

EAST-WEST CONNECTION (LAGERFELD DRIVE) MOUNT PLEASANT GO STATION (CREDITVIEW ROAD) TO WEST OF MISSISSAUGA ROAD

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STUDY
SCHEDULE "C"
CITY OF BRAMPTON

PUBLIC INFORMATION CENTRE (PIC) #2

TUESDAY NOVEMBER 5, 2019 (6:00 PM TO 8:00 PM)
MOUNT PLEASANT VILLAGE PUBLIC LIBRARY

**Please sign in and provide your comments
in the comments sheet provided**

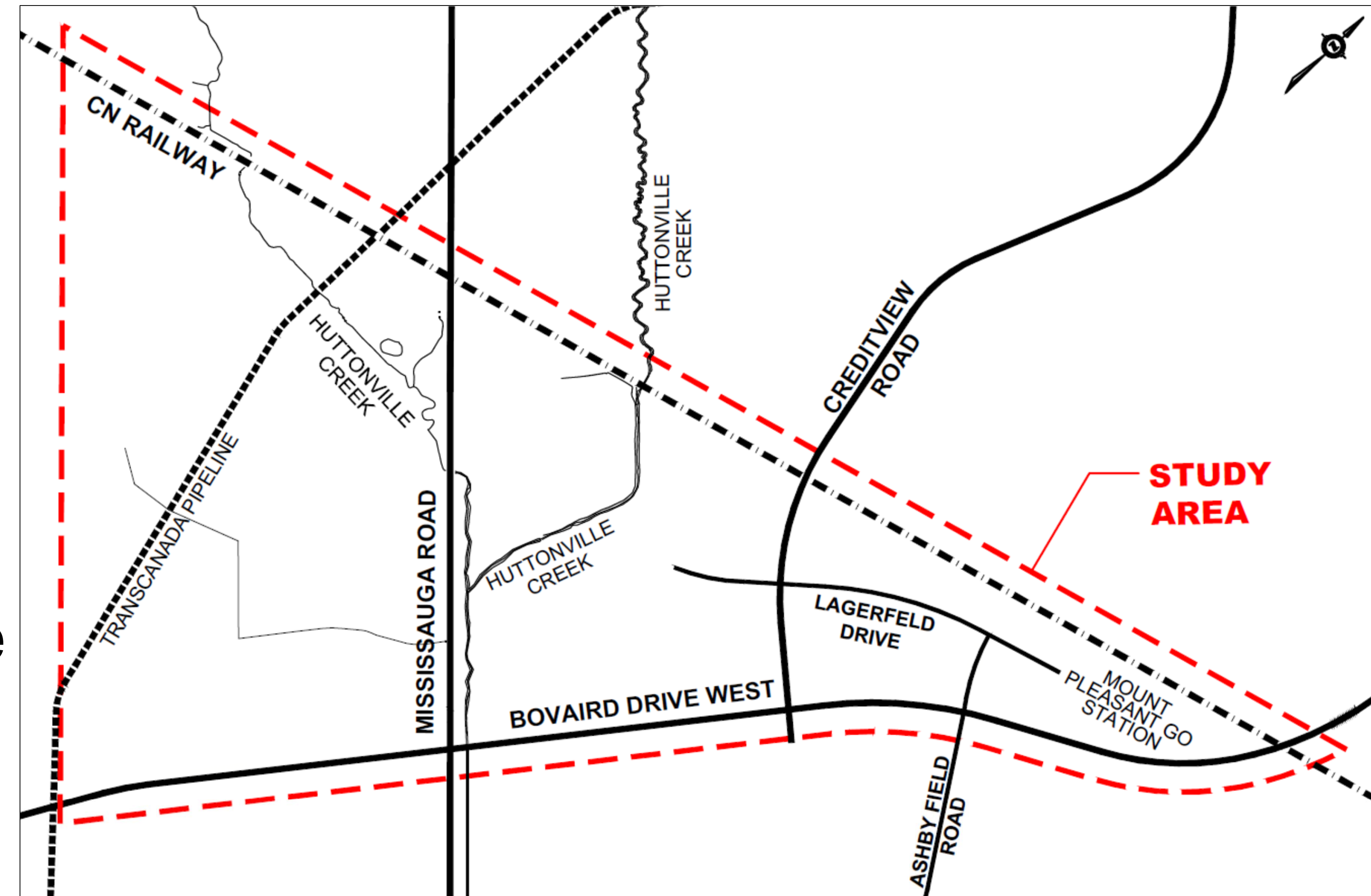
PURPOSE OF PIC #2

The purpose of this Public Information Centre (PIC) is to:

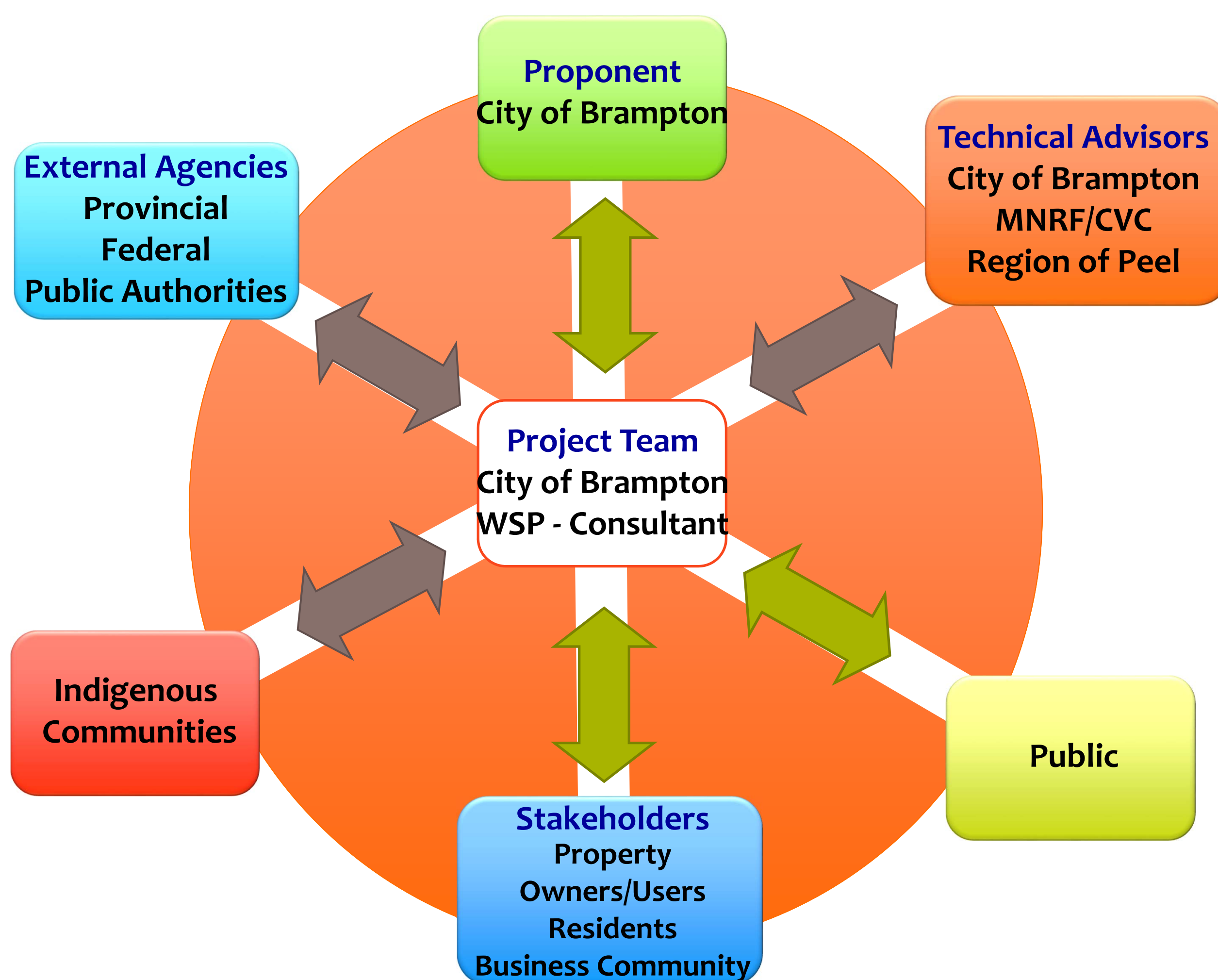
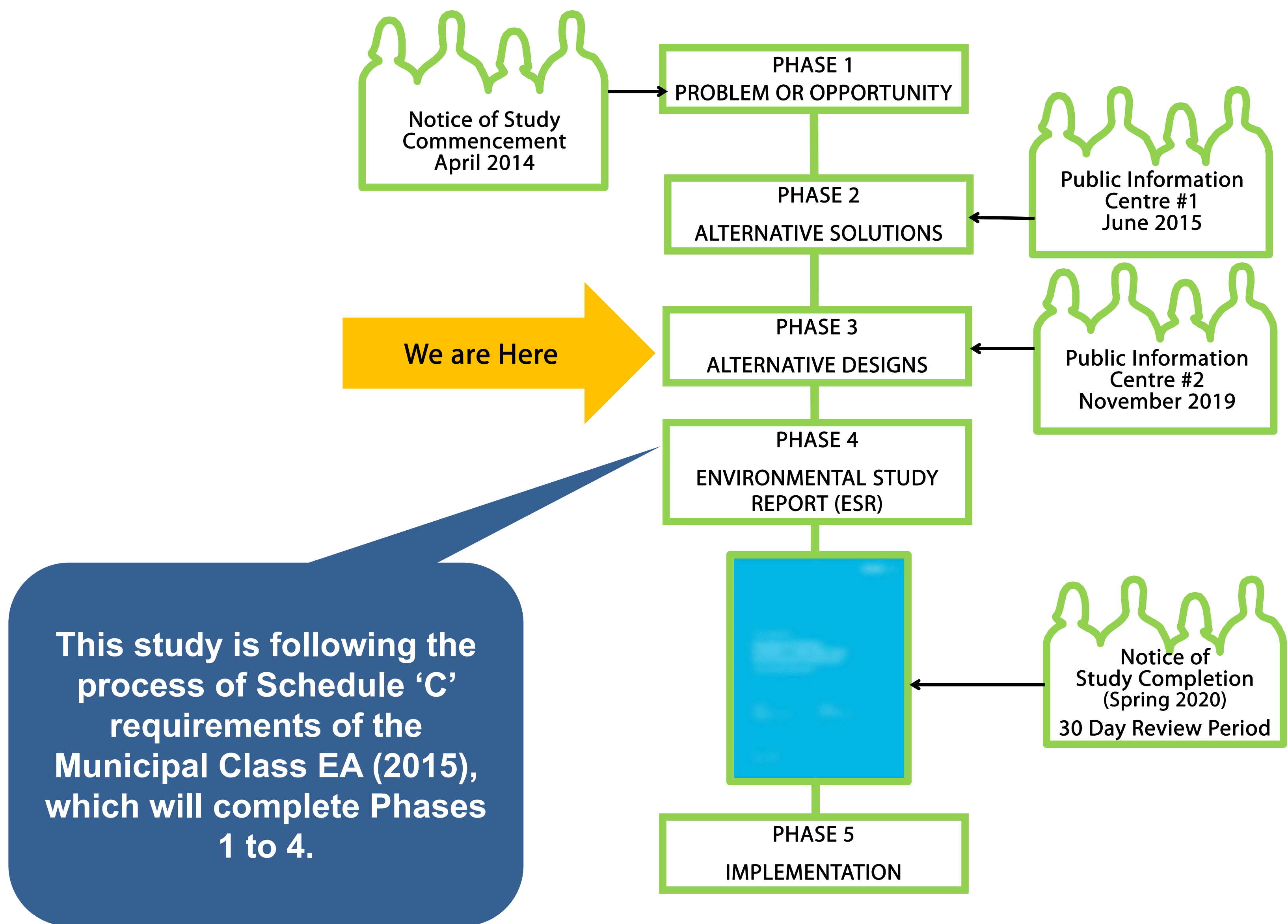
- Present a summary of Alternative Solutions and their evaluation that have been completed following PIC #1
- Present a summary of alternative designs and their evaluation
- Present the preliminary preferred design concept and its impacts and mitigation measures
- Obtain public input on the preliminary preferred design, and explain the next steps

STUDY AREA AND OVERVIEW

- The City of Brampton is conducting a Schedule 'C' Municipal Class Environmental Assessment (EA) to extend Lagerfeld Drive from the Mount Pleasant GO Station (Creditview Road) to approximately 680m west of Mississauga Road.
- The boundaries of the immediate study area are west of Mississauga Road, Creditview Road to the east, Bovaird Drive West to the south and CN Railway to the north.
- As part of a strategic future road network assessment, extension of Lagerfeld Drive is considered to address anticipated traffic demand and provide opportunities to enhance the future community, and facilitate sustainable modes of transportation, to northwest Brampton.
- Approved and planned growth in the study area will contribute to an increase in traffic congestion over the next 10-25 years.

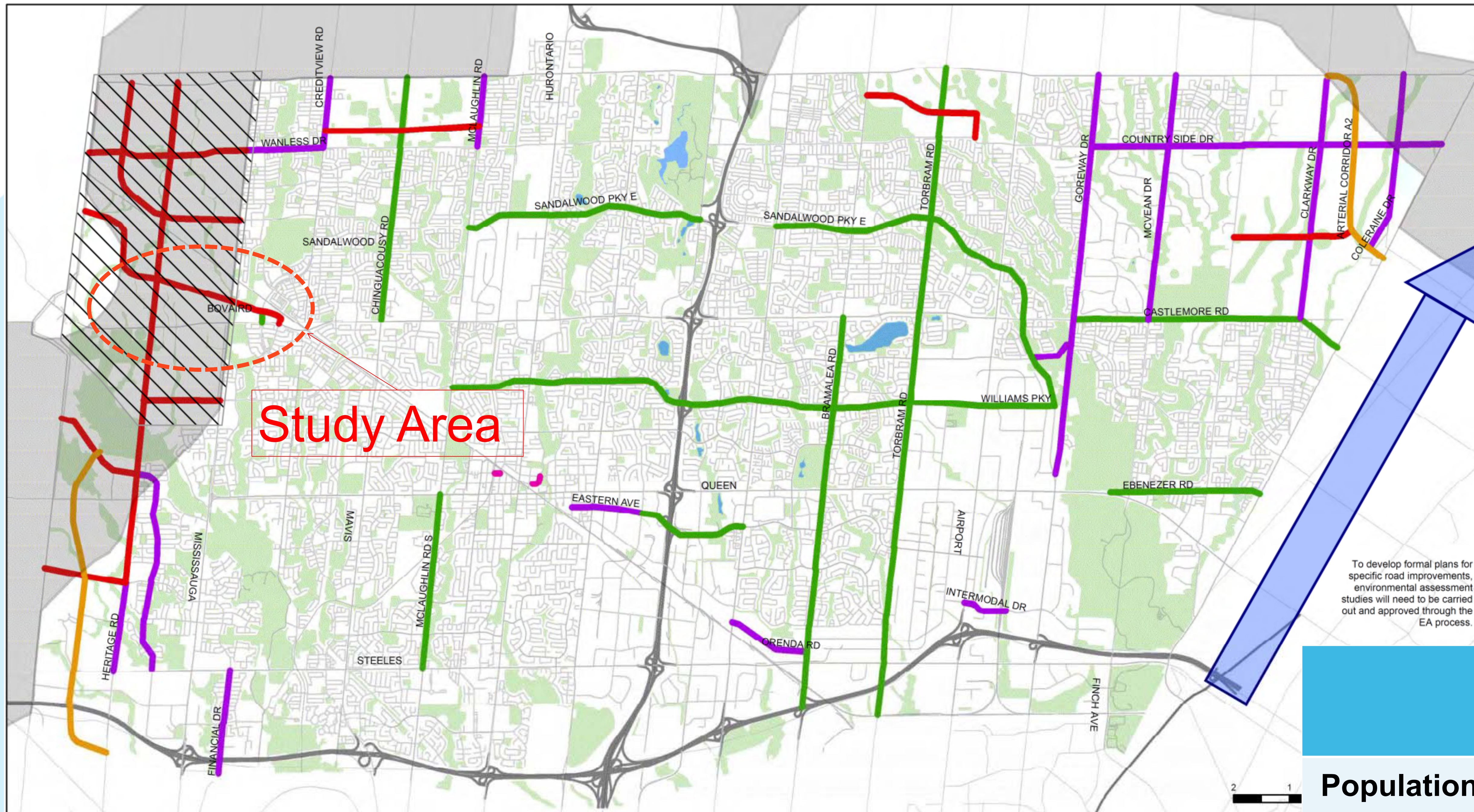


MUNICIPAL CLASS EA STUDY PHASES



EAST-WEST CONNECTION (LAGERFELD DRIVE)
 MOUNT PLEASANT GO STATION (CREDITVIEW ROAD)
 TO WEST OF MISSISSAUGA ROAD
 MUNICIPAL CLASS EA



POLICY CONTEXT - TRANSPORTATION MASTER PLAN UPDATE (2015)



- The existing land use in the study area consists of a mixture of agricultural, residential, commercial, and industrial.
- North West Brampton is rapidly growing community.

To develop formal plans for specific road improvements, environmental assessment studies will need to be carried out and approved through the EA process.

	City of Brampton		
	2021	2031	2041
Population	523,900	842,800	899,500
Employment	182,000	291,400	325,200

Transportation Master Plan Update

Legend

- City Road Extension by Two Lanes
- City Road Expanded to Four Lanes
- City Road Expanded to Six Lanes
- New Road Construction Six Lanes
- New Road Construction Four Lanes
- Provincial Highway
- GTA West Corridor Study Area
- Highway 427 and Extension
- Conceptual Road Network for use in the Development Charges Background Study



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ALTERNATIVE SOLUTIONS

- An evaluation framework was developed as presented, including technical considerations and environmental components that address the broad definition of the environment as described in the EA Act and those based on comments received from relevant agencies.

ALTERNATIVE SOLUTION 1: Do Nothing	ALTERNATIVE SOLUTION 2: Transportation Demand Management (TDM)	ALTERNATIVE SOLUTION 3: Improve Transportation Operations along other Roads in the Network	ALTERNATIVE SOLUTION 4: Extend road west of Mississauga Road only	ALTERNATIVE SOLUTION 5: Extend Mount Pleasant GO Station access road (Lagerfeld Drive) to west of Mississauga Road + Alternative 2 & 3
No changes made within the Study Area (status quo)	Introduce TDM strategies to reduce demands on Mississauga Road & Bovaird Drive (i.e. shift demand to time periods outside of the congestion periods)	Introduce additional operational improvements such as restricting turning movements, localized widening to accommodate dedicated turn lanes, intersection improvements, continuous left turn lanes, and/or signal timings, etc.	Not connecting Mississauga Road with Mount Pleasant GO Station. East-west connection will start at Mississauga Road, extending to the west.	Continuation of the existing Mount Pleasant GO Station access road to lands west of Mississauga Road



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MOUNT PLEASANT GO STATION (CREDITVIEW ROAD)
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ALTERNATIVE SOLUTIONS-EVALUATION FRAMEWORK AND CRITERIA

- The Class EA process recognizes that there are many ways of solving a particular problem and requires various alternative solutions to be considered. The five alternative solutions for consideration in this study are described in the following Table:

COMPONENT	DESCRIPTION
Planning Policies	<ul style="list-style-type: none"> Component that evaluates the City's planning policies such as Vision 2040, TMP, Active Transportation and Vision Zero.
Technical Considerations	<ul style="list-style-type: none"> Component that evaluates the technical suitability and other engineering aspects of the road network system.
Natural Environmental	<ul style="list-style-type: none"> Component that evaluates the potential effects on the natural and physical aspects of the environment (e.g., air, land, water and biota) including natural heritage/ environmentally sensitive areas.
Social/Economic Environment	<ul style="list-style-type: none"> Component that evaluates the potential effects on residents, neighbourhoods, businesses, community character, social cohesion and community features, in addition to municipal development objectives.
Cultural Environment	<ul style="list-style-type: none"> Component that evaluates the potential effects on historical/archaeological and built heritage resources.
Cost	<ul style="list-style-type: none"> Relative cost in terms of capital costs, property costs and maintenance costs

EVALUATION OF ALTERNATIVE SOLUTIONS

	ALTERNATIVE SOLUTION 1	ALTERNATIVE SOLUTION 2	ALTERNATIVE SOLUTION 3	ALTERNATIVE SOLUTION 4	ALTERNATIVE SOLUTION 5
Transportation (Traffic operations and accommodation of future travel demand; Traffic safety; Road network compatibility/connectivity; Accommodation of pedestrians/cyclists; Response times/access for emergency vehicles)					
Engineering Considerations - Constructability (Services/utilities; Construction staging; Drainage/stormwater management; Flooding and erosion hazards)					
Cultural (Archaeological resources; Built heritage resources)					
Socio-Economic Environment (Sustainability and City/ Regional Planning; Compatibility with existing and proposed developments; Potential sustainability improvements to the community, including green house gas emission; Noise impacts, Property impacts)					
Natural Environment (Vegetation; Wildlife; Water resources; Fisheries; Potential to impact Species at Risk (SAR) – Provincial Best Management Practices for Redside Dace)					
Cost/Implementation (Construction and Maintenance)					
Overall					

LEGEND					
	Least Preferred			Most Preferred	



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SUMMARY OF ALTERNATIVE SOLUTIONS

ALTERNATIVE SOLUTION 1: Do Nothing	ALTERNATIVE SOLUTION 2: Transportation Demand Management (TDM)	ALTERNATIVE SOLUTION 3: Improve Transportation Operations along other Roads in the Network	ALTERNATIVE SOLUTION 4: Extend road west of Mississauga Road only	ALTERNATIVE SOLUTION 5: Extend Mount Pleasant GO Station access road (Lagerfeld Road) to west of Mississauga Road + Alternative 2 & 3
<p>This alternative solution is not recommended for the following reasons:</p> <ul style="list-style-type: none"> Does not address current and future traffic operations issues and multi-modal transportation needs. Results in delays and safety concerns associated with increased traffic along other east-west and north-south roadways in the study area in the longer term. Does not support the land use policies and future development plans for Mobility Hub which in order to create Value around Mount Pleasant GO commuter train station, which acts as a MOBILITY HUB connecting inter-regional GO service (rail and bus-connecting Toronto with Georgetown, Guelph and Kitchener) with Brampton local transit <p>This alternative solution does not address problems and opportunities for the project and therefore is not recommended.</p>	<p>This alternative solution is not recommended as a stand alone solution for the following reasons:</p> <ul style="list-style-type: none"> Not consistent with planning policies. Does not fully address future traffic demand. Does not provide connectivity to mobility hub. Does not provide access to future development. <p>This alternative solution does not fully address problems and opportunities for the project and therefore is not recommended as a stand alone solution. Recommended for implementation along with Alternative 5.</p>	<p>This alternative solution is not recommended as a stand alone solution for the following reasons:</p> <ul style="list-style-type: none"> Provides minimal additional transportation capacity but the projected capacity problem would still exist with local improvements only. Not consistent with planning policies Does not fully address future traffic demand. Does not provide connectivity to mobility hub. Does not provide access to future development. <p>This alternative solution does not fully address problems and opportunities for the project and therefore is not recommended as a stand alone solution. Recommended for implementation along with Alternative 5.</p>	<p>This alternative solution is not recommended for the following reasons:</p> <ul style="list-style-type: none"> Provides connectivity/access only to the west side of Mississauga Road. Does not provide connectivity to the mobility hub. Does not fully address future traffic growth. Does not provide access to development on the east side of Mississauga Road. <p>Although Alternative # 4 may provide some relief to the east-west traffic future connections but it does not fully support the land use policies and future development plans. It does not fully address the problem statement.</p> <p><i>Although this alternative solution is not recommended but it is carried forward to design alternative evaluation for further analysis.</i></p>	<p>This alternative solution is recommended for the following reasons:</p> <ul style="list-style-type: none"> Improves current and future traffic conditions. Provides additional transportation capacity and access; Improved traffic operation safety; strategic multi-modal connections linking future planned destinations including mobility hub. Facilitate direct travel for all modes of travel including transit, walking and cycling, and reduce the reliance on vehicles and the associated congestion/pressure placed on Bovaird Drive and Mississauga Road and their intersection. Best responds to the social- cultural criteria as it supports the land use policies and future development plan of the Mount Pleasant and Heritage Heights Community, and supports potential commuters from communities north and/or west of Brampton. <p><i>This alternative solution best addresses problems and opportunities for the project and therefore is recommended.</i></p>

Five alternative solutions studied and assessed – two alternative solutions carried forward:

- ALTERNATIVE SOLUTION 4: Extend road west of Mississauga Road only
- ALTERNATIVE SOLUTION 5 (**PREFERRED**): Extend Mount Pleasant GO Station access road to west of Mississauga Road + Alternative 2 & 3



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MUNICIPAL CLASS EA



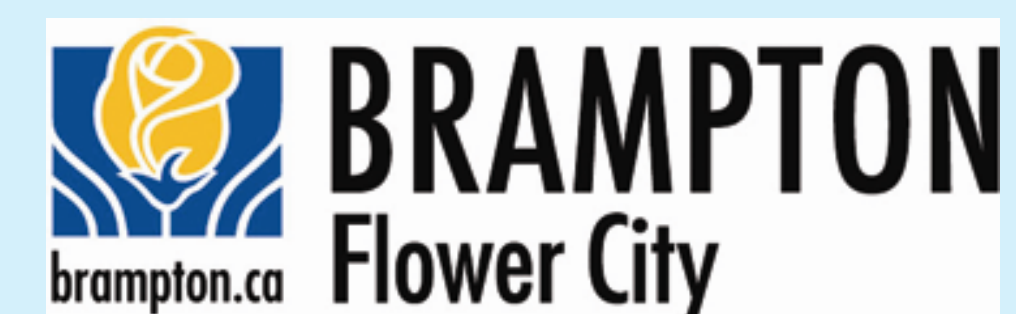
ALTERNATIVE DESIGN CONCEPTS

➤ A series of alternative design were developed for the preferred solution at a preliminary level of detail to properly assess the potential impacts and benefits associated with each alternative.

DESIGN ALT. 1A	DESIGN ALT. 1B	DESIGN ALT. 2	DESIGN ALT. 3A	DESIGN ALT. 3B	DESIGN ALT. 4A	DESIGN ALT. 4B	DESIGN ALT. 5
<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment past Mississauga Road at 419m north of Bovaird Drive centreline. Longer span bridge. (Crossing abutments <u>beyond</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment past Mississauga Road at 419m north of Bovaird Drive centreline. Shorter span bridge. (Crossing abutments <u>within</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment past Mississauga Road at approximately 240m north of Bovaird Drive centreline. 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment past Mississauga Road at the proposed Huttonville Creek bridge location, at an 70° angle, approximately 473m north of Bovaird Drive centreline. Longer span bridge. (Crossing abutments <u>beyond</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment past Mississauga Road at the proposed Huttonville Creek bridge location, at an 70° angle, approximately 473m north of Bovaird Drive centreline. Shorter span bridge. (Crossing abutments <u>within</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment does not intersect with Mississauga Road but utilize proposed slip road north of Huttonville Creek crossing, just south of CN Rail. Longer span bridge. (Crossing abutments <u>beyond</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Continuation of the existing Lagerfeld Drive to lands west of Mississauga Road. Alignment does not intersect with Mississauga Road but utilize proposed slip road north of Huttonville Creek crossing, just south of CN Rail. Shorter span bridge. (Crossing abutments <u>within</u> 30m regulated habitat zone) 	<ul style="list-style-type: none"> Not connecting Mississauga Road with Mount Pleasant GO Station. East-west connection will start at Mississauga Road, extending to the west, at 419m offset from Bovaird Drive centreline.



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EVALUATION CRITERIA FOR ALTERNATIVE DESIGNS

The following assessment factors were used to evaluate alternative designs:

Technical

- Ability to Improve East-West Capacity
- Safety / Traffic Operations
- Support for Transit Connectivity to Mobility Hub
- Ability to address Flood Risks
- Ability to Improve Drainage System
- Emergency Services
- Utilities

Social-economic /Cultural Environment

- Support for Future Designated Growth Areas
- Adjacent Land-uses/Properties
- Noise Levels
- Access & Circulation
- Traffic Infiltration Effects
- Heritage Resources & Archaeological Features
- Short Term Construction Related Impacts

Natural Environment

- Existing Environmentally Sensitive Areas
- Vegetation
- Habitat Areas (Terrestrial)
- Species at Risk
- Existing Watercourses
- Water Quality / Quantity
- Effects on Air Quality

Cost

- Capital Costs
- Road Operation and Maintenance Costs

EVALUATION OF ALTERNATIVE SOLUTIONS

	DESIGN ALT. 1A	DESIGN ALT. 1B	DESIGN ALT. 2	DESIGN ALT. 3A	DESIGN ALT. 3B	DESIGN ALT. 4A	DESIGN ALT. 4B	DESIGN ALT. 5
Transportation (Traffic operations and accommodation of future travel demand; Traffic safety; Road network compatibility/connectivity; Accommodation of pedestrians/cyclists; Response times/access for emergency vehicles)	●	●	◐	●	●	○	○	◐
Engineering Considerations - Constructability (Services/utilities; Construction staging; Drainage/stormwater management; Flooding and erosion hazards)	◐	◑	◐	◐	◑	◐	◑	●
Cultural (Archaeological resources; Built heritage resources)	◐	◐	◐	◐	◐	◐	◐	◑
Socio-Economic Environment (Sustainability and City/ Regional Planning; Compatibility with existing and proposed developments; Potential sustainability improvements to the community, including green house gas emission; Noise impacts, Property impacts)	●	●	◐	●	●	○	○	◐
Natural Environment (Vegetation; Wildlife; Water resources; Fisheries; Potential to impact Species at Risk (SAR) – Provincial Best Management Practices for Redside Dace)	◐	◑	◐	◑	◑	◑	◑	◑
Cost/Implementation	◑	◑	◐	◑	◑	◑	◑	●
Overall	◑	●	◐	◑	◑	○	○	◐

LEGEND	○	◑	◐	◑	●
	Least Preferred			Most Preferred	

EAST-WEST CONNECTION (LAGERFELD DRIVE)
MOUNT PLEASANT GO STATION (CREDITVIEW ROAD)
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EVALUATION OF PREFERRED PRELIMINARY ALTERNATIVE DESIGN CONCEPT

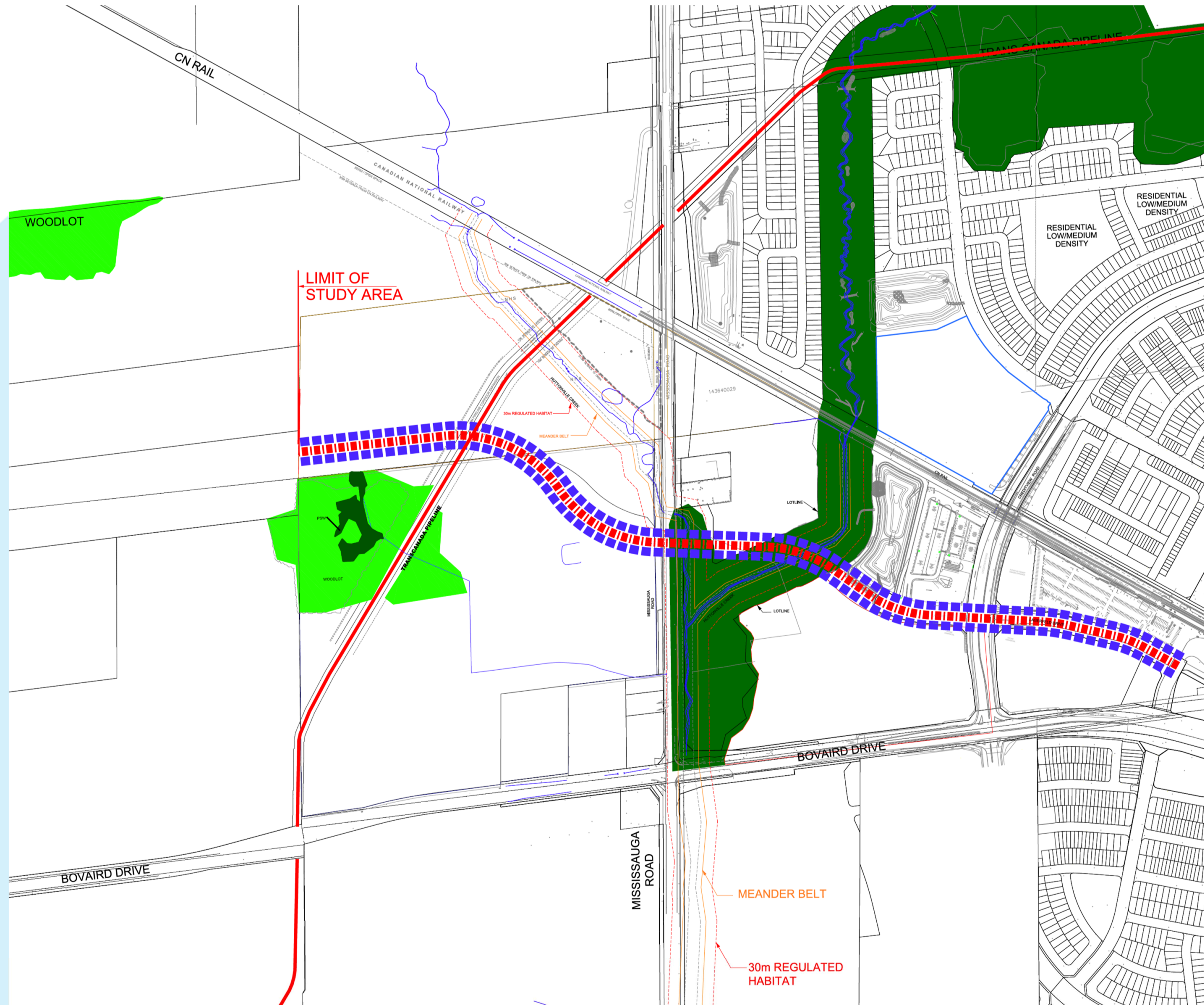
DESIGN ALT. 1A	DESIGN ALT. 1B	DESIGN ALT. 2	DESIGN ALT. 3A	DESIGN ALT. 3B	DESIGN ALT. 4A	DESIGN ALT. 4B	DESIGN ALT. 5
<p>This design alternative is similar to 1B, the difference being the bridge structural differences. It is not recommended for the following reasons:</p> <ul style="list-style-type: none"> While this option addresses the problem statement has less natural heritage impacts than 1b the structural capital costs are significantly higher 	<p>Recommended to carry forward</p> <p>This design alternative is recommended for the following reasons:</p> <ul style="list-style-type: none"> Meets minimum intersection offset from Bovaird Drive intersection as specified in City's standards (300m) for the crossing at Mississauga Road. Provides access to the GO Station from the west which improve traffic operations in the area. This option is expected to involve much lower structural capital costs than Design Alternative 1A. This option best addresses the problem statement. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> Does not meet the minimum intersection offset from Bovaird Drive intersection as specified in City's standards (300m) for crossing at Mississauga Road Will have queuing issue for southbound left turning vehicles along Mississauga Road at Bovaird Drive with reduced intersections distance between Bovaird Drive and the east-west connection. Not consistent with the planned function of the corridor identified in the City's TMP, Heritage Heights TMP, and the identified east-west connection needs. Will not fully addresses anticipated capacity deficiencies. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> Technically challenging to remove existing culvert at Mississauga Road Huttonville Creek crossing and realign creek without interrupting existing traffic operations. Major changes to the Huttonville Creek crossing bridge at Mississauga Road, which is already in detailed design by the Region of Peel. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> Technically challenging to remove existing culvert at Mississauga Road Huttonville Creek crossing and realign creek without interrupting existing traffic operations. Major changes to the Huttonville Creek crossing bridge at Mississauga Road, which is already in detailed design by the Region of Peel. With proposed crossing structures, major increase in flood elevations in the Huttonville Creek expected. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> This design alternative will not address the Problem/Opportunity statement and provide a wider benefit to the future developments and community by providing a reasonable spaced direct link to the transportation hub. May be problematic given its proximity to the rail corridor and conflict with the proposed new layover facility at Heritage Road on the south side of the corridor. Does not support the City's endorsed Community Design Principles that include Transit Oriented Development in an Urban Core around Mount Pleasant GO Station. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> This design alternative will not address the Problem/Opportunity statement and provide a wider benefit to the future developments and community by providing a reasonable spaced direct link to the transportation hub. May be problematic given its proximity to the rail corridor and conflict with the proposed new layover facility at Heritage Road on the south side of the corridor. With proposed crossing structures, major increase in flood elevations expected. Abutments of the crossing structures are on the floodplain. 	<p>This design alternative is not recommended for the following reasons:</p> <ul style="list-style-type: none"> This design alternative will not address the Problem/Opportunity statement and provide a wider benefit to the future developments and community by providing a direct link to the transportation hub. Although design alternative 5 may provide some relief to the east-west traffic future connections but it does not fully support the land use policies and future development plans.



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MOUNT PLEASANT GO STATION (CREDITVIEW ROAD)
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MUNICIPAL CLASS EA



ALTERNATIVE DESIGN CONCEPTS - ALIGNMENT 1

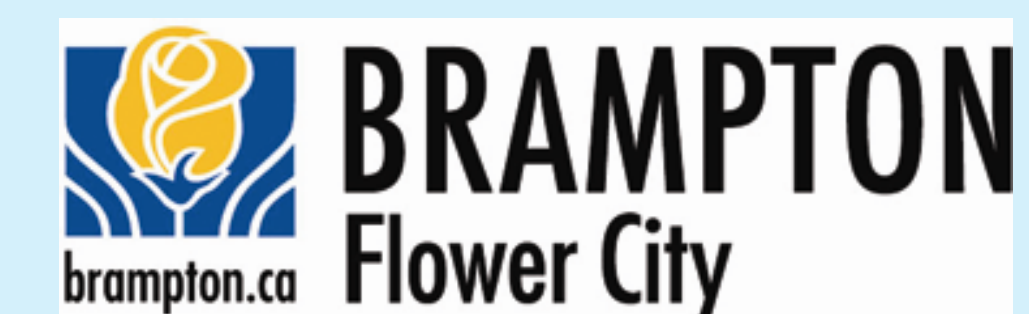


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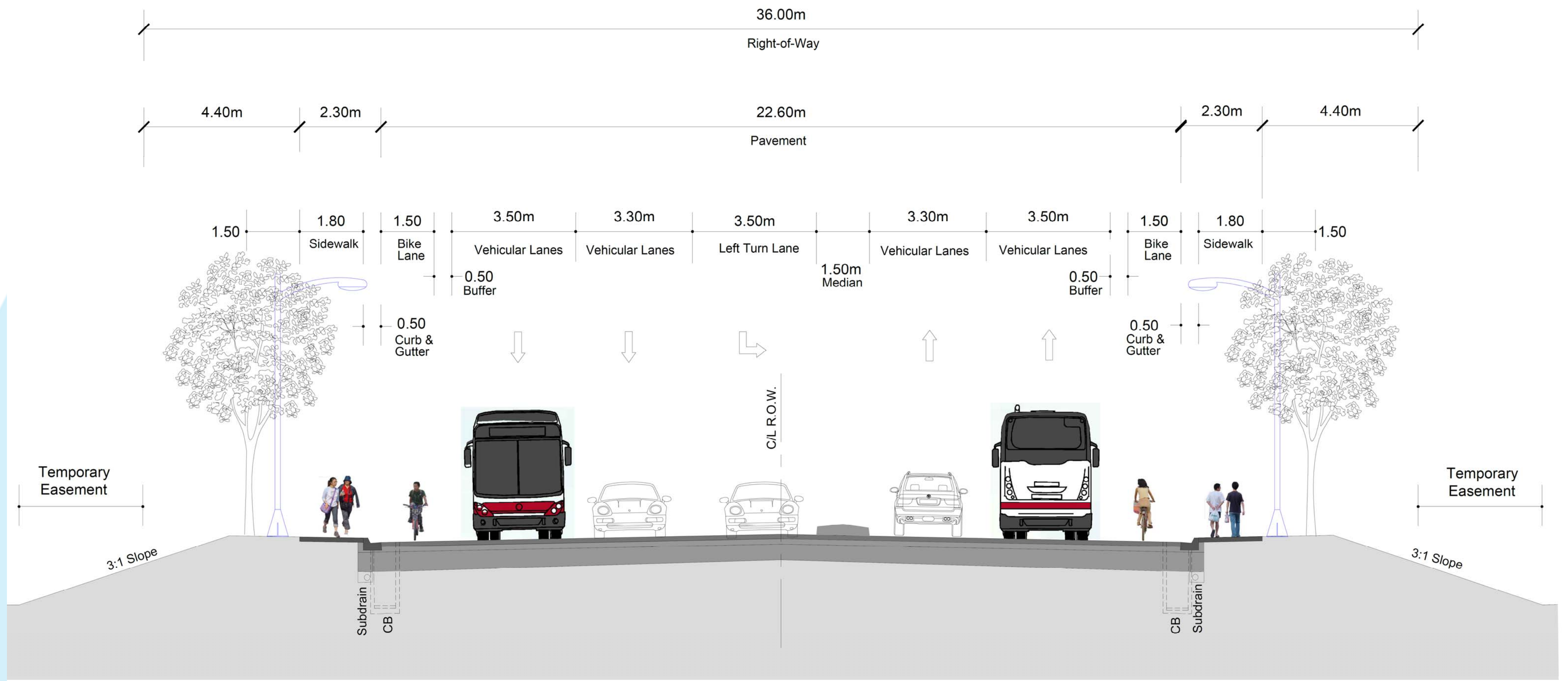
- Address all geometric requirements
- 2 new creek crossings
- Meet minimum distance between signalized intersections
- No impact on woodlots
- Meet sightline requirements
- No impact on structure proposed in Mississauga Road EA



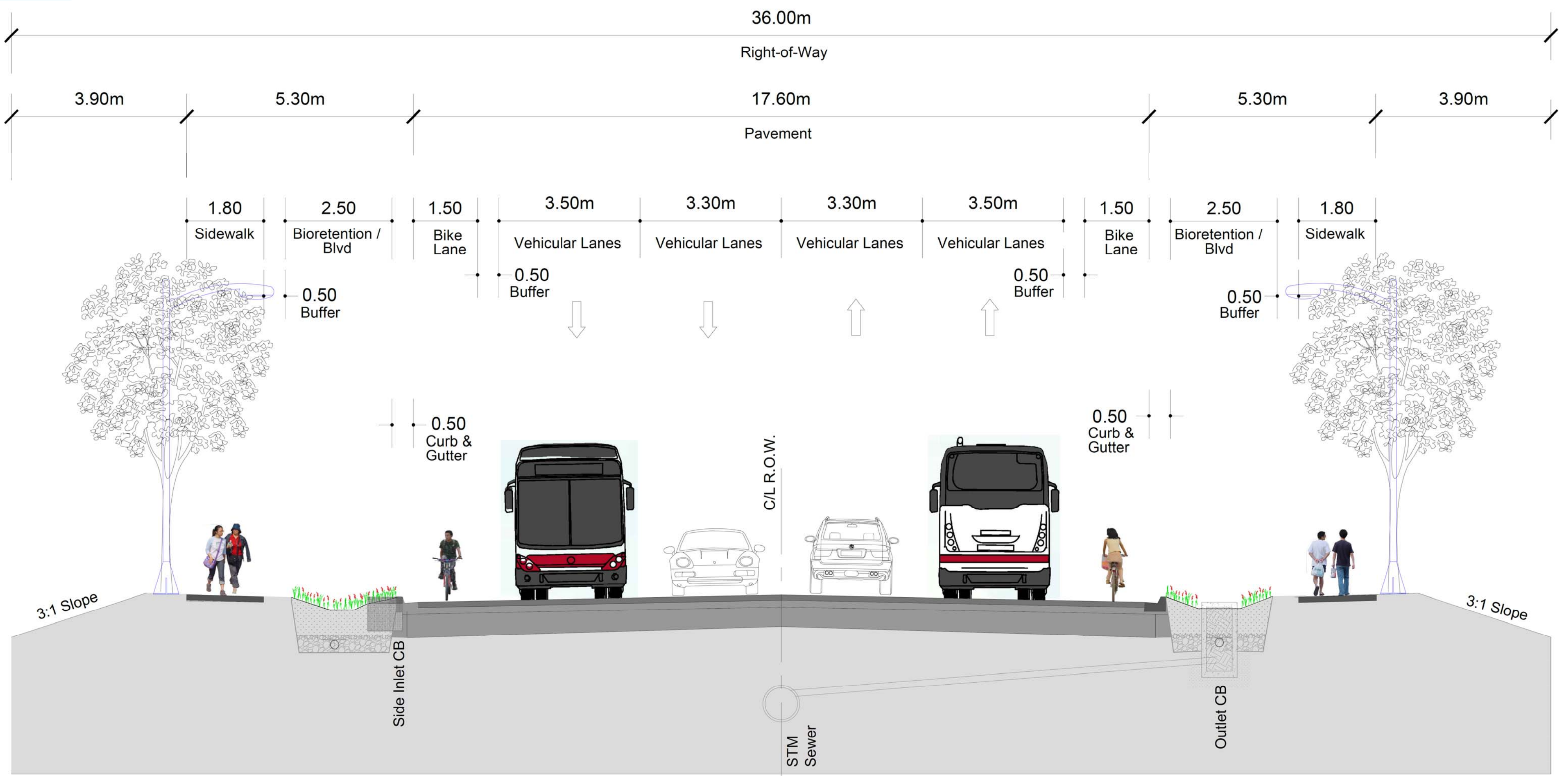
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PROPOSED TYPICAL CROSS SECTION



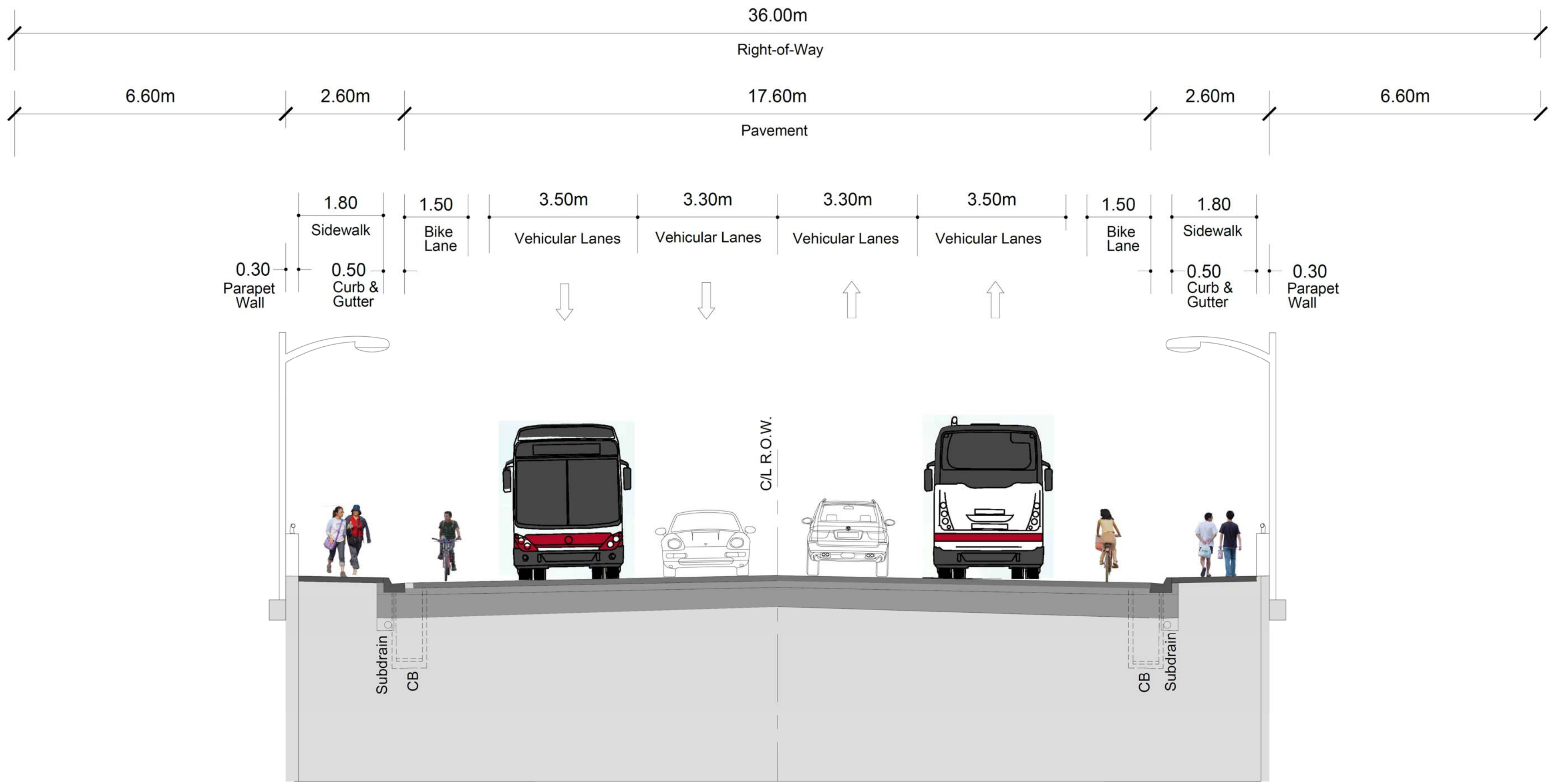
INTERSECTION



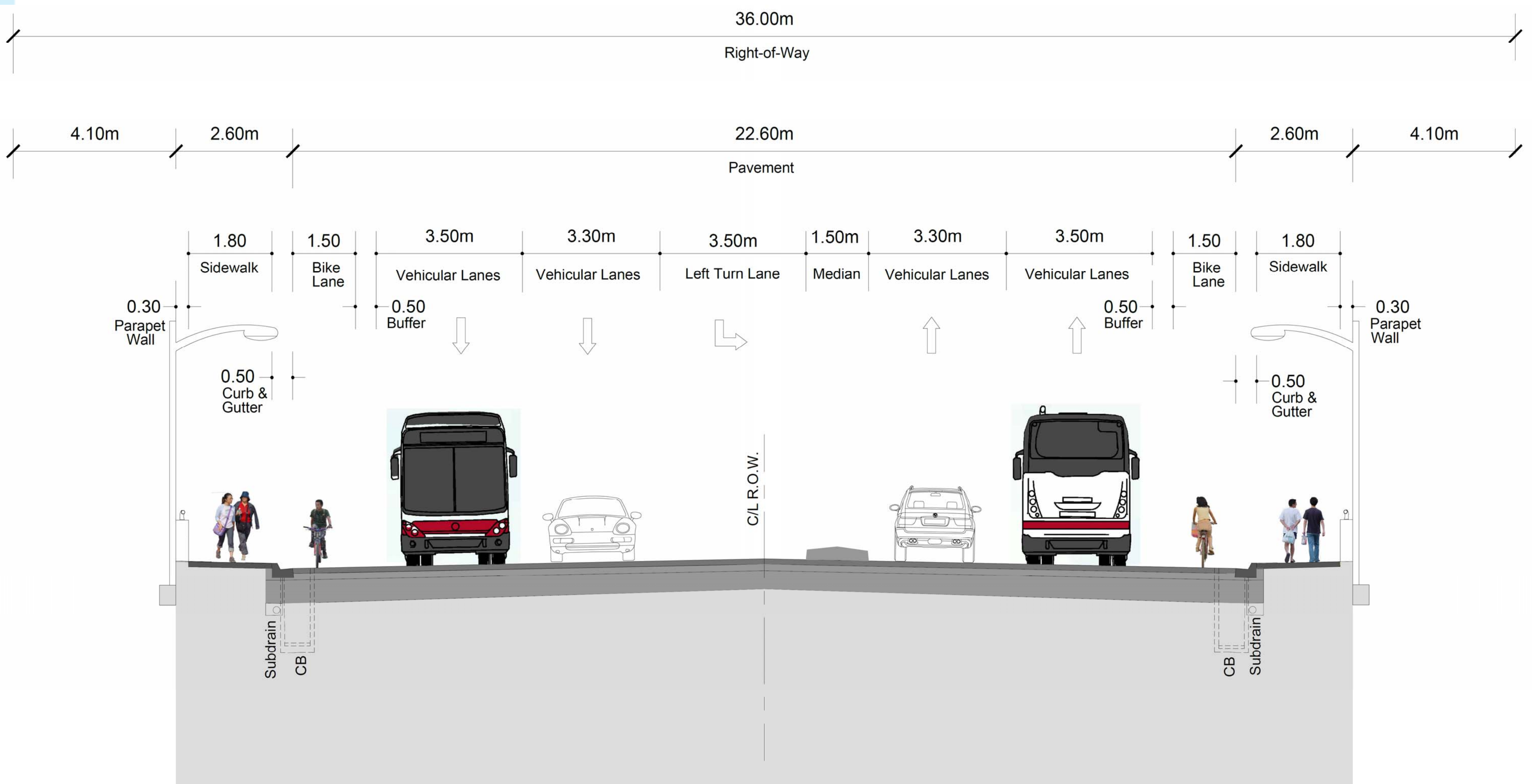
MID BLOCK WITH BIO SWALES

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PROPOSED TYPICAL CROSS SECTION



EAST CROSSING BRIDGE



MISSISSAUGA ROAD CROSSING BRIDGE

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PRELIMINARY PREFERRED ALTERNATIVE DESIGN

DESIGN ALTERNATIVE 1B

**Continuation of the existing Mount Pleasant GO Station access road to lands west of Mississauga Road. Alignment past through Mississauga Road at 419m north of Bovaird Drive centreline.
(Crossing abutments within 30m regulated habitat buffer zone)**

This design alternative is recommended to carry forward for the following reasons:

- Meets minimum intersection offset from Bovaird Drive intersection as specified in City's/Region of Peel's standards for the crossing at Mississauga Road.
- Will not have queuing issue (southbound queues along Mississauga Road) as there is sufficient storage distance between Bovaird Drive and the new connection for left turning vehicles onto Bovaird Drive.
- Passes Mississauga Road at approximately the midpoint between Bovaird Drive and CN Rail, evenly splitting the areas, as required for Collector Roads.
- Provides access to future developments.
- Provides east-west connection including access to Mount Pleasant GO Station.
- Connects major destinations with multi-modal access (transit, active transportation and auto). enhancing the connectedness, and provide opportunity for successful development of Mount Pleasant Village.
- This option is expected to involve much lower structural capital costs than Design Alternative 1A.
- This option best addresses the problem statement.



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NEXT STEPS AND STUDY CONTACTS

Following this Public Information Centre, the project team, will:

- Receive public comments within two weeks of PIC.
- Address comments received from the public and agencies.
- Finalize the preliminary preferred design.
- Document the study findings, decision making process and incorporate them along with the preliminary preferred design into an Environmental Study Report (ESR)
- Complete and file the ESR for 30 day public and agency review period.
- Issue a notice of completion.

Please submit your comments to one of the following project team members by **Nov. 22, 2019**.

Consultant for the Class EA:

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