

# Public Information Centre (PIC) 2

Winston Churchill Boulevard Municipal Class EA Study  
Highway 401 to Embleton Road / 5 Sideroad

Regional Municipalities of Peel and Halton

**May 19, 2022 to June 9, 2022**

**HATCH**

 **Region of Peel**  
working with you



# Indigenous Land Acknowledgment

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We would like to begin by acknowledging the land on which we gather, and which the Region of Peel operates, is part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous Peoples inhabited and cared for this land, and continue to do so today. In particular, we acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Métis; and most recently, the territory of the Mississaugas of the Credit First Nation who are direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.



# Summary of PIC #1 (October 2015)

## Topics Covered:

- Existing Traffic Conditions / Traffic Analysis
- Existing Environment
- Alternative Solutions
- It was determined that Winston Churchill Blvd. needed to be widened to accommodate future traffic demands.

## Feedback

- Request for additional information related to timing of project, property requirements, and construction
- Interest in other ongoing projects, including Financial Drive, GTA West, Halton-Peel Boundary Study

## Activities Since

- A Stage 2 Archaeological Assessment was completed for Mount Zion Cemetery in 2017
- Alternative Design Concepts were evaluated to identify a preliminary preferred design





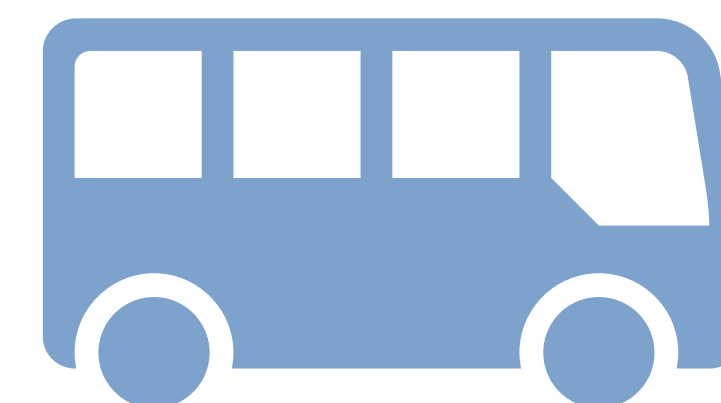
# Public Information Centre #2

## Purpose of the Study

- Complete a Schedule C Municipal Class EA and Preliminary Design for improvements to Winston Churchill Blvd.
- Identify, define and evaluate existing and future capacity, traffic safety, design and operational needs along Winston Churchill Blvd.
- Identify improvements to accommodate existing and future transportation needs.
- Identify potential impacts to the natural, social, cultural, economic and technical environments.

## Objectives of PIC #2

1. Learn about the alternative design concepts
2. Review the technical work completed in support of the study to date
3. Provide input on the preliminary preferred design concept and evaluation methods
4. Discuss next steps and obtain your input

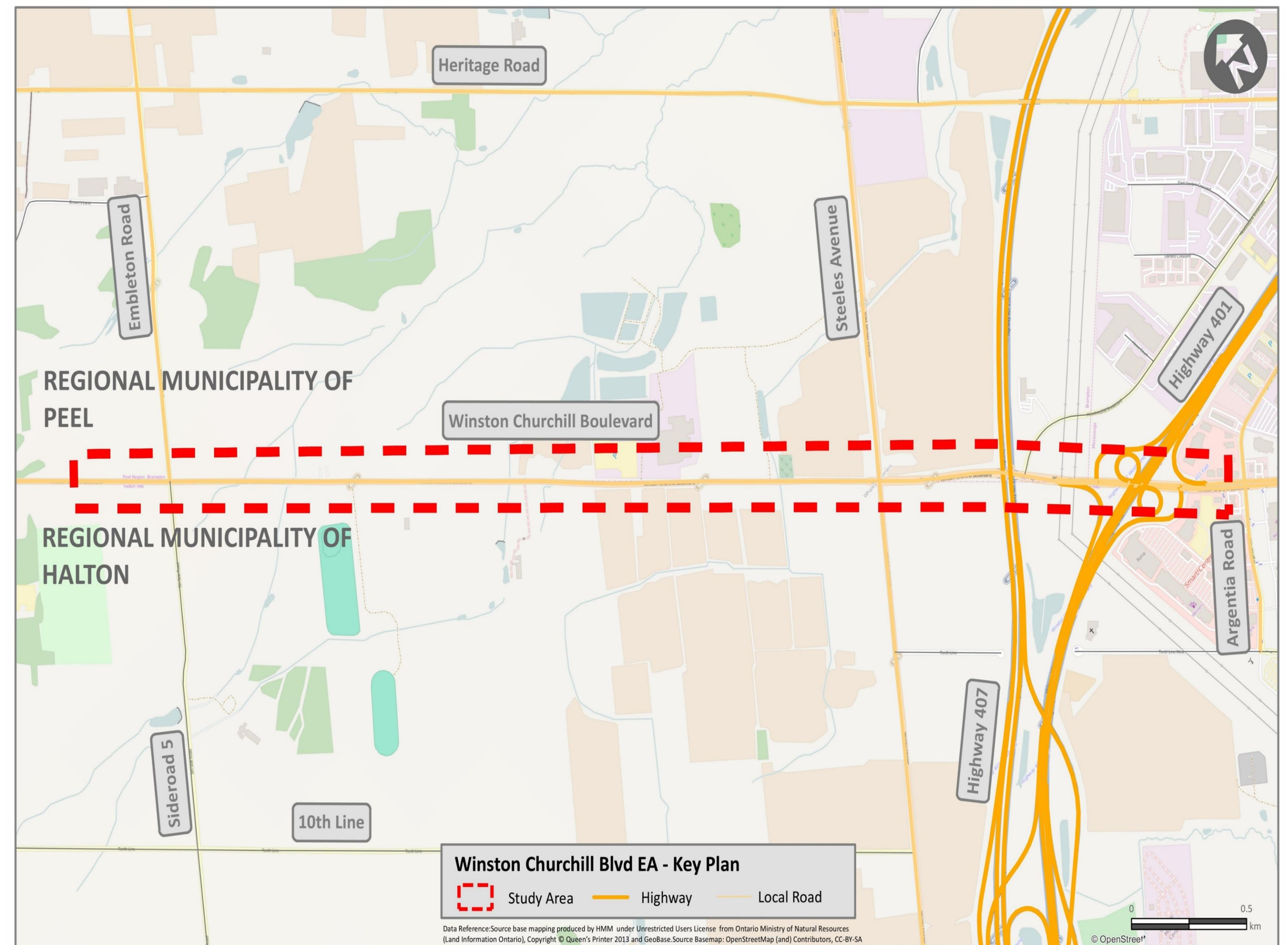




# Study Background

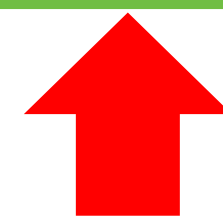
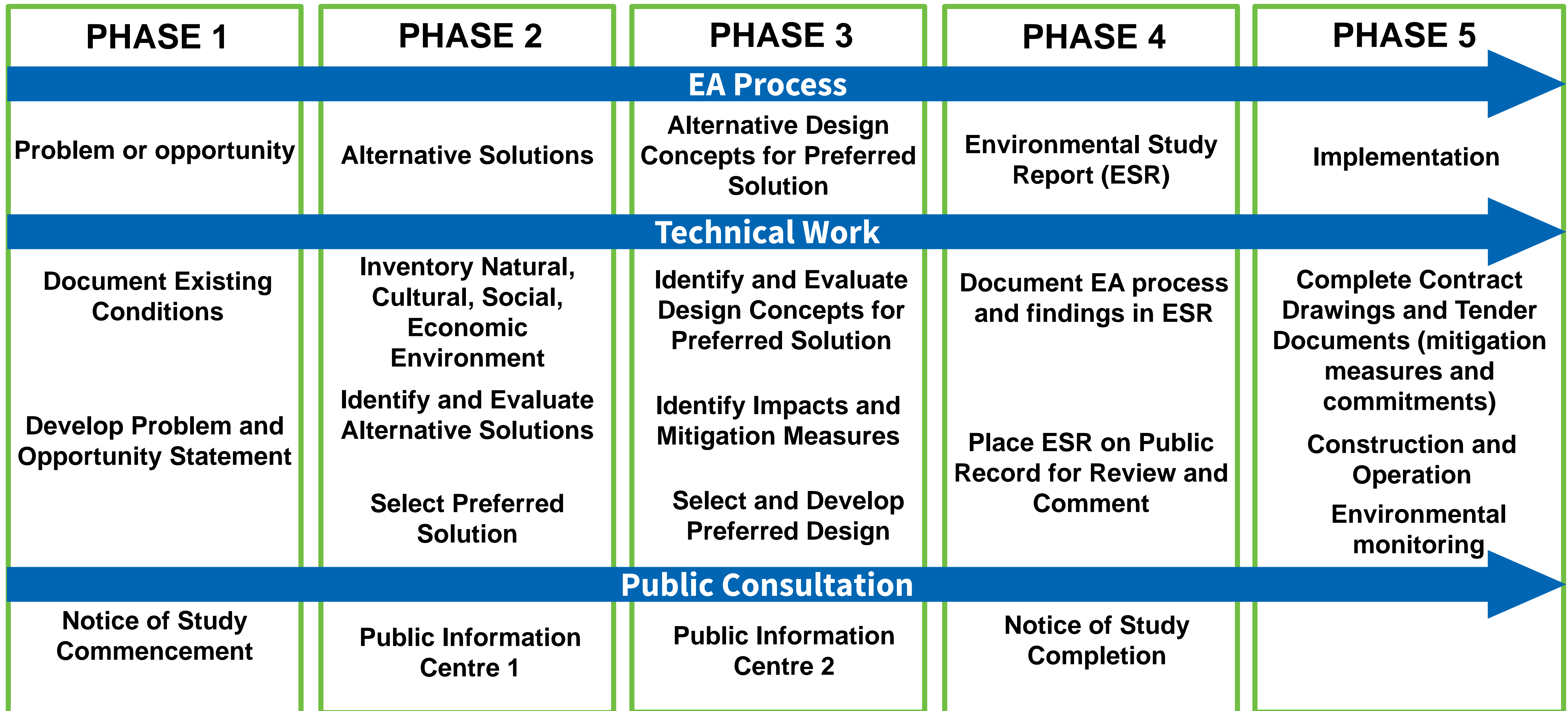
## Existing Characteristics

- 4.2 km long (between Hwy 401 to Embleton Road) boundary road (with shared jurisdiction) between the Region of Halton and the Region of Peel
- Bordering Cities: Brampton and Mississauga
- Bordering Towns: Town of Halton Hills
- 3 watercourses
- 4 travel lanes + two-way left-turn lane (Hwy 401 to just north of Maple Lodge Farms)
- 2 lanes from Maple Lodge Farms (MLF) northerly
- Varying posted speed limits (60-70 km/h)





# Class EA Process – Schedule ‘C’ Project



**WE ARE HERE**



# Transportation Planning

## Region of Peel

- Region of Peel Long Range Transportation Plan (2012 / 2019)
- Region of Peel Sustainable Transportation Strategy (2018)

## Halton Region

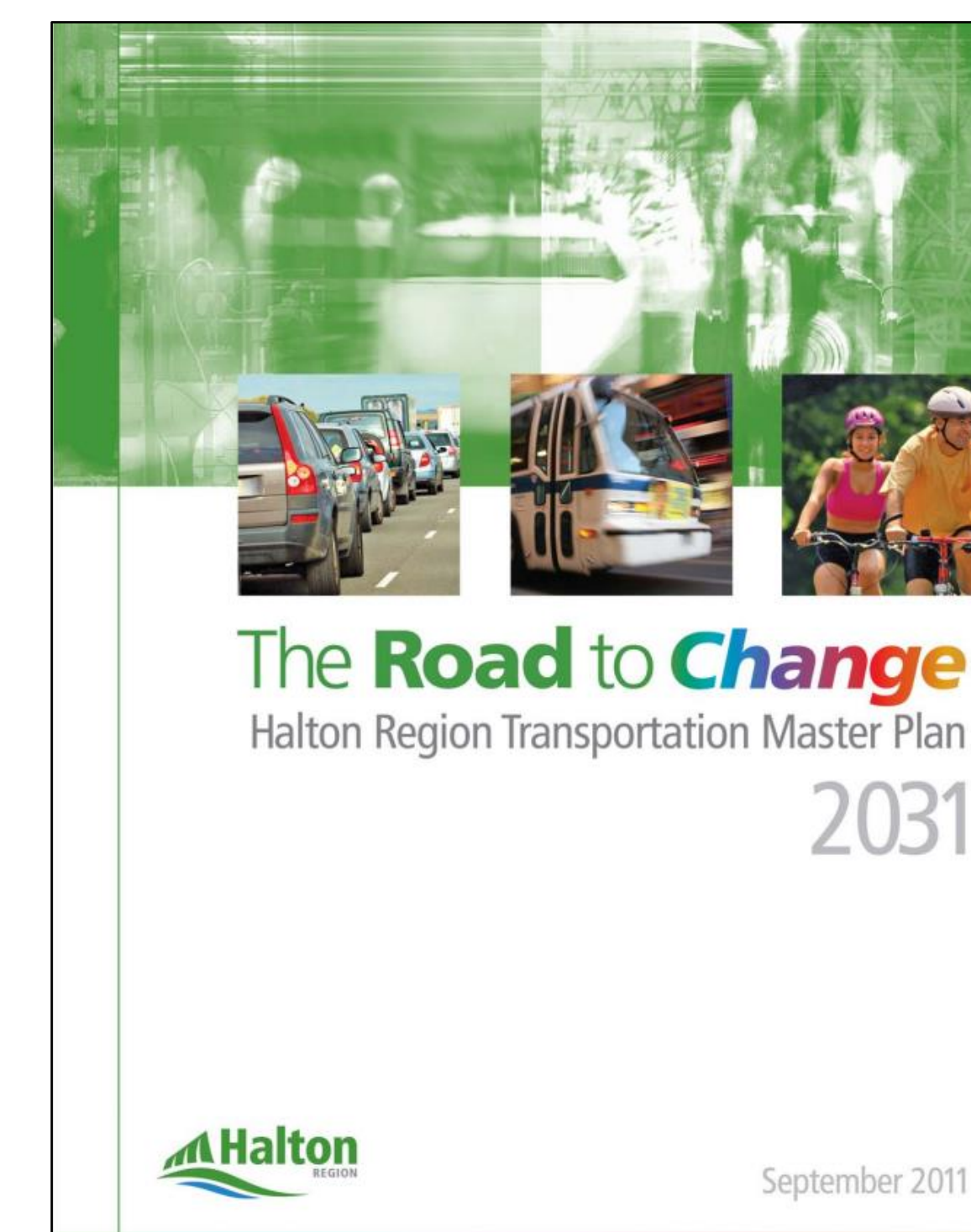
- The Road to Change – Halton Transportation Master Plan 2031 (2011)
- Halton Region Active Transportation Master Plan 2031 (2015)

## City of Brampton

- Bram West Secondary Plan
- Bram West Parkway / Financial Drive Environmental Assessment
- Heritage Heights Secondary Plan and
- Heritage Heights Transportation Master Plan

## Town of Halton Hills

- Premier Gateway Phase 2B Secondary Plan (ongoing)





# Traffic Analysis

The Traffic Analysis study demonstrated delays are expected to occur within the Study Area by 2031 if there are no improvements. All sections of the Study Area are expected to be “at or beyond capacity”.

1. Increase corridor multi-modal capacity

2. Improve safety and comfort for both walking and cycling on both sides of the roadway

3. Improvements to transit services and facilities

4. Improve travel time reliability of all users



# Physical Constraints

## 407ETR Structure

New piers and pier cap constructed on east side of structure to support future expansion of Winston Churchill Blvd. and 407/ETR. Design of existing structure constrains ability to widen Winston Churchill Blvd. to the west.

## Hydro Corridor

Currently extends along the east side of Winston Churchill Blvd and will require relocation to support any widening of the roadway.

## Existing Development

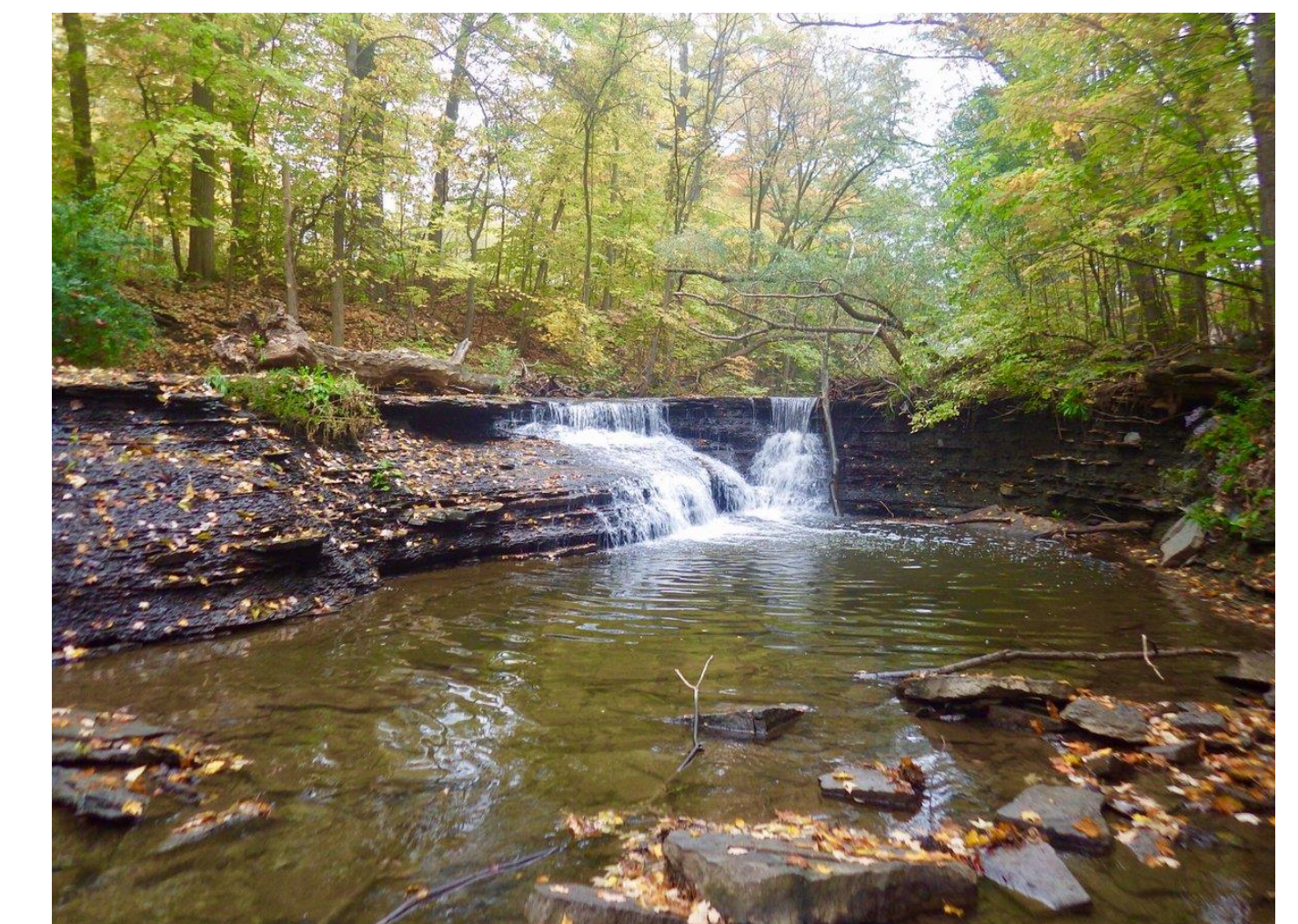
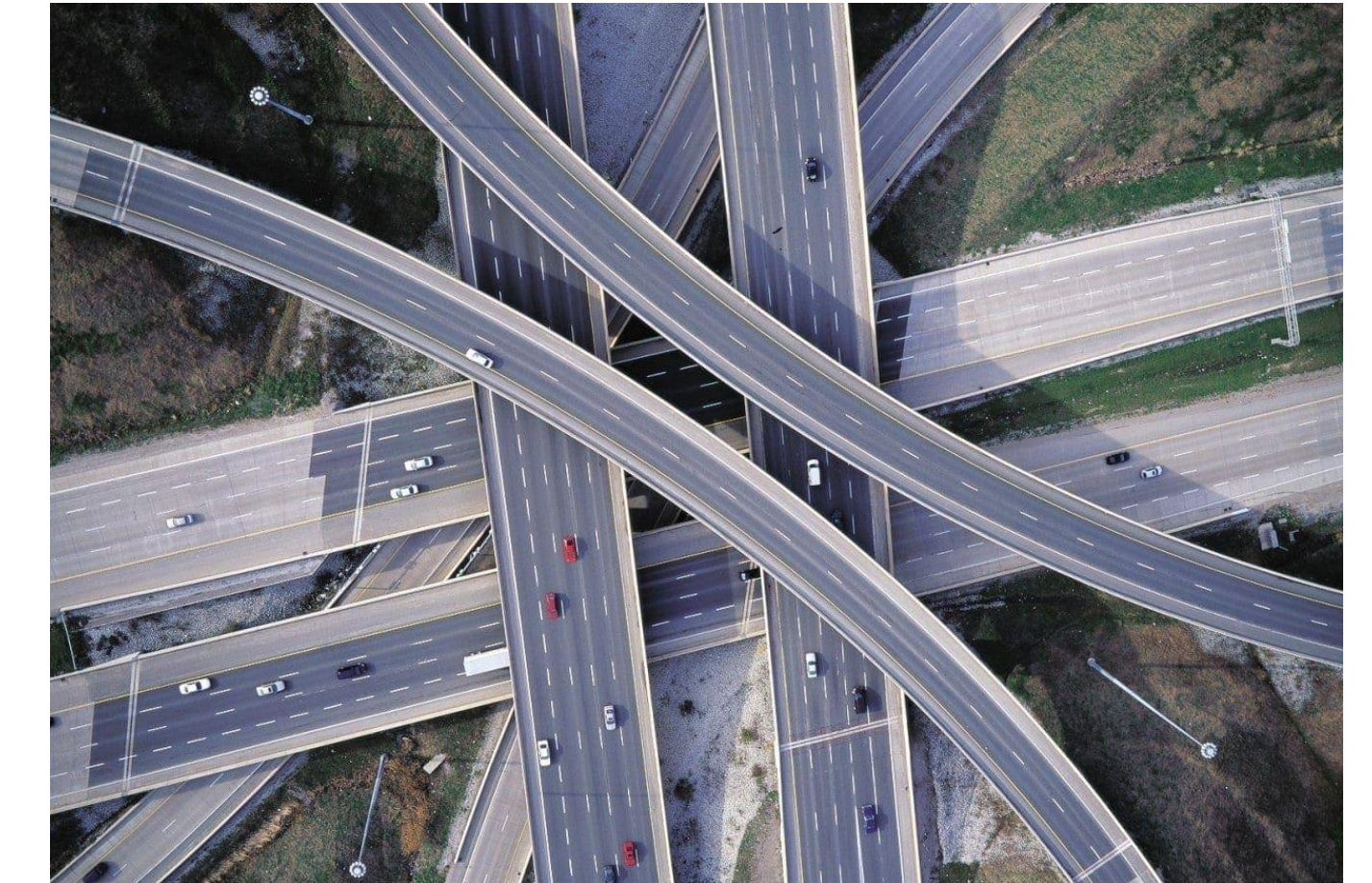
Existing residences located on west side of roadway north of Steeles Ave. Existing industrial development on east side south of Steeles Ave.

## Watercourses

There are three watercourses which cross the corridor, including Mullet Creek, Levi Creek South and Levi Creek North, which are conveyed through concrete box structures under the roadway.

## Mount Zion Cemetery

The cemetery is located close to the east side of the roadway. A Stage 2 Archaeological Assessment was completed and additional investigations required to protect this resource.





# Studies by Others

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## **New Development**

Town of Halton Hills is undertaking a Secondary Plan, which may include a new connection with Winston Churchill Blvd. City of Brampton is undertaking an update to the Bram West Secondary Plan, which includes multiple connections to Winston Churchill Blvd.

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## **Highway 401**

The existing Highway 401 structure is being reconstructed to provide improved sidewalk width and a re-alignment of Winston Churchill Blvd. to the east to support provision of a carpool lot in the northwest quadrant of interchange.

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## **Highway 413 (GTA West)**

Highway 413 (GTA West freeway) is proposed to cross Winston Churchill Blvd. south of Embleton Rd.

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## **Heritage Heights Transportation Study**

The Heritage Heights Transportation Study (to be completed in 2022) seeks to develop a narrower north-south boulevard crafted to provide defined spaces for pedestrians. The increased capacity of Winston Churchill Blvd. and the cross-section improvements will help facilitate traffic flow through the area.

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# Technical Studies



**Traffic and Transportation**



**Drainage & Stormwater Management**



**Noise Impact**



**Natural Environment –  
Terrestrial & Aquatic**



**Cultural Heritage  
Assessment**



**Air Quality**



**Geotechnical,  
Contamination and  
Hydrogeological**



**Meanderbelt Analysis**



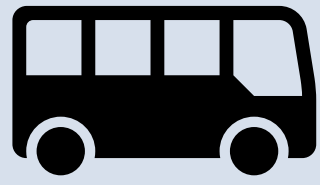



**Structural and Culvert  
Assessment**



**Stage 1 Archaeological  
Assessment**



# Evaluation Criteria

	Transportation Services		Economic Environment/Cost
	<ul style="list-style-type: none"> <li>Improves public transit</li> <li>Improves safety for all travel modes</li> <li>Improve mode choice</li> <li>Reduce congestion and delays</li> <li>Create pedestrian &amp; cycling friendly environment</li> <li>Meets transportation planning objectives</li> </ul>	\$	<ul style="list-style-type: none"> <li>Accommodate planned development and growth</li> <li>Minimize impacts on business properties</li> <li>Improve access to business and key employment areas</li> <li>Minimize Construction value</li> <li>Minimize operating costs</li> <li>Minimize property requirements</li> </ul>
	Engineering		Natural Environment
	<ul style="list-style-type: none"> <li>Accommodates SWM and Drainage needs</li> <li>Minimizes utility relocations</li> <li>Minimizes constructability complexity</li> <li>Minimizes disruption due to construction</li> </ul>		<ul style="list-style-type: none"> <li>Protect designated natural areas</li> <li>Protect vegetation, wildlife and aquatic habitat</li> <li>Protect surface water and groundwater</li> </ul>
	Socio-Cultural Environment		
	<ul style="list-style-type: none"> <li>Improve air quality</li> <li>Minimizes impact on existing residential properties</li> <li>Improves access to residential areas</li> <li>Minimize traffic noise</li> <li>Preserves archaeological and cultural heritage features</li> </ul>		



# Technical Findings – Cultural Heritage

- The following Cultural Heritage Landscapes (CHLs) and Built Heritage Resources (BHRs) influenced the evaluation of alternative design concepts:
  1. Mount Zion Cemetery
  2. Maple Lodge Farms Complex
  3. Humphrey Farm
  4. 8768 Winston Churchill Blvd.
  5. Croatian Franciscan Social and Cultural Centre
  6. 9065 Winston Churchill Blvd.
  7. 9021 Winston Churchill Blvd.



## Mitigation

- All efforts to be taken during detailed design to reduce impact to CHLs and BHRs

## Commitments

- Preparation of Heritage Impact Assessment to document direct impacts to BHRs and CHLs
- Avoid laydown areas on CHL and BHR properties

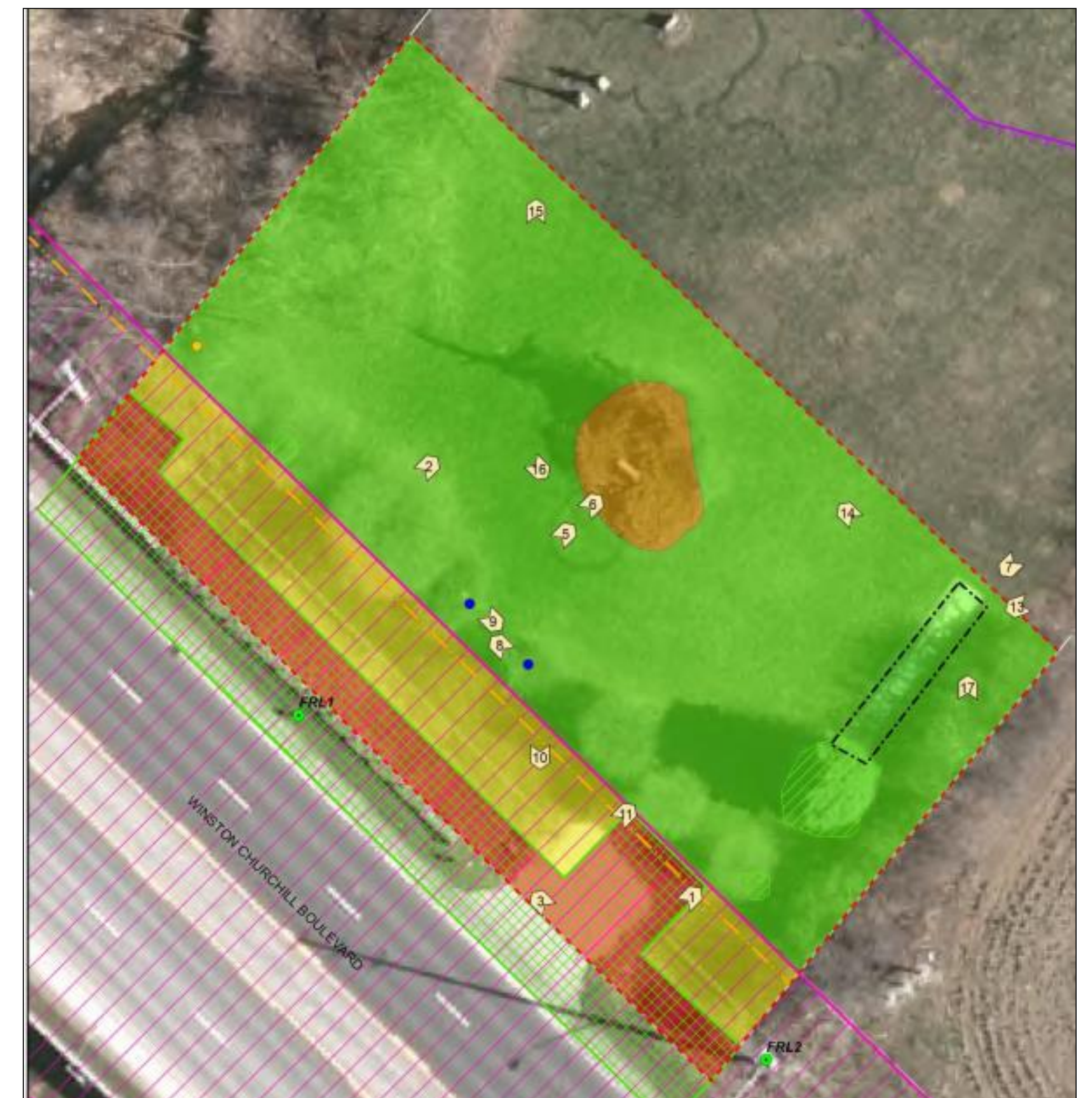


# Technical Findings - Archaeology

- A Stage 2 Archaeological Assessment was undertaken to review alternatives to reduce the impact on residential properties on the west side and investigate opportunities to shift the road farther to the east.
- A Stage 2 Archaeological Assessment was completed in 2017 for Mount Zion Cemetery - one location containing archaeological materials was identified adjacent to the project limits and will not be directly impacted by construction.

## Commitments

- A partial Stage 3 assessment to determine whether any areas of cultural heritage value and interest require Stage 4 excavation.
- Cemetery investigation to confirm no burial features are present.
- Implementation of an avoidance strategy including temporary barrier to be established along the interface between the protected area and the project limits during construction.
- Construction activities to be monitored by licensed archaeologist.



Legend	
Image Location and Direction	<b>Areas Surveyed</b>
Fixed Reference Landmark (FRL)	Test Pit Survey at an interval of 5 m
Study Area	Test Pit Survey at a Modified Interval
Ultimate 45 m ROW	<b>Areas Not Surveyed</b>
Property Parcel	Previously Assessed - Requires Further Assessment
Fencepost	Previously Assessed - No Further Concerns
Gatepost	<b>Previous Assessments</b>
Consolidated Monument	PIF #P018-288-2009 (Stage 1-2)
Tree Area	PIF #P018-325-2010 (Stage 3)
	PIF #P007-0678-2014 (Stage 1)



# Technical Findings – Noise & Air Quality

## Noise Assessment

- Noise assessment determined there is only a marginal increase in ambient noise from traffic.
- The expansion of Winston Churchill Boulevard is predicted to produce less than 3 dB increase from current noise levels, remaining below the daytime limit required by the Ministry of the Environment, Conservation and Parks and Region of Peel.

## Commitments

- During construction, will follow best practices and abide by noise complaint process and applicable noise by-laws

## Air Quality

- Sensitive receptors chosen for the assessment include 35 residential locations surrounding the roadway.
- Ambient monitoring data outlined that all contaminants are below respective guidelines except for certain forms of particulate matter, total suspended particles and annual benzene.
- Total Greenhouse Gas emissions were reduced within the study area except between Steeles Ave. and Maple Lodge Farms.

## Commitments

- Follow best practices during construction such as using equipment in good repair, machinery equipped with emission controls, and on-site dust suppression.



# Technical Findings - Natural Environment

## Potentially Impacted Features

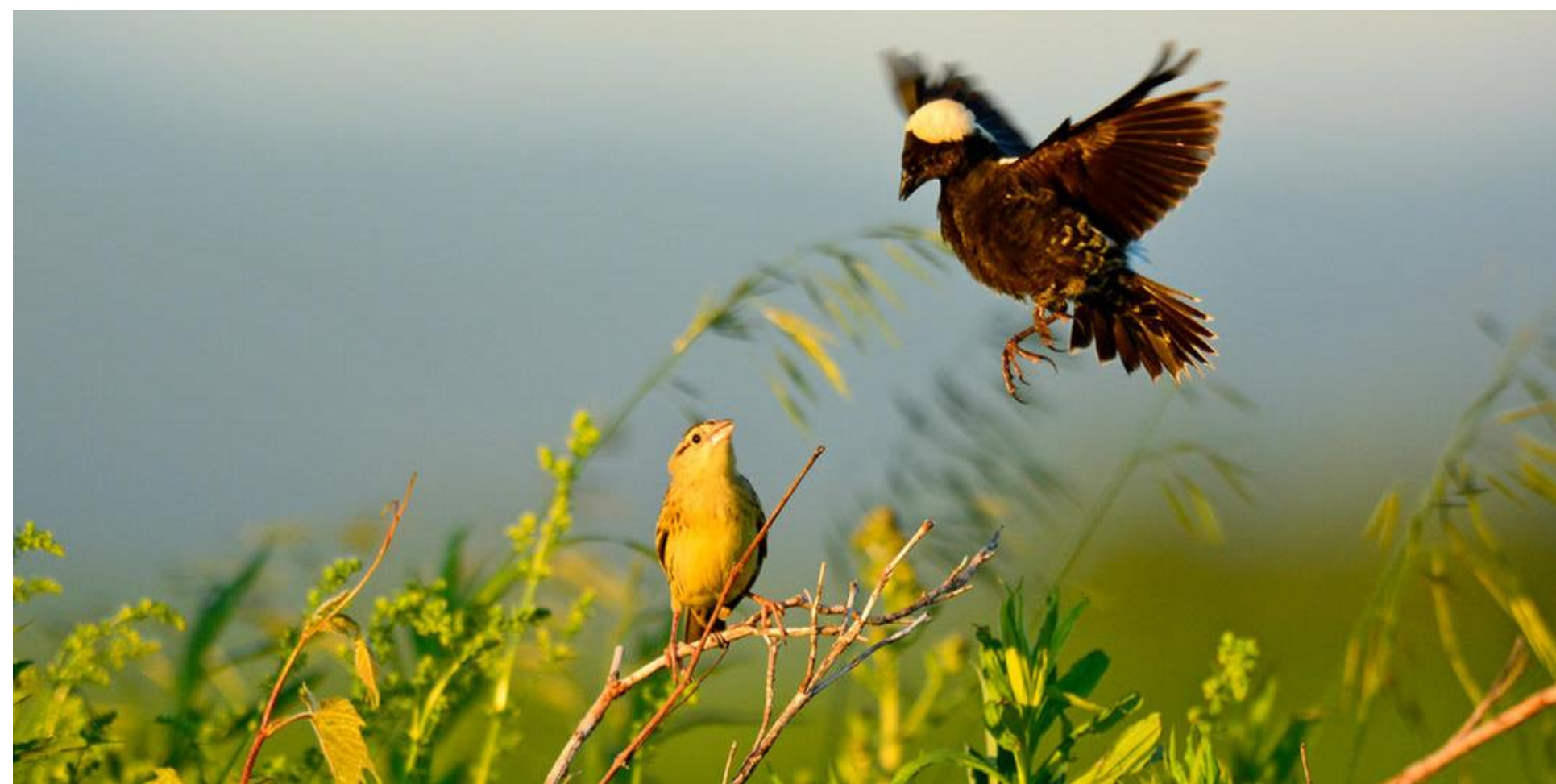
Tributaries of Levi Creek that flow through the Study Area are upstream of regulated Redside Dace habitat.

Potential Bobolink breeding habitat - risk of harming Bobolink during construction or disturbing species habitat (via increased noise, dust, human-species interaction, etc.).

Potential to adversely impact the Levi Creek Wetland Complex Provincially Significant Wetland (PSW) associated with Levi Creek North, as well as the three watercourses within CVC regulation via sedimentation caused by construction activities.

## Commitments

- Minimize work within the watercourse channels, to minimize potential impact to Redside Dace habitat.
- Construction and vegetation clearing to occur outside bird breeding window.
- Additional surveys may be required to confirm presence of suitable Bobolink habitat.
- Reduce impacts to watercourses, PSW and marsh areas associated with Levi Creek South and Mullet Creek, including the implementation of an Erosion and Sediment Control Plan





# Technical Findings – Stormwater Management

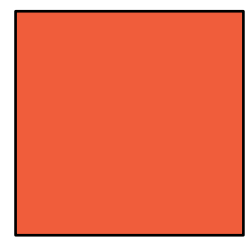
## Existing Stormwater System

- Storm water runoff from the study area catchments is currently conveyed via a combination of overland sheet flow to low spots along both sides of the right-of-way and/or storm sewer networks and eventually discharges into ten (10) outfall locations in the Levi Creek North and Levi Creek South and Mullet Creek sub-watersheds.
- Post-development runoff for road catchments is expected to increase due to the increase in overall imperviousness coverage.
- The stormwater management strategy was developed in consultation with CVC and will control the quantity increases to pre-development conditions.

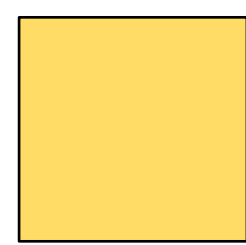
## Recommendations

- *Storage Volume:* Provided through proposed underground infiltration chambers at each outlet.
- *Major Storms:* Runoff resulting from major storms will be conveyed to the existing outlets
- *Minor Drainage/Overland Flows:* Will be collected by a series of catch basins and conveyed to the underground infiltration chambers with which are connected to the storm sewer network located under the median of the road.
- *Water Quantity Control:* Water quantity control via underground storage chambers.
- *Water Quality Control:* Water quality using oil grit separators and bioretention planters.

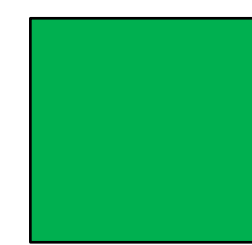




Not Preferred



Less Preferred



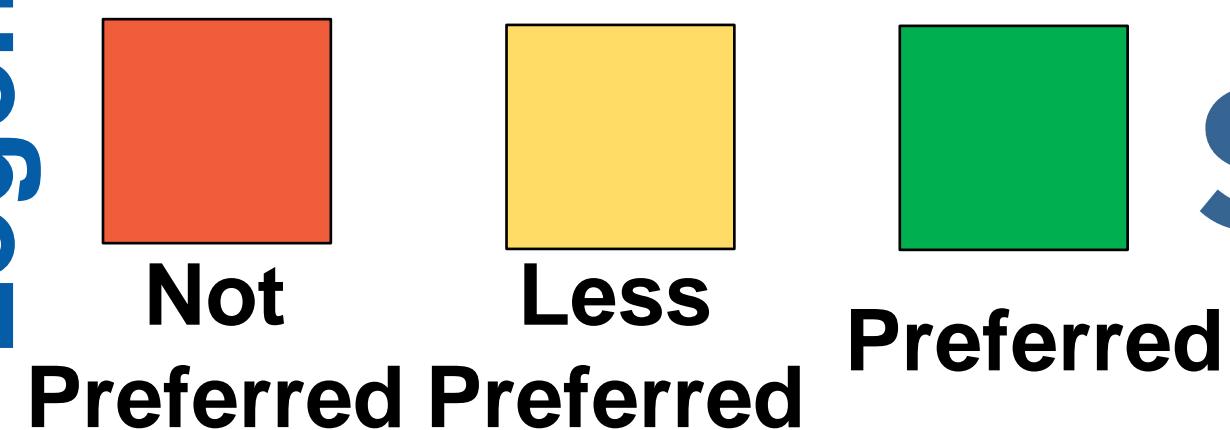
Preferred

# Highway 401 to Steeles Avenue

## Evaluation of Alternative Design Concepts

Criteria	Alternative 2: Widen along Centre	Alternative 3: Widen to the East	Alternative 4: Widen to the West
Transportation	All alternative designs result in similar transportation service improvements.		
Engineering	<ul style="list-style-type: none"> <li>407ETR structure to be widened</li> <li>Requires reconfiguration of Hwy 401 N-Westbound ramp and W-N/S ramp</li> </ul>	<ul style="list-style-type: none"> <li>407ETR structure supports widening to east</li> <li>Requires reconfiguration of Hwy 401 N-Westbound ramp and W-N/S ramp</li> <li>Can accommodate proposed MTO improvements at Hwy 401 carpool lot</li> </ul>	<ul style="list-style-type: none"> <li>407ETR structure to be widened</li> <li>Requires reconfiguration of Hwy 401 N-Westbound ramp and W-N/S ramp</li> </ul>
Socio-Cultural	Minimal impact on air / noise Archaeological potential on west side Minimal impact to cultural heritage resources No residential/institutions properties		
Natural Environment	Minimal impact on natural heritage		
Costs	<ul style="list-style-type: none"> <li>Minimal property costs</li> <li>Encroaches businesses on east side</li> </ul>	<ul style="list-style-type: none"> <li>Minimal property costs</li> <li>Encroaches businesses on east side</li> </ul>	<ul style="list-style-type: none"> <li>Minimal property costs</li> <li>Minimal impact to businesses on west side</li> <li>Potential impacts to access to business' just north of Hwy 407</li> </ul>
Recommendation	<b>NOT PREFERRED</b>	<b>PREFERRED</b>	<b>NOT PREFERRED</b>



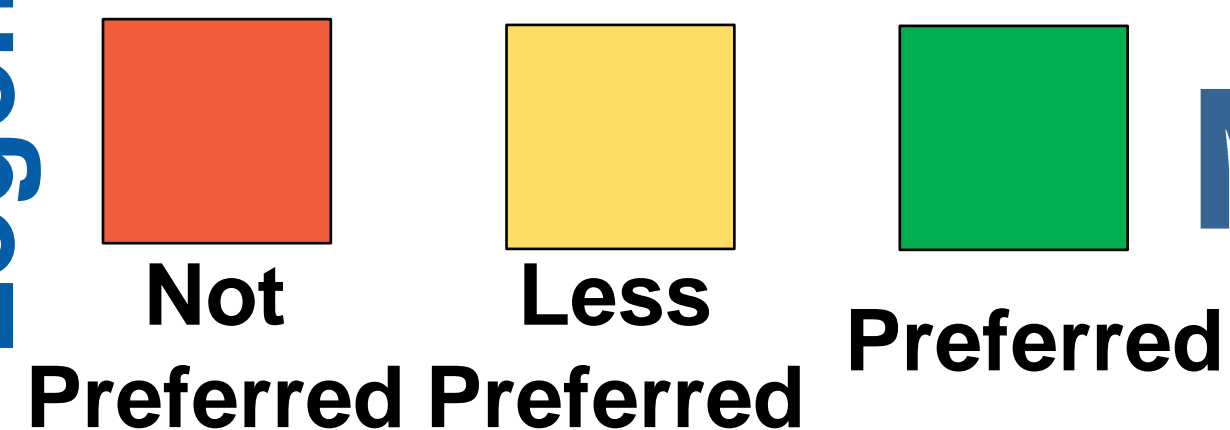


# Steeles Avenue to Maple Lodge Farms

## Evaluation of Alternative Design Concepts

Criteria	Alternative 2: Widen along Centre	Alternative 3: Widen to the East	Alternative 4: Widen to the West
Transportation	All alternative designs result in similar transportation service improvements.		
Engineering	Requires extension of Mullet Creek culvert Requires new sewer installation to accommodate expanded roadway		
Socio-Cultural	<ul style="list-style-type: none"> <li>Moderate impact to cultural heritage resources</li> <li>Moderate impact to Maple Lodge Farms and residential properties on west side</li> </ul>	<ul style="list-style-type: none"> <li>Significant impact to cultural heritage resources</li> <li>Significant impact to the Maple Lodge Farms</li> </ul>	<ul style="list-style-type: none"> <li>Minimal impact to cultural heritage resources</li> <li>Significant impact to residential properties on west side</li> </ul>
Natural Environment	Potential impact to natural heritage features Potential to impact fish and fish habitat		
Costs	Moderate costs		
Recommendation	<b>PREFERRED</b>	<b>NOT PREFERRED</b>	<b>NOT PREFERRED</b>





# Maple Lodge Farms to Embleton Road

## Evaluation of Alternative Design Concepts

Criteria	Alternative 2: Widen along Centre	Alternative 3: Widen to the East	Alternative 4: Widen to the West
Transportation	All alternative designs result in similar transportation service improvements.		
Engineering	Requires reconstruction of storm sewers northward to accommodate expanded roadway Requires realignment of Levi Creek North Culvert needs to be extended on both sides		
Socio-Cultural	<ul style="list-style-type: none"> <li>Minimal impact to archaeological and cultural heritage resources</li> <li>Reduced impact to residential properties</li> </ul>	<ul style="list-style-type: none"> <li>Moderate impact to archaeological features</li> <li>Significant impact to residential properties on east side</li> </ul>	<ul style="list-style-type: none"> <li>Moderate impact to archaeological and cultural heritage resources</li> <li>Significant impact to residential properties on the west side</li> </ul>
Natural Environment	<ul style="list-style-type: none"> <li>Potential impact to natural heritage features</li> <li>Potential impact to fish species</li> </ul>		<ul style="list-style-type: none"> <li>Minimal impact to natural heritage features</li> <li>Potential impacts to Bobolink and fish species</li> <li>Requires realignment of Levi Creek North</li> </ul>
Costs	Moderate costs		
Recommendation	<b>PREFERRED</b>	<b>NOT PREFERRED</b>	<b>NOT PREFERRED</b>



# Active Transportation

## Active Transportation Recommendations

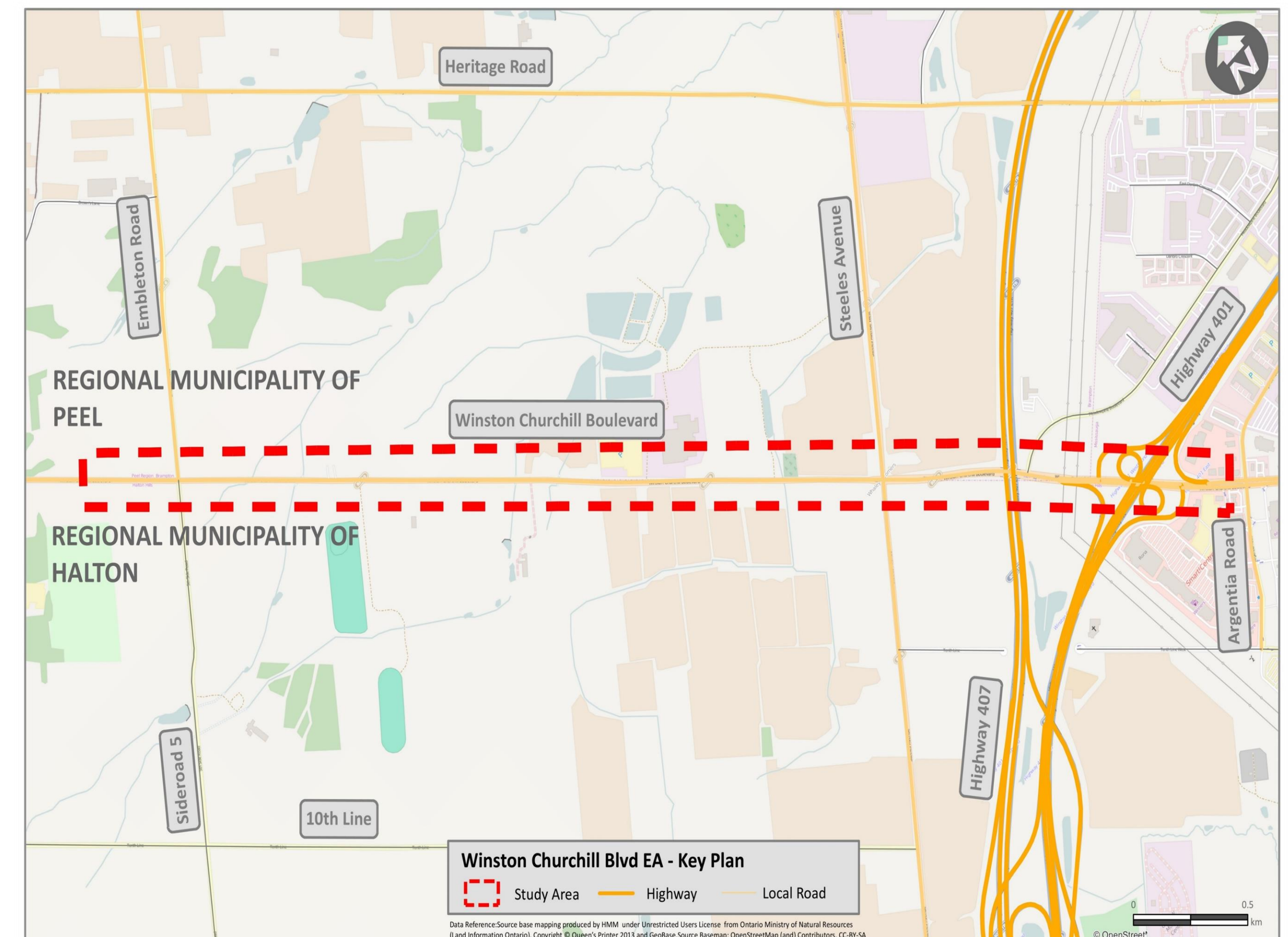
- **Multi-Use Path** on both the east and west sides of Winston Churchill Blvd:
  - Provides cycling and walking on both sides of the roadway
  - Provides safety for all active transportation users
  - Cross rides will be provided at all intersections
  - Multi-use path to transition to sidewalk at north side of Highway 401 crossing (until Highway 401 crossing widened).
- **Bus Stop Locations:** Preference for far-side bus stop locations. Near-side bus stops recommended in specific locations to reduce property impact, as well as in locations to improve cross-walk connectivity across Winston Churchill.





# General Components & Traffic Management

- Expanded to six lanes across all segments of the Study Area
- Posted speed limit of 60 km/h (pending Council approval)
- Multi-use path (MUP) on one or both sides of the corridor between Highway 401 and Embleton Road to accommodate cyclists and pedestrians.

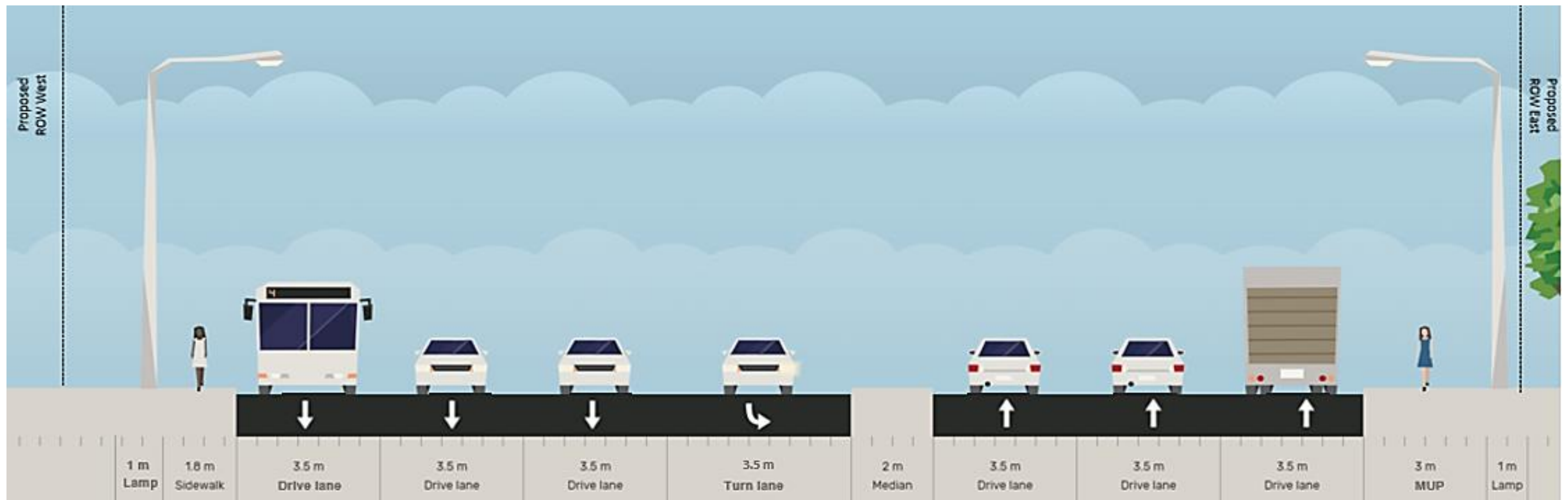




# Preliminary Preferred Design: Highway 401 to Steeles Avenue

The typical cross-section will generally include the following improvements:

- Widening from **4 to 6 lanes**
- Cross section is approximately **47.5 m wide (varied width)**
- Multi-use path on both sides of the corridor, including cross-rides at intersections
- Stormwater management to include underground storage chambers and Oil/Grit Separators



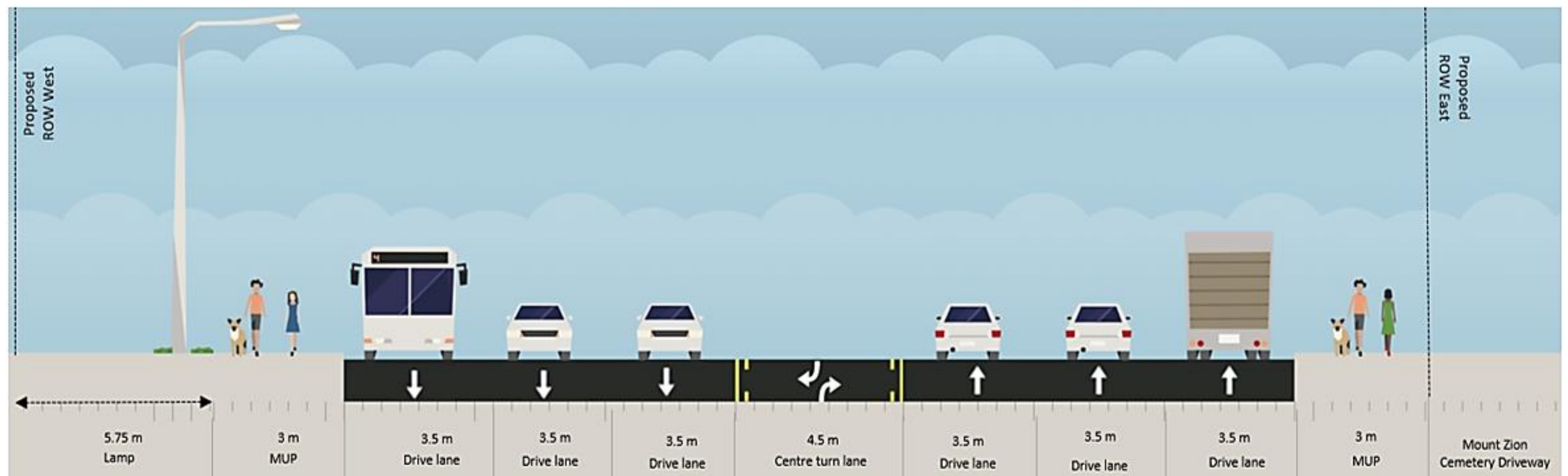
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# Preliminary Preferred Design: Steeles Avenue to Maple Lodge Farms

## The typical cross-section will generally include the following improvements:

- Widening from **4 to 6 lanes** with flush median
- Cross section is approximately **40 m wide** to reduce impact on residences and the Mount Zion Cemetery
- Multi-use path on both sides of the corridor, including cross-rides at intersections
- Opportunity for landscaping within the right-of-way
- Stormwater management to include underground storage chambers and Oil/Grit Separators



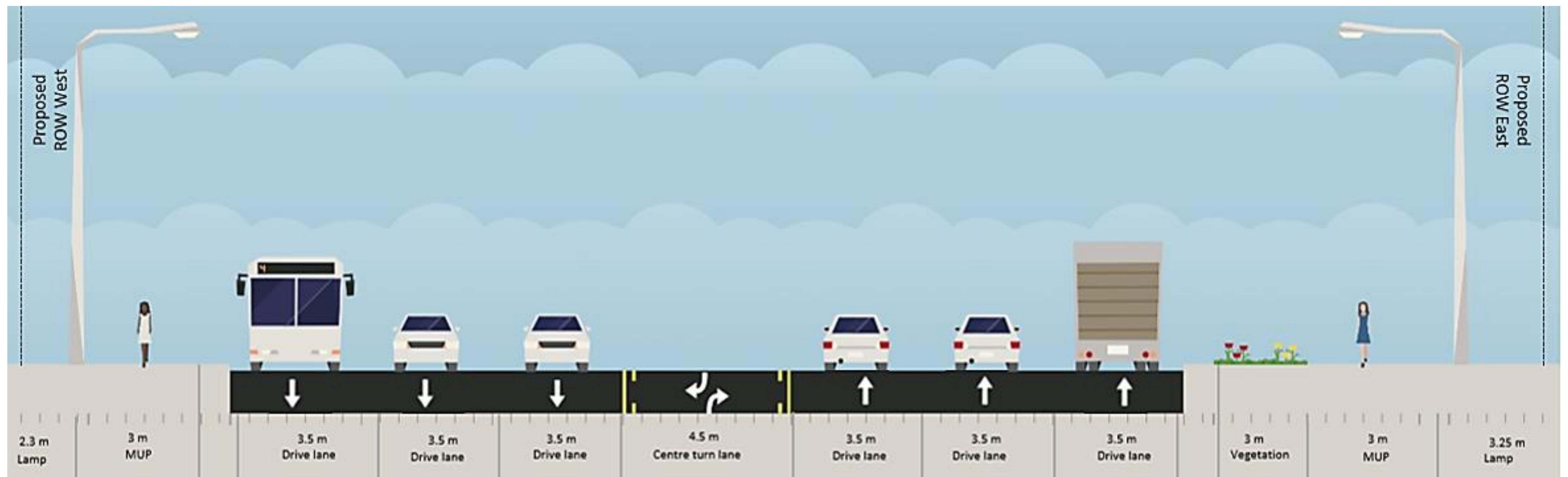
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# Preliminary Preferred Design: Maple Lodge Farms to Embleton Road

## The typical cross-section will generally include the following improvements:

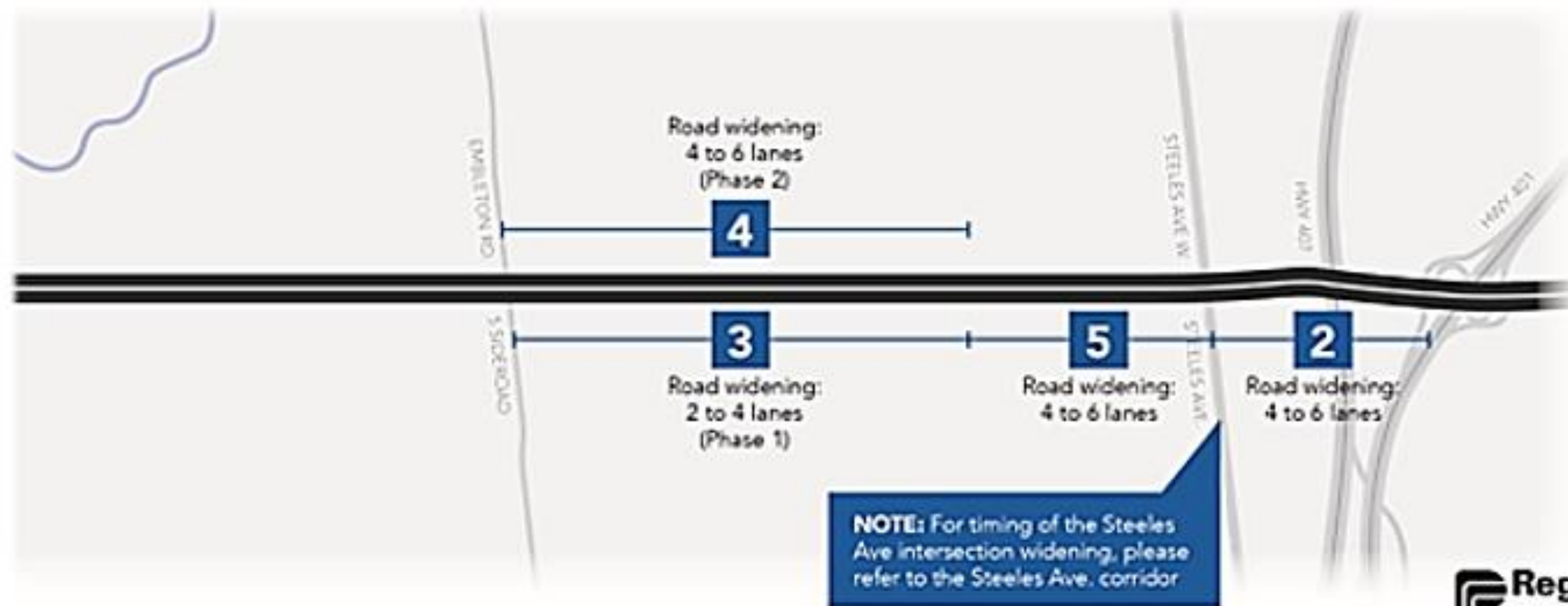
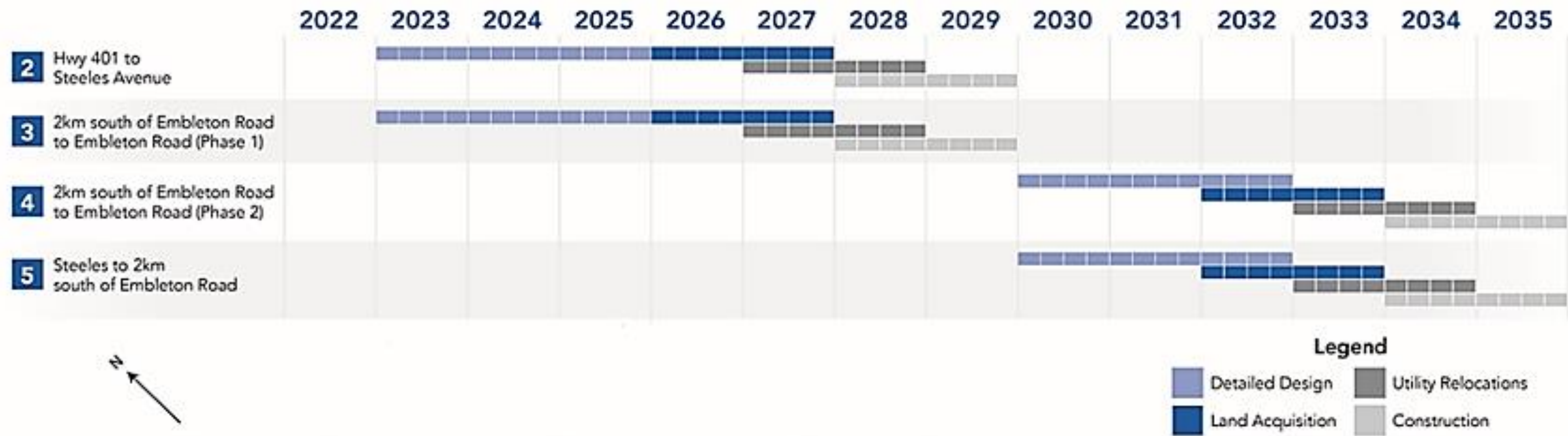
- Widening from **2 to 6 lanes** with flush median
- Cross section is approximately **40-42.5 m wide (varied width)**
- Multi-use path on both sides of the corridor, including cross-rides at intersections
- Opportunity for landscaping within the right-of-way
- Stormwater management to include underground storage chambers and Oil/Grit Separators



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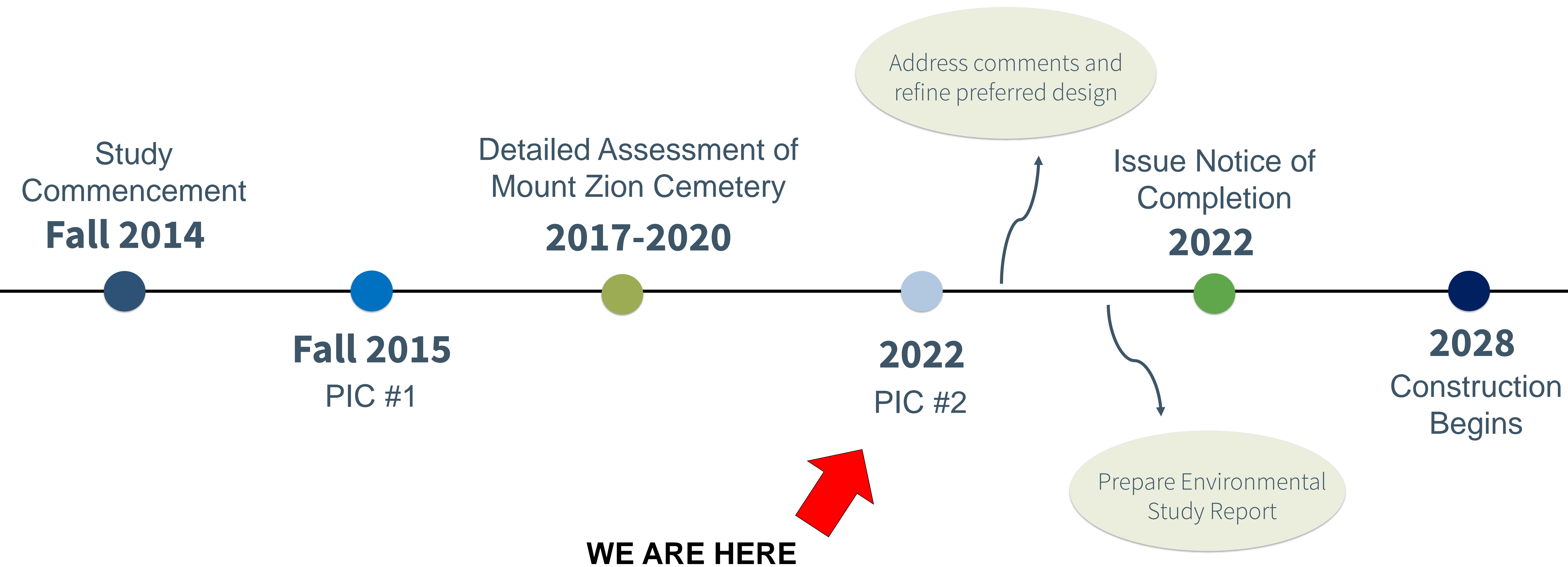


# Working with You to Deliver Winston Churchill Blvd





# Project Schedule & Next Steps







# Thank you!

## Questions or Comments?

**You can view today's information boards on the Project website:**  
<https://peelregion.ca/pw/transportation/construction/environmental-assessment/winston-churchill-boulevard.asp>

Please complete a Comment Sheet and forward to the Project Manager by June 19, 2022.

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Environmental Planner / Project Manager  
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Mississauga, ON L5K 2R7  
[Melissa.Alexander@hatch.com](mailto:Melissa.Alexander@hatch.com)

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