

Burnhamthorpe Road West Improvements Class Environmental Assessment

**Public Information Centre No. 2
June 19th, 2018, 6:00 to 8:00 pm**

Please sign in and fill in a comment sheet

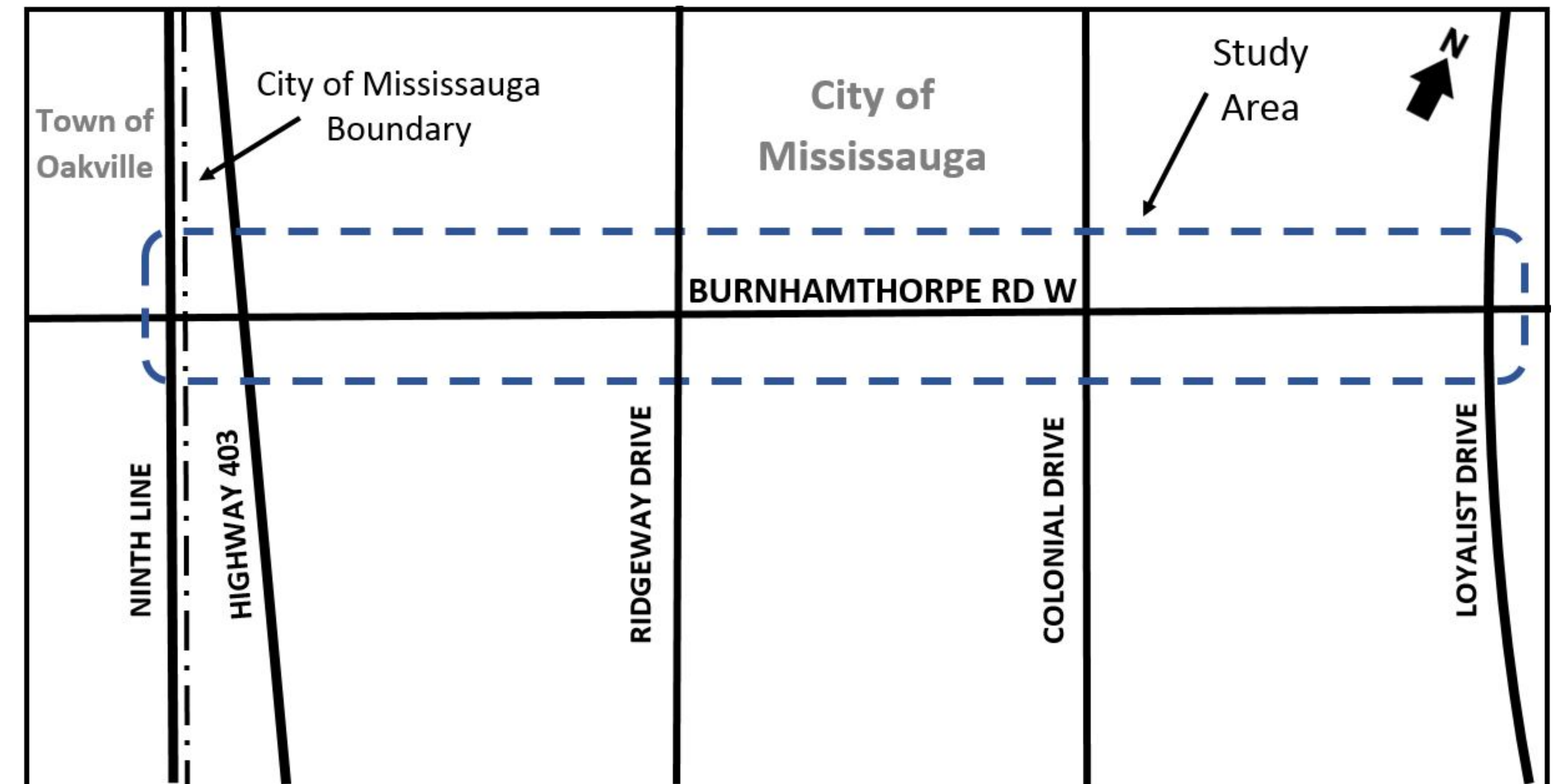
Purpose of Public Information Centre No. 2

- **Review project information on display**
 - Study Context and Overview
 - Study Process and Schedule
 - Summary of PIC No. 1
 - Existing Conditions
 - Future Conditions
 - Alternative Design Concepts
 - Analysis and Evaluation of Alternative Design Concepts
 - Preliminary Preferred Design
 - Staging, Implementation and Timing
 - Next steps for the study
- **Ask the Project Team questions**
- **Discuss areas of interest with the Project Team**
- **Fill out and submit a comment sheet**

**Please fill out and
submit a
comment sheet by
July 17, 2018**

Study Context and Overview

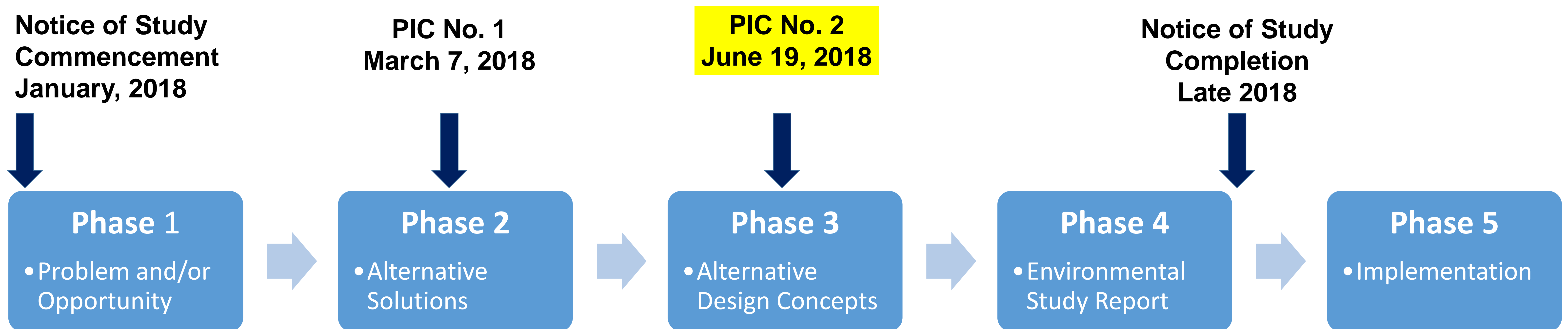
- The study area, as shown on the key plan, includes Burnhamthorpe Road West from Loyalist Drive to the West City Limit.
- Burnhamthorpe Road West is an east-west arterial road in the City of Mississauga.
- Within the study area, Burnhamthorpe Road West from Loyalist Drive to the West City Limit, consists of a 2-lane road cross-section.
- East of Loyalist Drive, Burnhamthorpe Road West is a 4-lane road with an existing multi-use trail on the north side and sidewalks on both sides of the road.
- The existing section of Burnhamthorpe Road West has a posted speed limit of 60 km/h.
- Within the study area, Burnhamthorpe Road West intersects with Ninth Line, Ridgeway Drive, Colonial Drive and Loyalist Drive.
- This study follows the City's planning principle to a build 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.



Burnhamthorpe Road West Facing East

Municipal Class EA Process and Study Schedule

- The Municipal Class EA is a planning and design process approved by the Ministry of Environment and Climate Change to meet the requirements of the Ontario Environmental Assessment Act.
- This Study follows the Class EA process for Schedule 'C' projects and will complete Phases 1 to 4 as outlined below:



Summary of Public Information Centre No. 1

Key Comments Received at PIC No. 1:

- Desire to widen Burnhamthorpe Road and provide additional traffic lanes
- Concerns that widening the road will lead to an increase in vehicle traffic
- Need for improved signal timing and advanced left-turns at all intersections
- Request for maintaining sidewalks and providing cycling facilities
- Noise concerns related to vehicle traffic
- Insufficient parking at Iglesia Ni Cristo church

Activities Since PIC No. 1:

- Reviewed and responded to inquiries/questions received from the public and stakeholders
- Selected the preferred solution – Improvement of Burnhamthorpe Road West from Loyalist Drive to the West City Limit through widening
- Developed alternative design concepts

Planning and Policy Context – Growth and Transportation

City of Mississauga Official Plan (August 2017)

- Policies to create a multi-modal transportation system: transit, vehicular travel, active transportation, rail and air.
- Arterial roads are designated as principle transportation corridors for high volumes of people and goods.
- This section of Burnhamthorpe Road West is classified as an arterial road, with a designated right-of-way (R.O.W.) of 35 metres.

Moving Mississauga from Vision to Action (2011)

- Interim Transportation Master Plan for the City that guides investment in transportation programs
- Vision:
 - The City of Mississauga will have a safe and connected multi-modal transportation system that enhances our environment, supports our economy, connects people to places and moves goods to market. Opportunity to add multi-modal elements to Burnhamthorpe Road.

City of Mississauga Strategic Plan (2009, Update 2014)

- Directions strategic decision making based on 5 Strategic Pillars; Move, Belong, Connect, Prosper and Green. Most relevant include:
 - Increasing transportation capacity for all road users
 - Creation of complete streets that support active modes of transportation
 - Develop walkable, connected communities
 - Maintain a safe city



Move

developing a transit oriented city



Belong

ensuring youth, older adults and new immigrants thrive



Connect

completing our neighbourhoods



Prosper

cultivating creative and innovative businesses



Green

living green

Planning and Policy Context – Cycling & Transit

Cycling

Mississauga Cycling Master Plan (CMP) (2018)

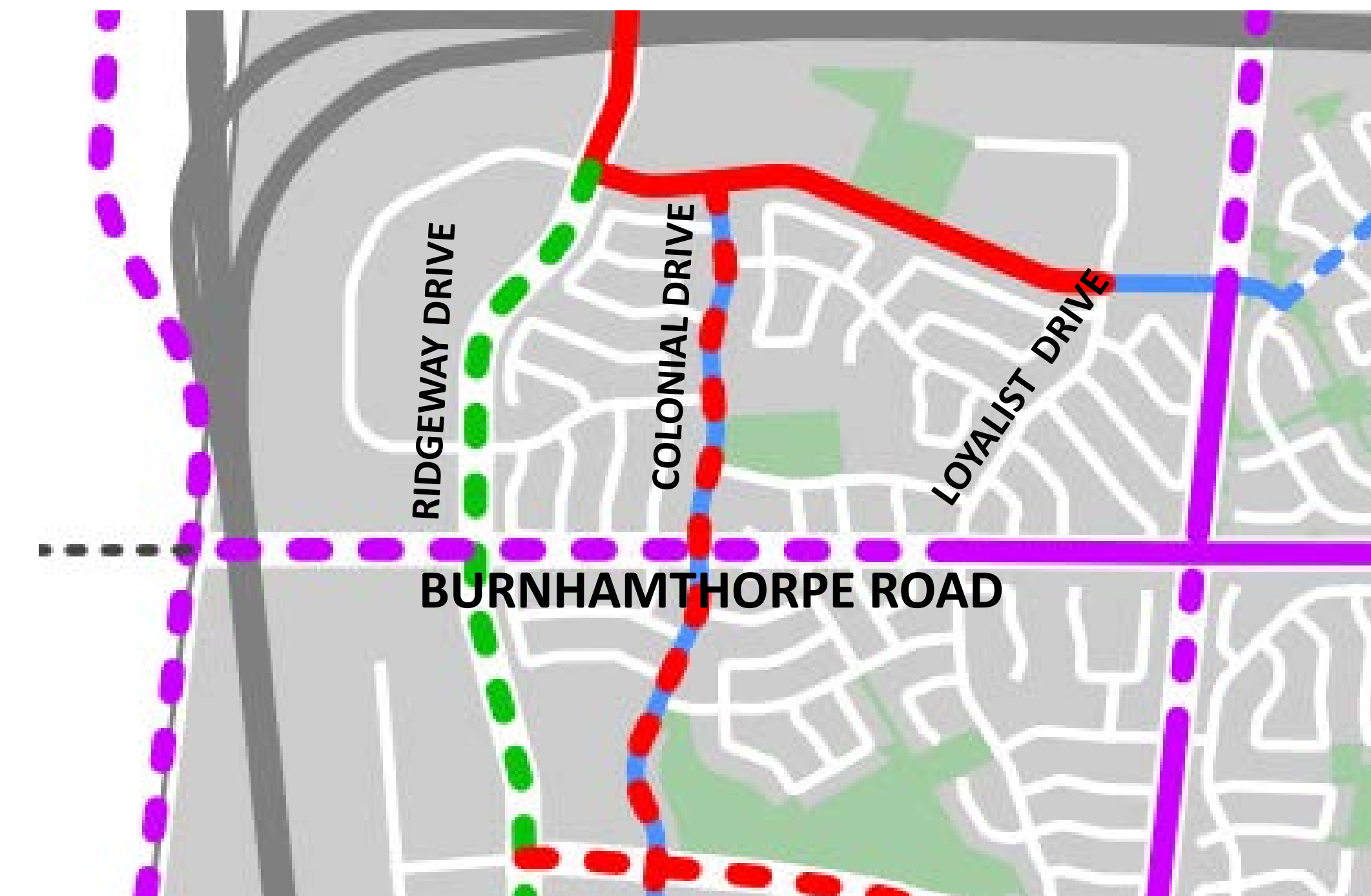
- CMP Vision:
 - The City of Mississauga will be a place where people choose to cycle for recreation, fitness and daily transportation needs. Cycling will become a way of life that supports vibrant, safe and connected communities and enhances our overall health and quality of life.
- Burnhamthorpe Road is identified as a proposed multi-use trail route for cycling.
- To the east of the study area, an existing multi-use trail is located on the north side of Burnhamthorpe Road West currently terminating at Loyalist Drive.
- Cycling within the Burnhamthorpe Road corridor will be reviewed as part of this study and recommendations will be made.

Existing Facilities

- Bike Lane
- Paved Shoulder
- Shared Route
- Multi-Use Trail
- Connecting Trail
- Regional Connection

Proposed Facilities

- Cycle Track/Separated Bike Lane
- Bike Lane
- Paved Shoulder
- Shared Route
- Multi-Use Trail
- Regional Connection
- ➡ Major Barrier Crossing



CMP Proposed Cycling Network

Transit

- Burnhamthorpe Road is currently serviced by Route 36: South Common Mall to Winston Churchill Transitway
 - Colonial Drive to Ridgeway Drive
 - Loyalist Drive to Winston Churchill Boulevard



MiWay Route 36 Transit Map

Existing Conditions

Land Use, Natural Heritage and Tree Inventory

- Existing land use adjacent to Burnhamthorpe Road West is mainly comprised of low density residential communities.
- The area west of Ridgeway Drive is designated as Business Employment land.
- There are no natural heritage systems present within the study area.
- A Natural Heritage review was conducted to consider the sensitivity and significance of any features within the study limits and the potential impacts of the recommended improvements with appropriate mitigation measures, if required.
- Street trees are present on both sides of Burnhamthorpe Road West within the study limits. However, all trees along the corridor are on the edge of the right-of-way.

Cultural Heritage

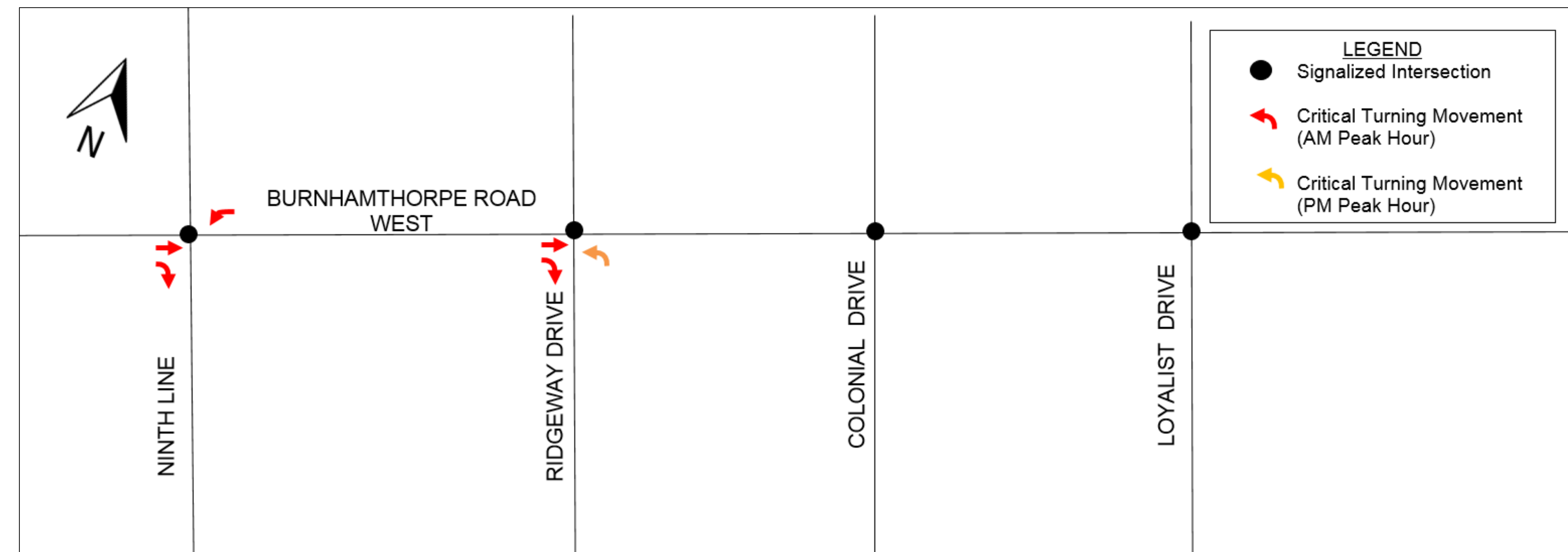
- A Stage 1 Archaeological Assessment was conducted and confirmed that the study corridor does not contain archaeological potential.
- A Cultural Heritage Resource Assessment was conducted and confirmed that no cultural heritage resources are present within the study area.



Existing Conditions

Transportation

- Under existing conditions, several movements (i.e. right turn, left turn, through) operate at or above capacity at the following intersections during the AM and PM peak hour:
 - Burnhamthorpe Road & Ninth Line
 - Burnhamthorpe Road & Ridgeway Drive
 - Burnhamthorpe Road & Winston Churchill Boulevard
- The westbound left-turn at Burnhamthorpe Road & Ninth Line is highly congested in the AM peak.
- The following turning movements present excessive queuing that is sustained over multiple signal cycles:
 - Burnhamthorpe Road & Ninth Line
 - Eastbound through/right-turn in the AM peak hour
 - Burnhamthorpe Road & Ridgeway Drive:
 - Eastbound through/right-turn in the AM peak hour
 - Northbound left-turn in the PM peak hour.
 - Burnhamthorpe Road & Winston Churchill Boulevard (outside of study area):
 - Westbound through in the PM peak hour

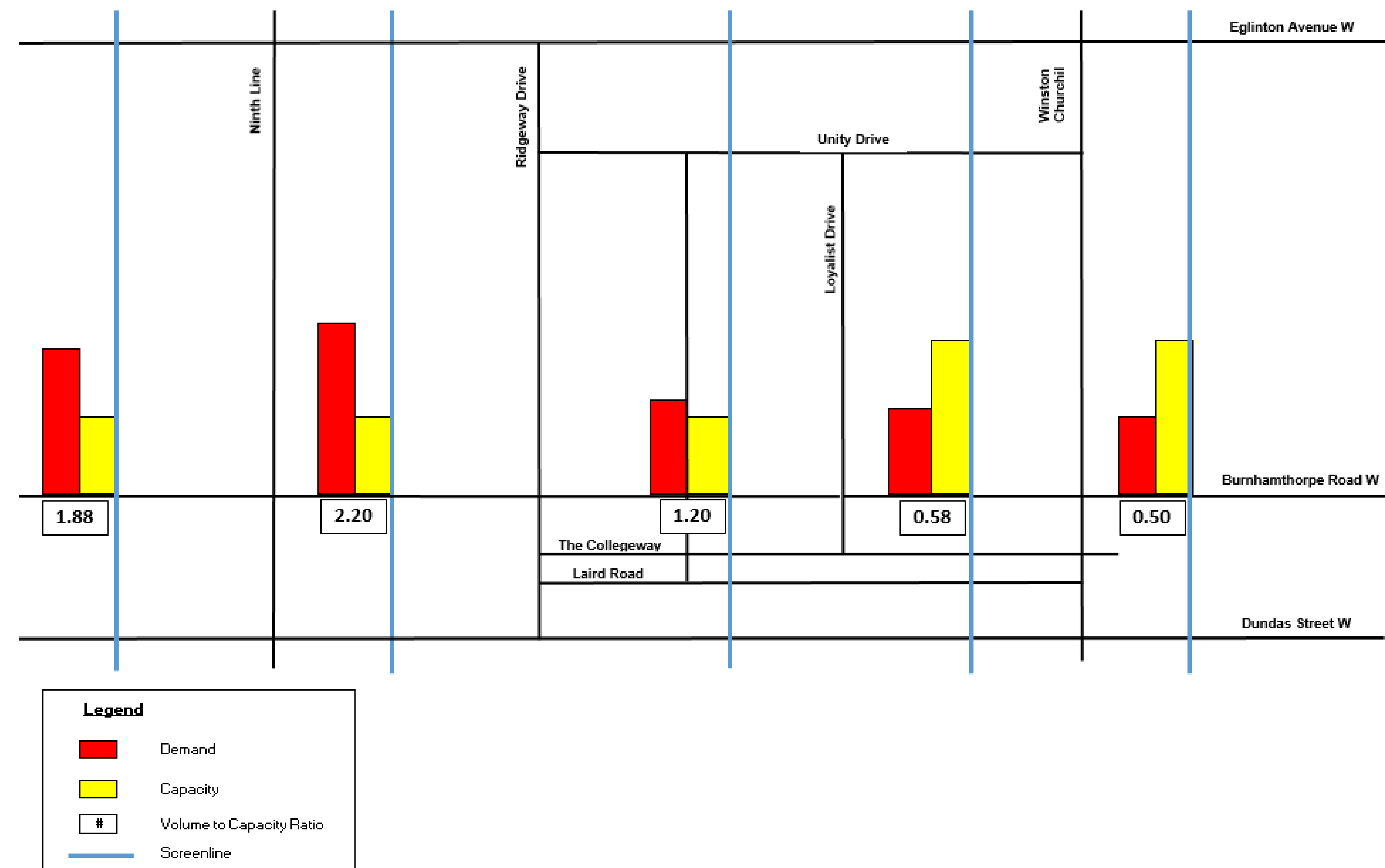


Congested/Over Capacity Turning Movements

Future Conditions Without Improvements

Transportation

- A screenline analysis was completed for future horizon years to assess the total east-west traffic demand and road capacity available considering other parallel roads in the area, thereby, identifying the capacity deficiency in the area.
- The results of the screenline analysis indicate that under future conditions, existing demand on Burnhamthorpe Road will be over existing capacity as shown on the figure below.
- A review of the mid-block volumes on the Burnhamthorpe Road corridor indicate the following:
 - With the 2021 scenario:
 - Total traffic conditions on Burnhamthorpe Road west of Ninth Line remain over capacity.
 - Total traffic conditions on Burnhamthorpe Road west of Ridgeway Drive are also over capacity.
 - With the 2031 and 2041 scenarios:
 - Total traffic conditions continue to worsen and Burnhamthorpe Road remains over capacity west of Ninth Line and west of Ridgeway Drive.



Traffic Volume and Capacity along Burnhamthorpe Road (2031 PM)

Recommended Planning Solution

- Under existing conditions, several intersections within the study limits are experiencing congestion and delays leading to significant queuing along Burnhamthorpe Road West.
- These poor traffic conditions are anticipated to worsen in the future as vehicle demand on Burnhamthorpe Road West increases.
- There is an opportunity to improve Burnhamthorpe Road West by accommodating traffic demand and providing active transportation connections.
- The Recommended Planning Solution includes:
 - Widening Burnhamthorpe Road West to four lanes from Loyalist Drive to the West City Limit
 - Providing multi-use trail connections
 - Implementing intersection improvements to improve traffic operations
- This recommendation was presented at PIC #1.
- Public feedback indicated general support for the recommendation and did not result in changes to the recommendation.

Future Conditions

Noise

- A Noise Assessment was completed to evaluate the potential environmental noise impacts of the proposed roadway improvements.
- The results indicate that the changes in sound level resulting from the widening are expected to be no higher than approximately 1 to 2 dBA.
- Therefore, consideration of noise mitigation is not warranted.

Stormwater Management

- A Stormwater Management Assessment (SWM) was completed to determine the future servicing needs along Burnhamthorpe Road.
- Based on a preliminary assessment, it was determined that the pipes along Burnhamthorpe Road were sized for a 4-lane cross-section and therefore, no improvements are required.
- Low impact development options for stormwater management will be considered including the following:
 - Permeable pavements for the multi-use path on the north side of Burnhamthorpe Road.
 - Bio-swale, grassed swale or planters in the boulevard on the south side of Burnhamthorpe Road.

Air Quality

- An Air Quality Assessment was completed to evaluate the potential impact of the proposed improvements on local air quality.
- Under future conditions, the maximum concentration of air pollutants are projected to be below guidelines with little or no increase occurring as a result of the road improvements.
- Overall, total greenhouse gas emissions are expected to decrease in the study area due to the reduction in idling.
- Therefore, mitigation measures are not warranted.

Alternative Design Concepts

Five alternative design concepts are being examined as part of this Class EA study:

Do Nothing

Burnhamthorpe Road West would remain a two-lane road between Loyalist Drive and Ninth Line. There would not be any improvement to active transportation elements or to local intersections.

Widen Burnhamthorpe Road West to 4 Lanes

Involves widening the roadway to increase capacity with additional travel lanes, to support future traffic demands and deficiencies identified in the long-range transportation policies. This solution also includes improvements to localized intersections and a multi-use trail on the north side of Burnhamthorpe Road within the study limits.

Widen Burnhamthorpe Road West to 4 Lanes with In-Boulevard Parking on the South Side

Involves widening the roadway to increase capacity with additional travel lanes, to support future traffic demands and deficiencies identified in the long-range transportation policies. This option also includes the provision of approximately 150 metres of in boulevard parking on the south of Burnhamthorpe Road west of Loyalist Drive and a multi-use trail on the north side of Burnhamthorpe Road within the study limits.

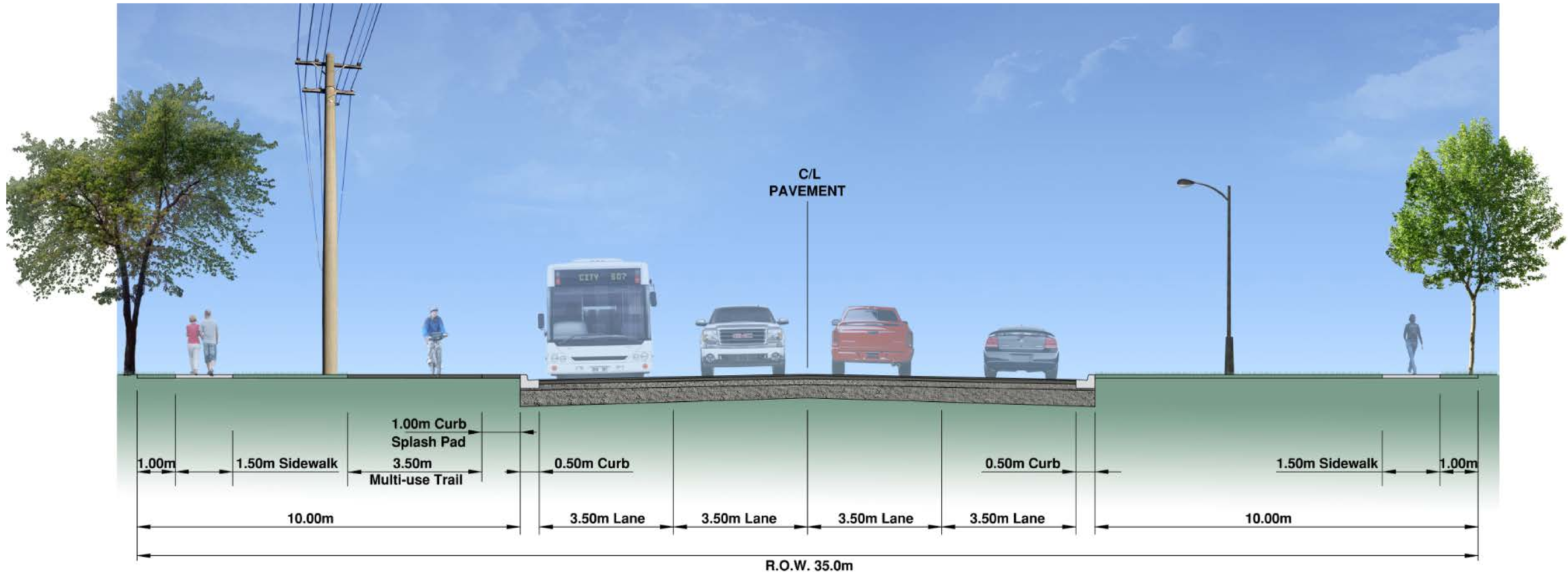
Widen Burnhamthorpe Road West to 4 Lanes with Intersection Improvements at Ridgeway Drive

Involves widening the roadway to increase capacity with additional travel lanes, to support future traffic demands and deficiencies identified in the long-range transportation policies. This option also includes double left turn lanes northbound at Ridgeway Drive to improve intersection operations and a multi-use trail on the north side of Burnhamthorpe Road within the study limits.

Widen Burnhamthorpe Road West to 4 Lanes with a Roundabout at Ridgeway Drive

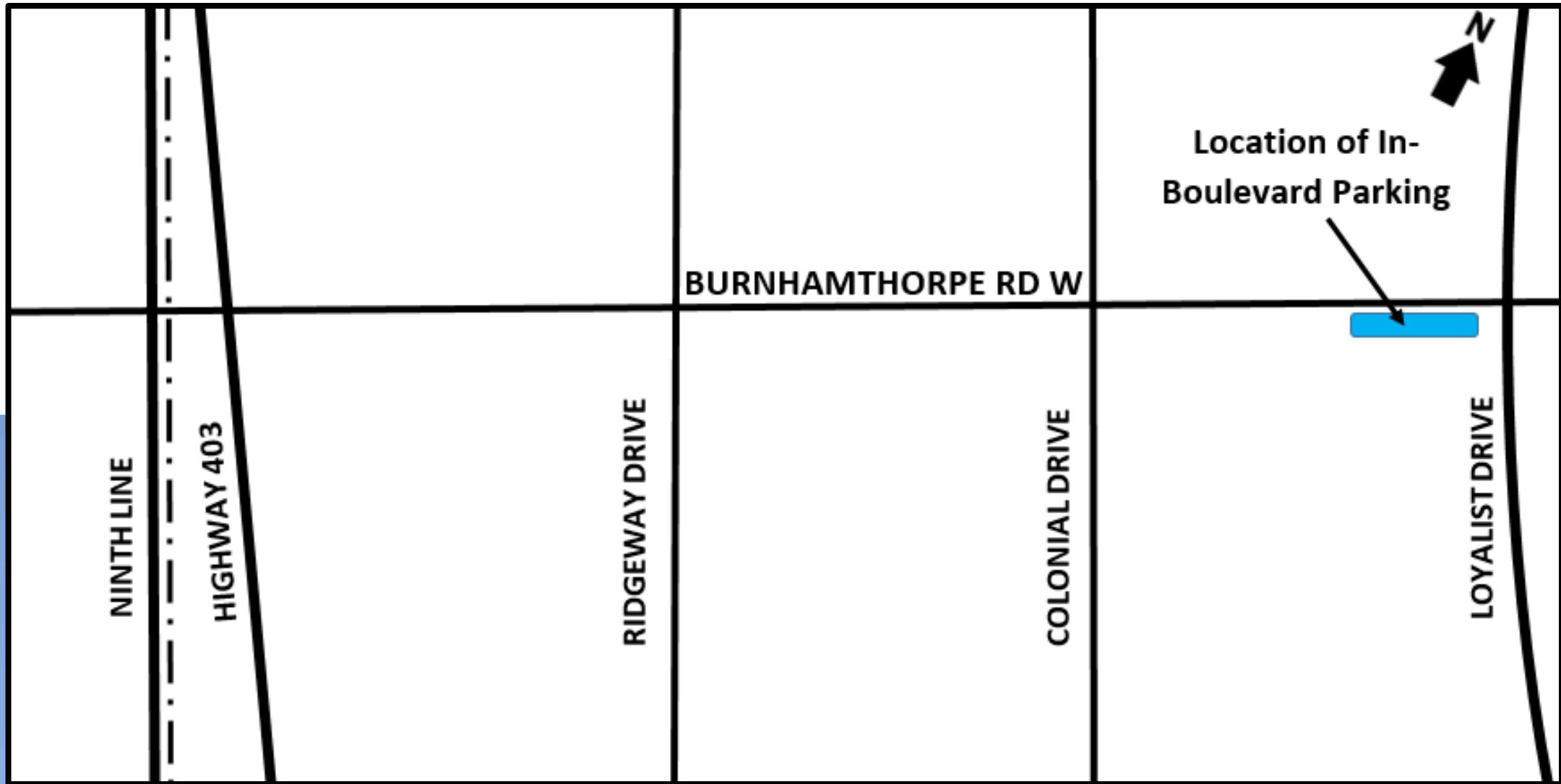
Involves widening the roadway to increase capacity with additional travel lanes, to support future traffic demands and deficiencies identified in the long-range transportation policies. This option also includes a roundabout at the intersection of Burnhamthorpe Road and Ridgeway Drive and a multi-use trail on the north side of Burnhamthorpe Road within the study limits.

Alternative Design Concepts

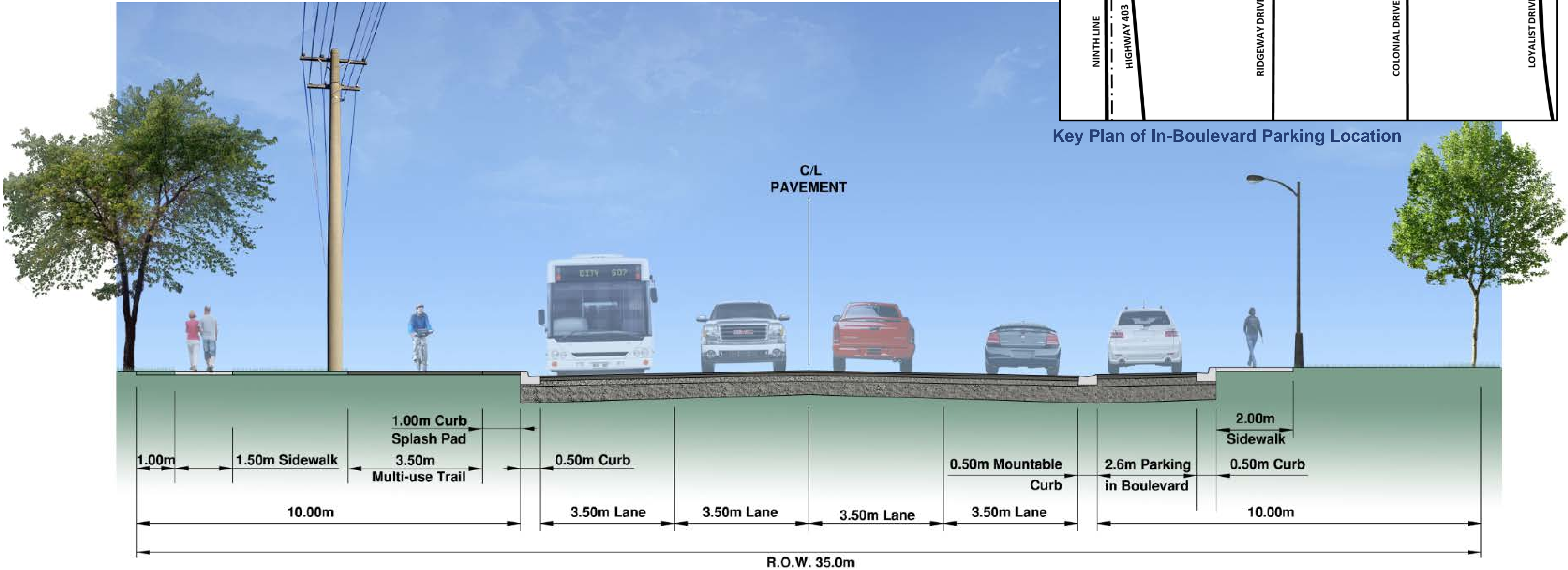


Typical Cross Section
4-Lane Burnhamthorpe Road

Alternative Design Concepts



Key Plan of In-Boulevard Parking Location

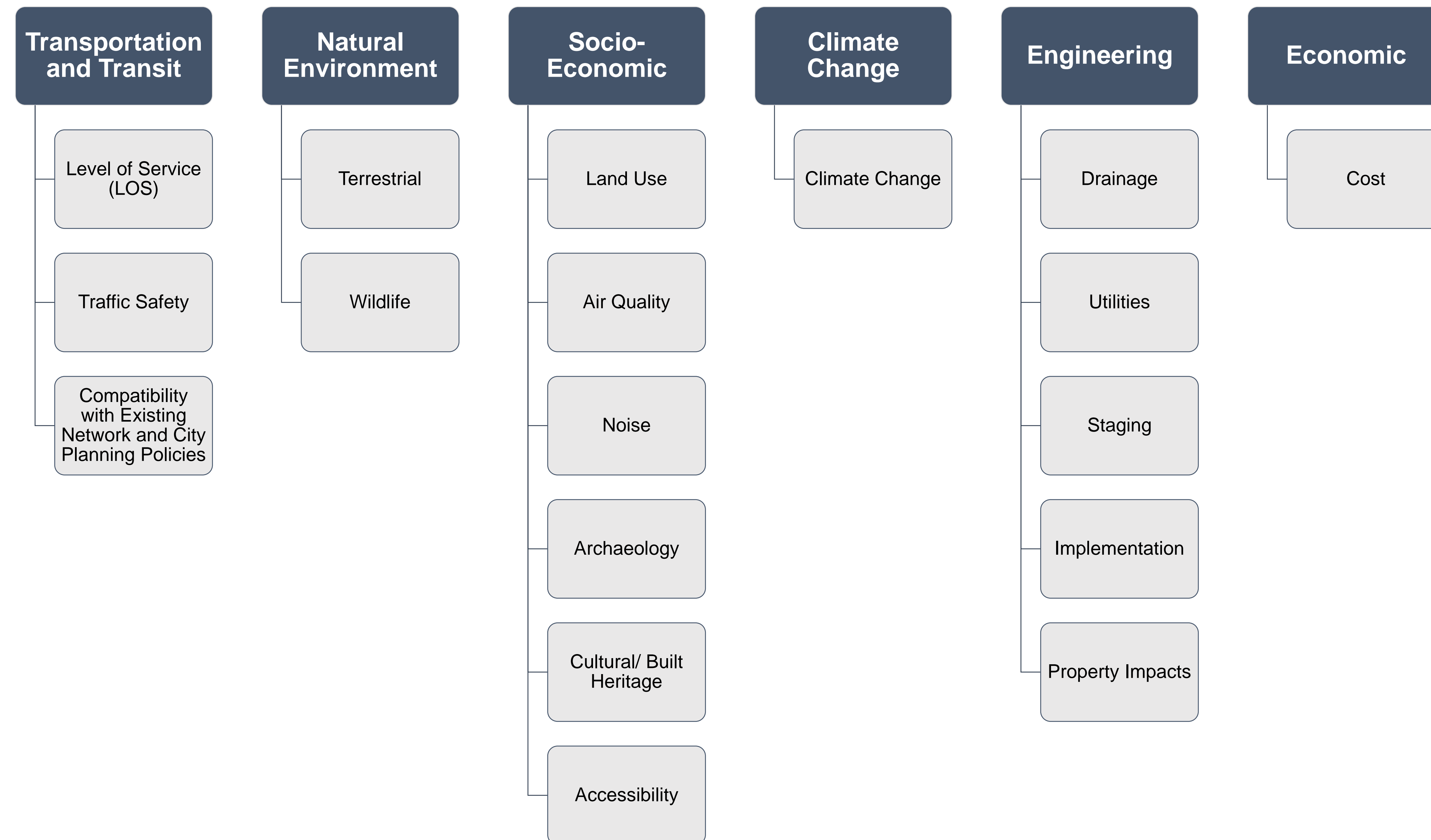


Typical Cross Section

4-Lane Burnhamthorpe Road with Approximately 150 Metres of In-Boulevard Parking on the South Side West of Loyalist Drive

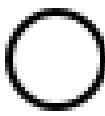
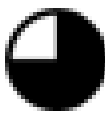
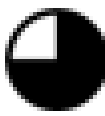
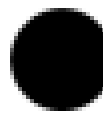

Evaluation Criteria

- Alternative design concepts for the preferred solution were assessed and evaluated based on the following factors.



- The preferred design concept will be confirmed following a review of comments received from agencies, stakeholders and members of the public.

Analysis and Evaluation of Alternative Design Concepts

TECHNICAL CRITERIA	Do Nothing	Widen Burnhamthorpe Road West to 4 Lanes	Widen Burnhamthorpe Road West to 4 Lanes with In-Boulevard Parking on the South Side	Widen Burnhamthorpe Road West to 4 Lanes with Intersection Improvements at Ridgeway Drive	Widen Burnhamthorpe Road West to 4 Lanes with a Roundabout at Ridgeway Drive
Transportation					
Summary of Transportation	<p>In the 2021 horizon year, the intersection of Ridgeway Drive & Burnhamthorpe Road will operate over capacity (LOS F).</p> <p>During the PM peak, WB queues at Burnhamthorpe Road & Ridgeway Drive may extend to the signal at Burnhamthorpe Road & Colonial Drive.</p> <p>Does not address safety deficiencies identified along the study corridor.</p> <p>Not compatible with the City planning policies.</p>	<p>In the 2021 horizon year, the intersection of Ridgeway Drive & Burnhamthorpe Road will operate near capacity (LOS E).</p> <p>During the PM peak, WB queues at Burnhamthorpe Road & Ridgeway Drive may extend to the signal at Burnhamthorpe Road & Colonial Drive.</p> <p>Safety improvements can be implemented simultaneously with road infrastructure improvements.</p>	<p>In the 2021 horizon year, the intersection of Ridgeway Drive & Burnhamthorpe Road will operate near capacity (LOS E).</p> <p>During the PM peak, westbound queues at Burnhamthorpe Road & Ridgeway Drive may extend to the signal at Burnhamthorpe Road & Colonial Drive.</p> <p>Safety improvements can be implemented simultaneously with road infrastructure improvements.</p> <p>Increased risk for doorings for vehicles parking on south side of Burnhamthorpe Road.</p>	<p>In the 2021 horizon year, the intersection of Ridgeway Drive & Burnhamthorpe Road will operate under capacity (LOS D).</p> <p>Safety improvements can be implemented simultaneously with road infrastructure improvements.</p> <p>Best addresses future traffic demand and identified deficiencies in keeping with City planning policies.</p>	<p>Improves intersection operations by reducing queueing along Burnhamthorpe Road.</p> <p>Pedestrians are required to cross 2 lanes of traffic and a PXO is required on all legs of the roundabout. High pedestrian volumes due to close proximity to a secondary school.</p> <p>Cyclists are required to negotiate the roundabout to cross Ridgeway Drive.</p>
Natural Environment					
Summary of Natural Environment	No impact.	No impact to street trees adjacent to roadway.	No impact to street trees adjacent to roadway.	No impact to street trees adjacent to roadway.	Impact to street trees on the east side of the Ridgeway Drive and Burnhamthorpe Road intersection.
Socio-Economic					
Summary of Socio-Economic	<p>No associated accessibility improvements.</p> <p>Queuing at Ridgeway Drive intersection leads to increased emissions.</p>	<p>Accessibility improvements at intersections can be implemented (e.g. AODA compliant features).</p> <p>Queuing at Ridgeway Drive intersection leads to increased emissions.</p>	<p>Accessibility improvements at intersections can be implemented (e.g. AODA compliant features).</p> <p>Queuing at Ridgeway Drive intersection leads to increased emissions.</p>	<p>Accessibility improvements at intersections can be implemented (e.g. AODA compliant features).</p> <p>Reduced queuing at Ridgeway Drive intersection leads to reduced emissions.</p>	Roundabout is less preferred for pedestrians with accessibility needs.
Climate Change					
Summary of Climate Change	No impact to landscaping and green space.	No impact to landscaping and green space.	No impact to landscaping and green space.	No impact to landscaping and green space.	Impact to street trees on the east side of the Ridgeway Drive and Burnhamthorpe Road intersection.
Engineering					
Summary of Engineering	No impact.	Roadway improvements can be completed within the right-of-way.	Roadway improvements can be completed within the right-of-way.	Roadway improvements can be completed within the right-of-way.	Impacts on all four corners of the intersection.
Cost					
Summary of Cost	No impact.	Moderate cost for road improvements.	Moderate cost for road improvements and the provision of parking.	Higher cost than options 1 or 2 for road and intersection improvements.	Highest cost due to construction of roundabout and property impacts.
Summary					
Recommendation					

Preliminary Preferred Alternative Design

Based on the evaluation of alternative design concepts, Widen Burnhamthorpe Road West to 4 Lanes with Intersection Improvements at Ridgeway Drive was selected as the preliminary preferred alternative design, subject to agency and public review.

Elements of the Preliminary Preferred Alternative include:

- Widening to 4-thorough lanes
- Sidewalks on both sides of the road
- A multi-use trail on the north side
- Approximately 150 metres of in boulevard parking on the south of Burnhamthorpe Road west of Loyalist Drive
- No structural impacts to the Highway 403 Bridge
- No impacts to street trees adjacent to the roadway
- Intersection design compliance with Accessibility for Ontarians with Disabilities Act (AODA)
- Improvements at local intersections without impacting property
- Intersection improvements at Ridgeway Drive & Burnhamthorpe Road
- Enhanced landscaping features
- A noise assessment was completed and no additional noise barriers are recommended at this time

Ridgeway Drive and Burnhamthorpe Road Intersection

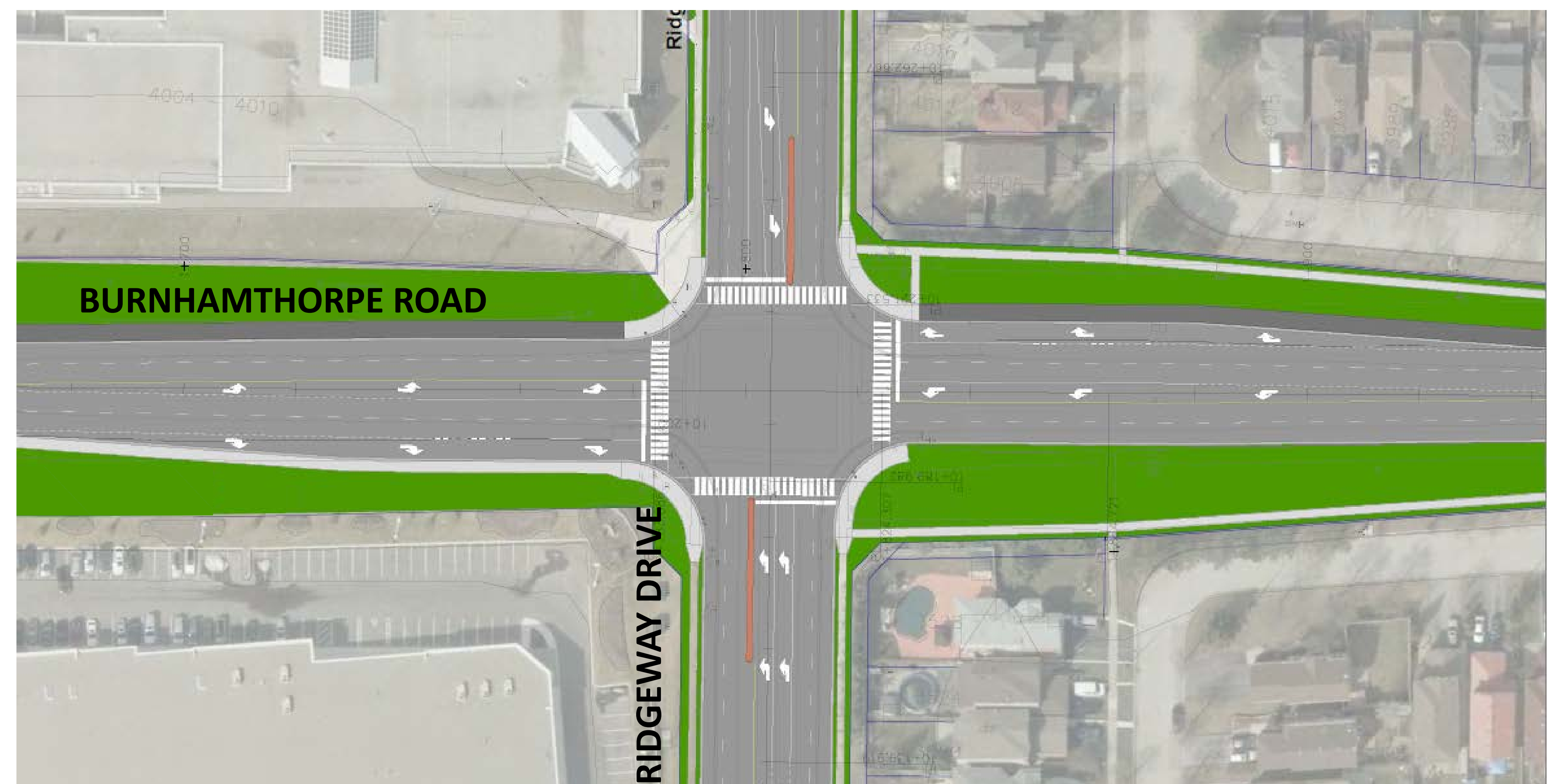
By 2031, the intersection of Ridgeway Drive and Burnhamthorpe Road is expected to reach capacity in the PM peak hour. These operational issues cannot be addressed with signal timing improvements alone. In order to accommodate the projected traffic volumes, improvements to the intersection of Ridgeway Drive and Burnhamthorpe Road are proposed:

Ridgeway Drive:

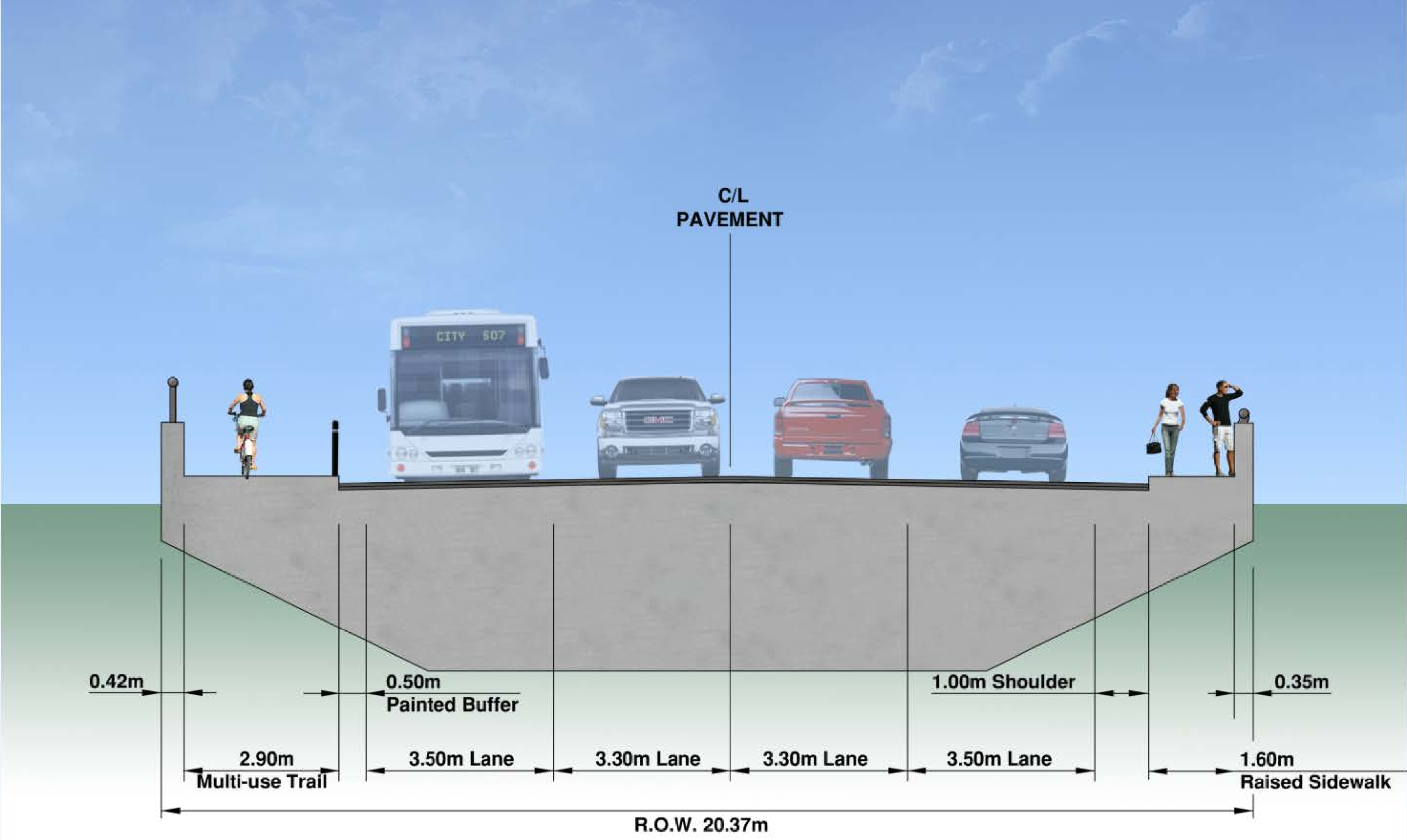
- Additional NB left turn lane

Burnhamthorpe Road:

- Exclusive EB right turn lane and additional EB through lane
- Exclusive WB right turn lane and additional WB through lane



Typical Cross-Section over Highway 403

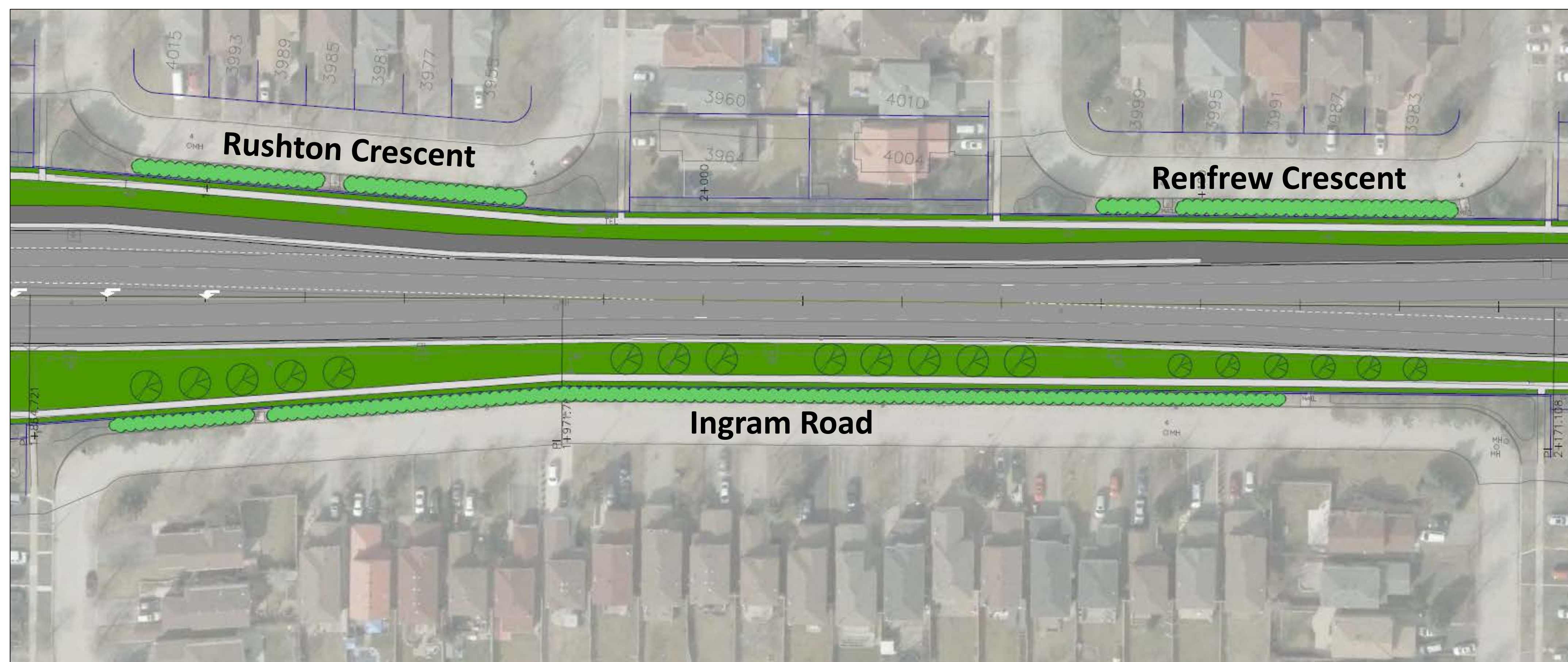


Typical Cross-Section over Highway 403*

* This is a conceptual design and it is subject to change as discussion with MTO continues.

Enhanced Landscaping Features

- Enhanced landscaping features will be considered for the Burnhamthorpe Road West corridor and planting will be recommended where appropriate.
- Generally, landscaping will be provided within the fence line of the properties adjacent to Burnhamthorpe Road.
- The species and location of planting will be reviewed in a Plantings and Landscaping Plan to ensure suitability.



Example of Enhanced Landscaping

Next Steps

Following this PIC the Project Team will:

- Review public and agency comments
- Incorporate design refinements based on feedback received
- Finalize the preliminary design
- Prepare the Environmental Study Report (ESR) to document the study and decision making process
- File the ESR on the public record for 30-day public review period

How to get involved:

- Request that your name be added to the study mailing list
- Provide your feedback by contacting the study team directly

For more information on this Study, please visit the project website at:

<http://www.mississauga.ca/portal/residents/burnhamthorpe-west-ea>



Please share your comments with either Project Manager:

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Your comments are welcome at any time throughout the study however, **we kindly ask that you provide comments with respect to the PIC No.2 materials by July 17, 2018** to allow us to incorporate critical information into the next stage of the study.

Thank you!