +1 289-835-2511

Phone: +1 905-823-8500 Fax: +1 905-823-8503 Email: Katherine.Jim@wsp.com

wsp.com

Please consider the environment before printing...

From: Bennington, Michael [mailto:michael.bennington@peelregion.ca]

Sent: June-12-19 11:19 AM

To: Jim, Katherine < Kathie < kathie.brown@peelregion.ca

Subject: Additional Information on MCEA Studies for extensions of Redmond Rd, Webb Dr, The Exchange and Kariya Dr.

Good morning Katherine,

Thank you for sharing the notice of the PIC for the environmental assessment process for Redmond Rd, Webb Dr, The Exchange and Kariya Dr. We would like to request digital copies of information being shared at tonight's PIC, including the presentation, so that we may review and provide comments.

Thanks in advance.

Best,

Michael Bennington, MPH

Analyst, Research and Policy Built Environment Team, Chronic Disease and Injury Prevention Region of Peel 7120 Hurontario St., Mississauga (905) 791-7800 ext. 2014



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PLEASE PRINT

City of Mississauga Municipal Class Environmental Assessment Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive

Public Information Centre - Wednesday June 12, 2019

The City of Mississauga has initiated four road extension studies in the downtown area to create a finer road network and improve walking and cycling opportunities. Public input and comments are welcome and will be incorporated into the planning and design. For more information about these studies, please visit:

http://www.mississauga.ca/portal/residents/rwek-ea-studies

Please provide your comments on any aspect of the study being considered, and place your comment sheet in the box provided at the Public Information Centre, or submit via regular mail or email by July 5, 2019.

NAME:	
ADDRESS:	POSTAL CODE:
EMAIL:	
MY INTEREST IS: (please check all that app	ly)
[Redmond Road	[Webb Drive
[4 The Exchange	[Kariya Drive
COMMENTS / QUESTIONS / SUGGESTIONS	
add at least 2 overpasses or a fraffic. ie Mavia & Burn / Burn & Burn & Gurn & Burn &	inderpasses to help allemake
traffic. il Mava & Burn / Burn.	Confee Pkwy. Replace proposed
lights @ Redmond & Webb with &	Lope Signo.

		-	
		I	

Place your comment sheet in the box provided at the Public Information Centre, or submit via regular mail or email by July 5, 2019.

By Mail:

Katherine Jim, M.Eng., P.Eng. WSP Consultant Project Manager

610 Chartwell Road, Suite 300

Oakville ON L6J 4A9

By Email:

rwekea@wsp.com



City of Mississauga | Redmond Road Municipal Class Environmental Assessment Project File | March 2020

Appendix A4 Stakeholder Consultation Record



Redmond Road, Webb Drive, The Exchange, Kariya Drive Class EAs May 30, 2019 | 1:00 pm to 2:00 pm City of Mississauga, 201 City Centre Drive, Superior Room

Rogers Real Estate Development Limited Stakeholder Meeting Agenda

Meeting Purpose: To introduce the study, review the early design concept, discuss stakeholder related questions and concerns and review next steps.

- 1. Introductions
- 2. Overview of the Studies
- 3. Study Process and Schedule
- 4. Problems and Opportunities (overview)
- 5. Supporting Technical Work (overview)
- 6. Design Considerations
- 7. Road Cross-Section
- 8. Design Concept
- 9. Next Steps
- 10. Next Meeting Date



City of Mississauga Class Environmental Assessment Studies for:



Redmond Road Webb Drive The Exchange Kariya Drive

Rogers Real Estate Development Stakeholder Meeting 1:00 pm – 2:00 pm Thursday May 30, 2019 201 City Centre Drive, 8th Floor, Superior Room

Agenda

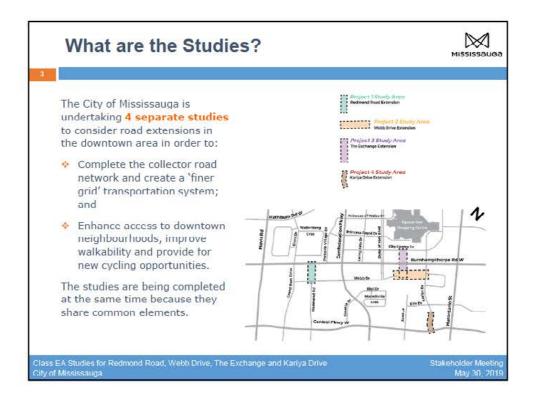


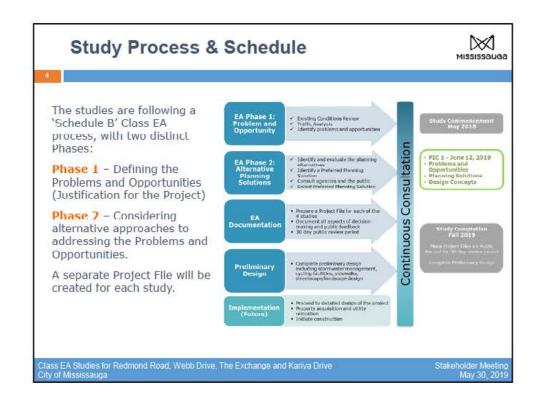
2

- 1. Introductions
- 2. Overview of the Studies
- 3. Study Process and Schedule
- 4. Problems and Opportunities (do we need?)
- 5. Supporting Technical Work
- 6. Design Considerations
- 7. Road Cross-Section
- 8. Design Concept
- 9. Next Steps

Class EA Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive City of Mississauga

Stakeholder Meeting May 30, 2019





Supporting Technical Work



- 5

Traffic Analysis

- Review existing and assess future transportation demand in the downtown area, based on planned populat on and employment growth.
- Assess how the proposed improvements (road extensions) will support future growth and accommodate access needs.
- Assess operat onal condit ons at all intersections and dentify required improvements.

Stormwater Management

- There are no surface water features such as creeks or rivers present within any of the study areas.
- Existing road drainage is captured and conveyed via stormwater sewer system.
- A stormwater management plan will be developed for each proposed road extension.

Natural Environment

- There are no significant natural features present within the study areas.
- Potential for wildlife habitat on existing vacant lands will be assessed.
- A tree inventory will be undertaken in accordance with City standards to record species, size
 and cond tion of trees. The inventory will be used to assess potential impacts to trees.

Cultural Heritage

- A Stage 1 Archaeological Assessment has been completed.
- Further archaeological work is recommended for some areas.
- There are no properties listed or designated under the Ontario Her tage Act, within the study areas.
- Kariya Park is on the City's Her tage Register and Cultural Landscape Inventory. The Garden will not be impacted.

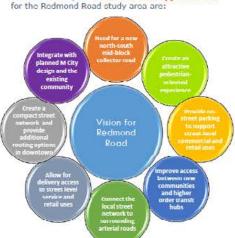
Class EA Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive City of Mississauga takeholder Meeting May 30, 2019

Problems & Opportunities



6

Based on the existing conditions and approved future land use, the **Problems and Opportunities** for the Redmond Road study area are:



Problem & Opportunity Statement

A new City of Mississauga collector road is required to provide north-south access and connectivity within the planned M City community.

A new segment of Redmond Road will facil tate multi-modal movement between the internal road system and the surrounding road network. The new road will also provide for on-street parking and a vibrant pedestrian environment to support street-level commercial uses.

The Redmond Road extension will support the City's vision for Downtown Mississauga that includes: a high-dens ty, dynamic urban core with smaller block sizes, finegrained street network with a high quality public realm and a range of transportation choices.

Class EA Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive City of Mississauga

Stakeholder Meeting May 30, 2019

Design Considerations



7

- ROW will be 23 m and 20.6 m; C ty Centre Road Cross-Section with modifications.
- No MiWay serv ce planned.
- No cycling facilities proposed.
- New signalized intersection at Burnhamthorpe Road with provision for westbound left-turn lane.
- Redmond Road will be full integrated with the community design. A high quality pedestrian environment is proposed to encourage walking, and create a vibrant neighbourhood.
- The roadway design provides for one lane of traffic in each direction. The focus of the street design is on multi-modal neighbourhood accessibility, and is not intended to prior tize through movements of vehicular traffic.
- On street parking will be accommodated to support street level commercial business.
- Streetscaping opportunities will enhance street level experience. Street trees will be provided in most areas to create a canopy, with shrubs and low planting beds located around local intersect ons. Soil cells preferred.
- The streetscape design will balance the aesthetic vision for the neighbourhood with the need to accommodate underground util ties.
- New signalized intersection at Webb Drive wth provision of left-turn lanes.

Class EA Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive

Stakeholder Meeting May 30, 2019

Typical Road Cross-Section Redmond Road near Webb Drive (20.6m) Redmond Road near Burnhamthorpe Road (23m) Provided to the second section of the second

Next Steps



9

- Review all stakeholder and agency comments received
- Confirm the Preferred Planning Solution for each study
- Incorporate public feedback on the design concepts into the Preliminary Design phase
- Prepare a Project File for each study to document decision making and public/agency consultation
- Make the Project Γiles available for a 30 day public review period

Class EA Studies for Redmond Road, Webb Drive, The Exchange and Kariya Drive City of Mississanga

Stakeholder Meeting May 30, 2019

Appendix A5 Notice of Completion



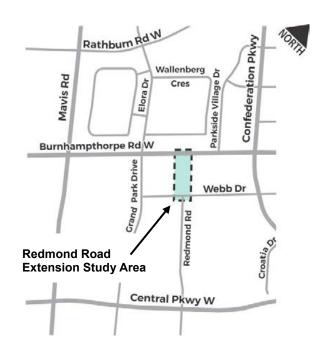
NOTICE OF STUDY COMPLETION Municipal Class Environmental Assessment Study for the Extension of Redmond Road

The City of Mississauga has completed a Municipal Class Environmental Assessment (Class EA) study for the extension of Redmond Road from Webb Drive to Burnhamthorpe Road West. This Study was conducted in accordance with the planning process for Schedule 'B' projects as outlined in the *Municipal Engineers Association Municipal Class Environmental Assessment* (October 2000, as amended in 2015), which is approved under the *Ontario Environmental Assessment Act*.

The Study was undertaken to investigate the need to:

- support the creation of smaller, urban-scale blocks and a finegrained street grid in downtown Mississauga;
- create a new north-south connection between Webb Drive and Burnhamthorpe Road West and provide alternative routes within downtown Mississauga; and
- support multi-modal transportation by providing additional pedestrian connections and access to transit.

Based on the Study findings, including feedback received from the public and stakeholders, the extension of Redmond Road from Webb Drive to Burnhamthorpe Road West was selected as the preferred solution. The configuration of the new roadway will be established during future design phases.



A Project File has been prepared to document the planning and decision-making process for this study. By this Notice, the Project File is being placed on the public record for a 30-day review period from and including **March 12, 2020 to April 13, 2020** and is available for review at http://www.mississauga.ca/portal/residents/rwek-ea-studies and:

The City of Mississauga

Office of the City Clerk 300 City Centre Drive, 2nd Floor Mississauga ON L5B 3C1 Telephone: 905-615-4311

Monday to Friday: 8:30 am to 4:30 pm

Weekends: Closed

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If you have any questions, comments or concerns, please contact the City of Mississauga Project Manager or Consultant Project Manager at rwekea@wsp.com by April 13, 2020:

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If concerns regarding the project cannot be resolved through direct discussion with the City of Mississauga, a person or party may make a request to the Minister of the Environment, Conservation and Parks (MECP) for an elevated level of study to comply with Part II of the Ontario Environmental Assessment Act (referred to as a Part II Order request). The request must be received by the Minister by April 13, 2020. Refer to the MECP website for specific instructions: https://www.ontario.ca/page/class-environmental-assessments-part-ii-order

Personal information is collected under the authority of the Environmental Assessment Act and will be used in the assessment process. With exception of personal information, all comments shall become part of the public records. Questions about this collection should be directed to the Project Manager listed in the notice.

This Notice first issued on March 12, 2020.

Appendix B Air Quality Assessment Technical Memorandum



TECHNICAL MEMO

TO: Katherine Jim, Senior Project Manager

FROM: Camille Taylor, Sr. Air Quality Engineer, WSP

SUBJECT: Qualitative Air Quality Impact Assessment for the Extension of Redmond Road,

Webb Drive, The Exchange, and Kariya Drive in the City of Mississauga, Ontario

DATE: January 24, 2020

1 INTRODUCTION

The City of Mississauga is undertaking four concurrent Municipal Class Environmental Assessment (MCEA) studies to consider the need to extend four streets in the Mississauga City Centre. The study areas are:

- Project 1: Redmond Road (from Webb Drive to Burnhamthorpe Road West);
- Project 2: Webb Drive (from East of Duke of York Boulevard to Kariya Drive);
- Project 3: The Exchange (from City Centre Drive to Webb Drive); and,
- Project 4: Kariya Drive (from south of Elm Drive to Central Parkway West).

The location of the Study Areas is shown in **Figure 1**.

The studies are being undertaken to support the creation of a pedestrian-scale, fine grained street grid in downtown Mississauga and support multi-modal mobility by improving pedestrian connections and, in some cases, expanding the cycling and transit networks.

A Category 3 qualitative air quality impact assessment (AQIA) has been completed in support of the four studies. Incorporating background air quality data, this qualitative assessment was prepared to discuss potential impacts of the four (4) studies, including:

- Information on background ambient air quality:
 - Background ambient air quality and contaminant concentration levels in the vicinity of the four (4) project areas; and
 - An estimation of the contributions of emissions to background air quality levels.
- Potential impacts of the four (4) projects:
 - Potential impacts of each of the projects on local ambient air quality; and
 - Effects of any identified potential impacts resulting from the projects.





Figure 1: Location of the Project Area (containing the four Study Areas)

2 METHODOLOGY

2.1 AIR QUALITY

2.1.1 CRITERIA AIR CONTAMINANTS

The background air quality assessment for this qualitative analysis of the four (4) study areas focused on criteria air contaminants (CACs) which are expected to be released from mobile sources (from fuel combustion of vehicles travelling on the roadway) within the area and contaminants that are generally accepted as indicators of changing air quality (MECC 2017 Guide "Traffic Related Air Pollution: Mitigation Strategies and Municipal Road Class Environmental Assessment Air Quality Impact Assessment Protocol"). The CACs within the study areas of the proposed project include:

- particulate matter less than 10 microns in diameter (PM₁₀);
- particulate matter less than 2.5 microns in diameter (PM_{2.5});
- total suspended particulates (TSP);
- nitrogen oxides expressed as nitrogen dioxide (NO₂);
- carbon monoxide (CO);



- selected VOCs (benzene, 1-3 butadiene, formaldehyde, acetaldehyde and acrolein) and,
- selected PAH (benzo(a)pyrene)

Emissions from construction operations are to be managed through best management practices for construction operations and it will be assessed whether monitoring and mitigation requirements will be required.

2.1.2 AIR QUALITY THRESHOLDS

The Ministry of the Environment, Conservation, and Parks (MECP) has released *Ontario's Ambient Air Quality Criteria* (AAQC), which contains the issued guidelines related to ambient air concentrations (MECP, 2018). Federal concentration objectives and criteria are presented in the National Ambient Air Quality Objectives (NAAQO) and the Canadian Ambient Air Quality Standards (CAAQS).

The Ontario AAQC is based on protection against adverse health and/or environmental effects and lists the desirable concentrations of contaminants in the air for various time-weighted averaging periods. These averaging periods were developed for acute and chronic adverse health and/or environmental effects (including adverse effects to health, vegetation, soiling, visibility, odour, and/or corrosion. AAQCs may be updated over time based on the state-of-the-science for a particular contaminant (MECP, 2012).

The federal concentration objectives (CAAQS and NAAQO) are health-based air quality objectives for contaminant concentrations in outdoor air. The CAAQS were established by the federal government in 2013 and include an annual target for PM_{2.5} (Environment Canada, 2013). Therefore, the applicable standards include the CAAQS standard for 2020 for PM_{2.5}. Additional standards included are for NO₂, which will be implemented by 2020. The NAAQOs are used as benchmarks to facilitate air quality management and provide goals for outdoor air quality that protect the environment, the aesthetics properties of the environment, and public health (CCME, 1999).

In this qualitative AQIA, "air quality thresholds" refer to the combined AAQC and CAAQS criteria and are presented in **Table 1-1**. These air quality thresholds outline the desirable contaminant concentrations in the outdoor air and are not enforceable within any jurisdiction but are indicators of provincial and federal ambient air quality. The threshold value for each contaminant and its respective averaging period are used to assess the existing air quality for the region.



Table 2-1: Applicable Air Quality Thresholds

				NAA		
Contaminant	Averaging Time	OAAQC (μg/m³) ^A	CAAQC (μg/m³)	Desirable (μg/m³)	Acceptable (μg/m³)	Project Criteria
TSP	24 h	120	_	_	120	120
135	Annual	60	_	60	_	60
PM10	24 h	50	_	_	_	50
PM2.5	24 h	25 ^C	27 ^D	_	_	25
PIVIZ.5	Annual	_	8.8	_	_	8.8
	1 h	400	79 (42 ppb) ^{E,F}	_	400	79
NO2	24 h	200	_	_	200	200
	Annual	_	22.6 (12 ppb) ^E	60	100	22.6
	1 h	36,200	_	15,000	35,000	15,000
СО	8 h	15,700	_	6,000	15,000	6,000
Acrolein	1 h	4.5	_	_	_	4.5
	24 h	0.4	_	_	_	0.4
Benzene	24 h	2.3	_	_	_	2.3
Delizelle	Annual	0.45	_	_	_	0.45
1.2 Butadiana	24 h	10	_	_	_	10
1,3-Butadiene	Annual	2	_	_	_	2
Acetaldehyde	30 min	500	_	_	_	500
	24 h	500	_	_	_	500
Formaldehyde	24 h	65	_	_	_	65
Ponzo/o\nymana	24 h	0.00005	_	_	_	0.00005
Benzo(a)pyrene	Annual	0.00001	_	_	_	0.00001

Notes: AMECP 2018 Ontario's Ambient Air Quality Criteria

^B CCME 1999 Canadian National Ambient Air Quality Objectives

^c MECP AAQC value is 30 μ g/m³ on the 98th percentile, however the MECP recommends the contribution of primary PM_{2.5} from a single facility to ambient levels of PM_{2.5} should be no greater than 25 μ g/m³ over 24-hours



^D CAAQS published in Canada Gazette Volume 147, No. 21 – May 25, 2013. Final standard phase of 2020 used.

^E CAAQS published in the Canada Gazette Volume 15, No. 49 — December 9, 2017. Final standard phase of 2025 used.

F The NO₂ 1-hr CAAQS is the 3-year average of the annual 98th percentile of the daily maximum 1-hour average concentrations.

2.2 SENSITIVE RECEPTORS

Sensitive receptors within a 500 m radius of the study areas were identified in this assessment, as per MTO guidance. The area surrounding the four (4) study areas is mainly comprised of residential, commercial, open space, greenlands, and industrial land use types. The following sensitive receptors have been identified within the four (4) project areas:

— Residences:

 Residential areas are located south west, south east, north west, and north east of the study areas.

— Schools:

- The Peel District School (Adult Education Centre) is located at 100 Elm Drive
 West and is approximately 70 m west of the Project 4 study area;
- The Fairview School is located at 3590 Joan Drive in Mississauga and is approximately 100 m south east of the Project 2 study area;
- The Corpus Christi Separate School is located at 4155 Elora Drive and is approximately 430 m north west of the Project 1 study area.
- The Bishop Scalabrini School is located at 225 Central Parkway West and is approximately 460 m south west of the Project 4 study area.

— Child Care Facilities:

- The Salvation Army Erin Mills day care is located at 300 City Centre Drive and is approximately 400 m west of the Project 3 study area and 450 m west of the Project 2 study area.
- The Corpus Christi YMCA Before and After School Program is located at 1275
 Mississauga Valley Boulevard and is approximately 430 m north west of the
 Project 1 study area.
- The Heather Child Care center is located at 3574 Joan Drive and is approximately 300 m west of the Project 4 study area and 250 m south east of the Project 3 study area.



- The PLASP Day Care Center (Fairview) is located at 3590 Joan Drive and is approximately 115 m south east of the Project 2 study area, 190 m south east of the Project 3 study area, and 320 m north west of the Project 4 study area.
- The PLASP Day Care Center (Bishop Scabrini) is located at 225 Central Parkway Boulevard West and is approximately 450 m south east of the Project 3 study area.
- The Mississauga Hanson Road YMCA Child Care Center is located at 30
 Hanson Road and is approximately 450 m south east of the Project 4 study area.

— Place of Worship:

- The Westside Presbyterian Church is located at 3637 Grand Park Drive in Mississauga and is approximately 365 m south from the Project 1 (Redmond Road extension) study area.
- The Community of Christ place of worship is located at 84 Burnhamthorpe Road West in Mississauga and is approximately 90 m north of the Project 2 (Webb Drive extension) area and 300 m north east of the Project 3 (The Exchange extension) study area.

— Recreational Areas:

- The City View Park is located at 565 Central Parkway West and is approximately
 410 m south east of Project 1 (Redmond Road extension) area.
- Senior Care Facility / Retirement Home:
 - The Peel Senior Link Retirement home is located at 50 Burnhamthorpe Road
 West and is approximately 150 m north of the Project 2 study area.

3 PROJECT ASSESSMENT

3.1 AIR QUALITY

3.1.1 EXISTING CONDITIONS

Data from the ECCC National Air Pollutant Surveillance (NAPS) stations and the MECP air monitoring stations were used to analyze background contaminant concentrations for the project areas. The representativeness of the data for each station was considered for use in this qualitative assessment and the latest years of publicly available data was obtained for each station. For most of the ambient monitoring stations, the year 2016 was used as it has undergone vigorous quality assurance and quality control by Environment Canada.

Ambient contaminant concentration data for this assessment was retained from the Toronto West (125 Resources Road), Toronto (223 College Street), Newmarket, and Egbert monitoring



stations. As the availability of data for each of the identified contaminants in Section 1.1.1, the station information and period of analysis are listed in **Table 2-1**.

Table 3-1: Air Monitoring Stations and Data Availability for Selected Contaminants

	NAPS Station ID	Data Available							Distance		
Station Name		PM ₁₀	PM _{2.5}	NO ₂	СО	voc	B(a)P	Years of Data Available	from Project (KM)	Direction from Project	
Newmarket	65101	-	Υ	Υ	-	Y	-	2012 - 2016	52	NE	
Toronto West	60430	-	Υ	Υ	Y	-	Y	2012 - 2016	16	NE	
Toronto	60427	-	-	1	-	Y	-	2012 - 2014	21	NE	
Egbert	64401	-	-	-	-	Y	-	2006 - 2010	72.5	NNE	

Contaminant concentrations were primarily extracted from the Newmarket station as it was considered most suitable due to the local land use, geographic region, and proximity to the site. Where data was not available, the Toronto and Toronto West stations were selected for the remaining contaminants. The Egbert station was chosen as it was the closest station with VOC monitoring and applicable concentrations of formaldehyde and acetaldehyde. The monitoring station chosen for each contaminant and the reason for selection is summarized in **Table 2-2**.

Table 3-2: Selected Monitoring Stations

Contaminant	Selected Station	Reason for selection
TSP ^A		
PM _{2.5}		
NO ₂	Newmarket	These stations were selected as a result of data availability, similar
Benzene		geographic region and local land use, and the station proximity of the
1,3-butadiene		site.
со	Toronto West	
B(a)P	Toronto	
Formaldehyde	E alla ant	This station was selected as a result of data availability, similar
Acetaldehyde	Egbert	geographic region and local land use, the station proximity to the Project site, as well as the station being located downwind of the Project site.

Note: A Concentrations of TSP were estimated based on the PM2.5 concentration levels using ratios for TSP-PM2.5-PM10 listed in Lall et al., 2004 ("Estimation of



historical annual PM2.5 exposures for health effects assessment", published in the Journal of Atmospheric Environment)

Table 2-3 summarizes the background ambient concentration data for each contaminant within the project areas. For contaminants with an assigned 1-hour averaging period, the 5-year average 90th percentile concentration was recorded and is a conservative estimate of the background air quality of the region as it is representative of ambient background concentrations for averaging periods of 30 min, 1-hour, and 8-hour (CEA Agency and CNSC, 2009). For contaminants with an assigned 24-hour averaging period, the 5-year average maximum 24-hour concentration was used. Concentrations of contaminants with an annual averaging period were recorded using the 5-year maximum annual mean concentration.

Table 3-3: Summary of Ambient Background Concentrations within the Study Area

Contaminant	Averaging Period	Background Concentration (μg/m³)	Concentration Threshold			
TSP	24 h	44	120	37%		
137	Annual	23	60	38%		
PM ₁₀	24 h	25	50	49%		
PM _{2.5}	24 h	13	25	53%		
F1V12.5	Annual	7	8.8	77%		
	1 h	28	79	35%		
NO _x (expressed as NO ₂)	24 h	24	200	12%		
ŕ	Annual	13	22.6	57%		
	1 h	458	15000	3%		
СО	8 h	435	6000	7%		
Acrolein	1 h	— 4.5		_		
	24 h	— 0.4		_		
Benzene	24 h	0.63 2.3		27%		
Denzene	Annual	0.08	0.45	17%		
1,3-Butadiene	24 h	0.043	10	0%		
	Annual	0.005	2	0%		
Acataldahuda	30 min	5	500	1%		
Acetaldehyde	24 h	2	500	0%		



Contaminant	Averaging Period	Background Concentration (μg/m³)	Air Quality Threshold (µg/m³)	% of Threshold		
Formaldehyde	24 h	4	65	6%		
Benzo(a)Pyrene	24 h	0.00010	0.00005	200%		
	Annual	0.00001	0.00001	116%		

In **Table 2-3**, all contaminant concentrations, except for benzo(a)pyrene, were below the air quality thresholds, indicating that the ambient air quality in the vicinity of the four (4) proposed projects is good.

3.1.2 LOCAL EMISSION SOURCES

Industrial emissions from facilities within a 5-kilometer radius of the four (4) projects were assessed as part of this qualitative study. There are two (2) industrial facilities located within the 5-kilometer radius that reported to the National Pollutant Release Inventory for the year 2017 for the contaminants of concern (ECCC, 2018). The emissions from both Fielding Chemical Technologies Inc. and Trillium Health Partners – Mississauga Hospital contribute to the local air quality and cumulative impacts. When compared to provincial totals, Fielding Chemical Technologies Inc. is a minor contributor of VOCs, PM_{2.5}, and PM₁₀ and Trillium Health Partners – Mississauga Hospital is a minor contributor of PM_{2.5} and PM₁₀. The emissions and facility contributions are listed in **Table 2-4**.

Table 3-4: Emission Totals for Industry Within the Study Area (tonnes/year)

Facility	Facility Location		СО	voc	TSP	PM ₁₀	PM _{2.5}
Fielding Chemical Technologies Inc.	3549 Mavis Road, Mississauga, ON	_	_	5.2		1.6	1.6
Trillium Health Partners – Mississauga Hospital	100 Queensway West, Mississauga, Ontario	l	l	_		0.502	0.502
Total Emissions			ı	5.2		2.1	2.1
Ontario Total Emissions		l	40,131		17,255	8,911	
% of Study Area Emissions	_	_	<1%	_	<1%	<1%	

The four (4) projects involve extending roadways and each of the projects include considerations of improved traffic operations and enhanced access to transit and downtown walkability. As such, no substantial change in road traffic emissions or in existing air quality is expected for each of the four projects.



3.1.3 PROJECT EMISSIONS

During construction, there is potential for air quality impacts to arise for a limited time, due to construction vehicle emissions and the generation of dust within the four (4) project areas. As per the document "Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities" (Cheminfo Services Inc., March 2005), the best management practices (or a combination) outlined below will be implemented to minimize on-site dust generation at each of the four (4) project sites.

Mitigating dust impacts will be performed in accordance with the Ontario Provincial Standard Specification 100 (OPSS) by ensuring that dust is controlled throughout construction. These measures may include:

- Stabilizing surfaces of completed earthworks with vegetation, coarse gravel, crushed stone, or geotextiles within a period of 10 days following the completion of construction.
 The use of noxious plants and weeds should be avoided;
- In locations where there is loose soil or where it has been disrupted, the area may be compacted promptly following the disturbance to reduce the potential for dust generation;
- Where feasible, loading and unloading activities should be performed downwind of the storage piles/work area to avoid dust generation and the material drop height should also be reduced to the least possible. Efforts should be made to ensure that the stockpiling of soil is minimized;
- The design of the four sites should include reduced vehicle traffic in areas of exposed soil, and distances travelled for the delivery of aggregate and soil materials may be reduced where possible to minimize dust generation at each site. When possible, material handling operations should be kept to a minimum to further control the amount of fugitive dust emissions;
- During construction, the speed limit of traffic on unpaved roads should not exceed 16 24 km/h. Speed limit signs should also be posted for traffic in both directions by the Contractor at the entrances, exits, and in intervals of at least 150 meters along the roadway at all four (4) project sites;
- Proper maintenance of the unpaved roads, including the cleaning of roads with a sweeper and wetting as needed, should be enforced by the site Contractor. Street sweeping may be performed either at the end of each workday or at least once in a 24-hour interval that operations at each site take place. If significant soiling takes place at a site, street sweeping may be performed in shorter intervals or immediately to remove tracked soil onto adjacent roadways;
- Dependent on the current weather conditions at the time of construction, water may be applied to the surfaces of soil and/or roadways to pre-emptively prevent dust emissions.
 Potable water may be applied by water trucks, pulls, hoses, fire hydrants, or sprinklers to any exposed surface on the haul or excavation routes or to the stockpiles, as necessary;



- The inspection of vehicle tires should be completed prior to entry of the project site to ensure they are clean, and a vehicle wash station should be installed at each site;
- Engines of both vehicles and/or equipment should be initially inspected and properly maintained to reduce the particulate emissions from off-road engines and the amount of time spent idling by vehicles should be reduced to the shortest possible amount.

4 CONCLUSIONS

The proposed projects are not expected to result in significant changes to traffic volumes and are expected to enhance access to transit and downtown walkability for the four study areas. Without the proposed projects, the air quality is expected to remain unchanged or slightly worsen as traffic increases; however, as the proposed projects facilitate access to public transit routes and provide more connections between communities within the street network, it is expected that the projects have the potential to improve air quality. If mitigation measures for dust control are performed during construction, the projects are expected to have a negligible impact on overall air quality.