

Public Meeting

Sheppard Avenue East and Willowdale Avenue

Road Resurfacing and Reconstruction Opportunities

December 7, 2021

toronto.ca/SheppardAvenueEast

Agenda

1. Land Acknowledgement
2. Opening Remarks
3. Project Overview, Background, Key Design Features
4. Design Proposal
5. Timelines and Next Steps
6. Questions and Answers
7. Closing Remarks



This meeting is being recorded

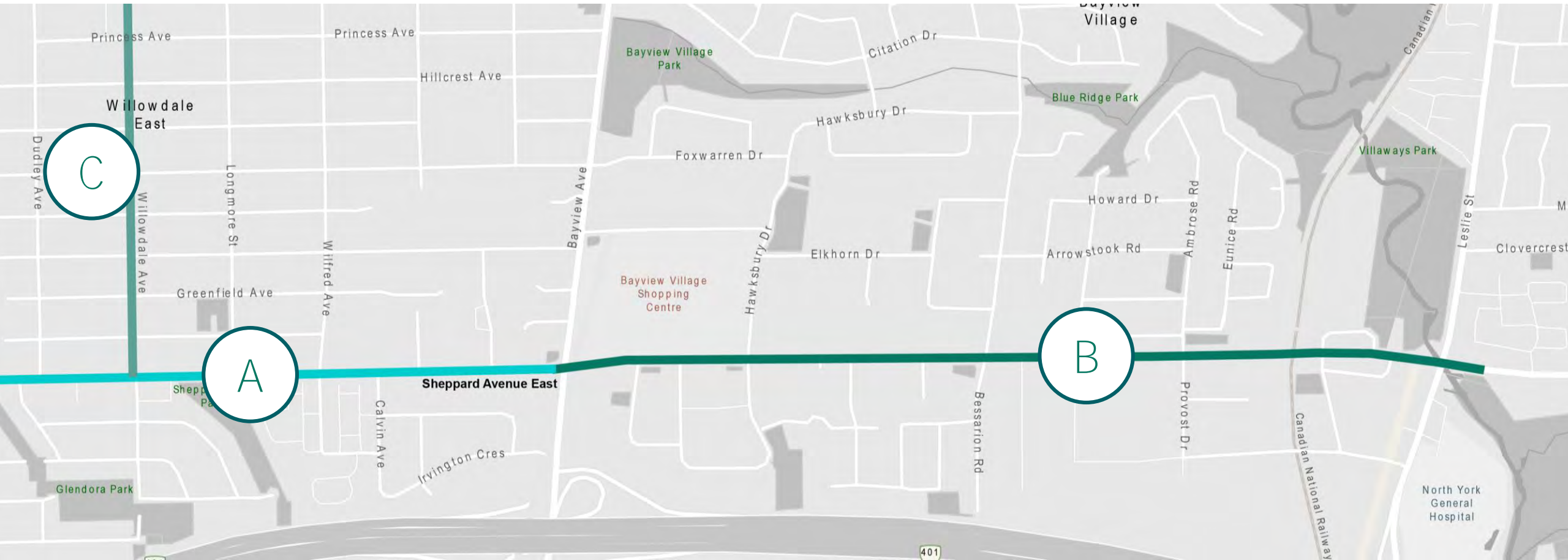
Land Acknowledgment

"We acknowledge the land we are meeting on is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. We also acknowledge that Toronto is covered by Treaty 13 with the Mississaugas of the Credit."

Project Overview

Project Overview

- A. Sheppard Avenue East, Bonnington Avenue to Bayview Avenue: Road Resurfacing (2022)
- B. Sheppard Avenue East, Bayview Avenue to Leslie Street: Road Reconstruction (2023-2024)
- C. Willowdale Avenue, Empress Avenue to Sheppard Avenue: Cycle Track Extension (2022)



Why Now?

- Sheppard Avenue from Bonnington Place to Bayview Avenue is programmed for a road resurfacing due to the poor condition of the road.
- Sheppard Avenue from Bayview Avenue to Leslie Street is programmed for a road reconstruction due to the very poor condition of the road.
- In Toronto, a road is resurfaced every 25-35 years and a road is reconstructed every 50-100 years.
- Development intensification is resulting in multi-modal demands.
- This project provides a once in a generation/lifetime opportunity to make changes to improve operations and safety.



Resurfacings and reconstructions are the most cost-effective time to improve streets

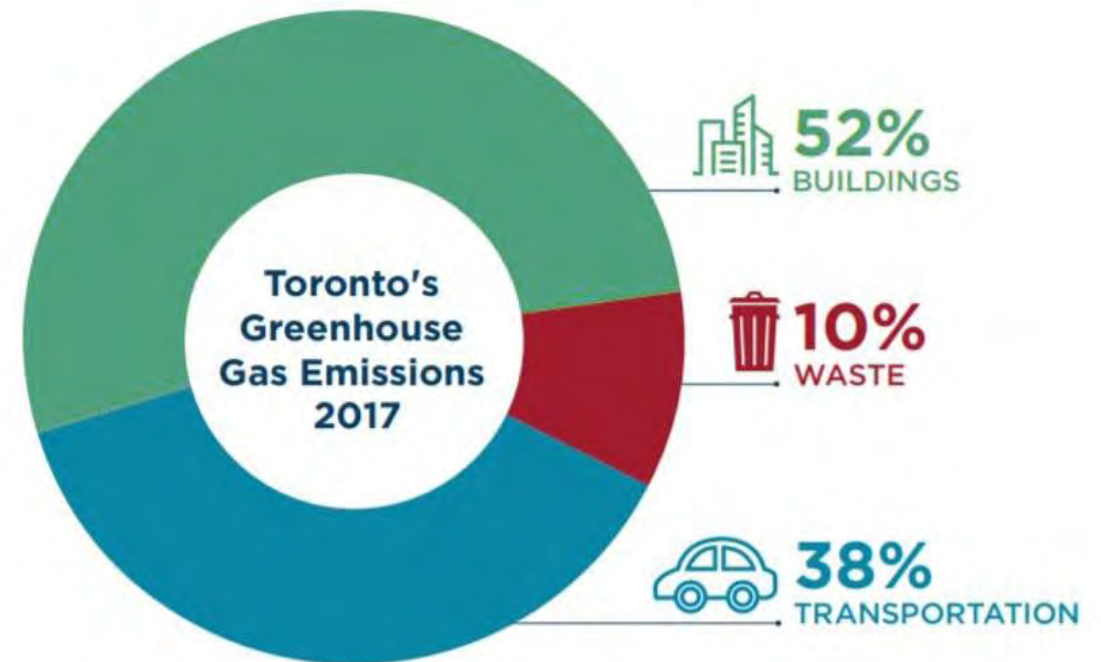
Why Consider Change? | Vision Zero

- The Vision Zero Road Safety Plan is a bold pledge to improve safety across our city using a data-driven and targeted approach, focusing on the locations where improvements are most needed. The City is committed to Vision Zero and accepts its fundamental message: fatalities and serious injuries on our roads are preventable, and we must strive to reduce traffic-related deaths and injuries to ZERO.
- Between 2015 and 2019, 7 people have been seriously injured in on Sheppard Ave East and Willowdale Avenue including:
 - 5 people walking, and;
 - 2 people driving.
- 1 person walking has been killed.
- The loss of life and serious injuries on Sheppard Avenue and Willowdale Avenue are unacceptable and the roadwork planned is an opportunity to take a Vision Zero approach and ensure people traveling on the corridor are safer.

Traditional Road Safety Approach	Vision Zero Approach
Traffic fatalities are inevitable.	Traffic fatalities are preventable.
Crashes are caused by non-compliant road users.	Humans make mistakes. The roadway system should be designed and operated so those mistakes are not deadly.
Try to reduce all collisions.	Prevent collisions that result in serious injuries and fatalities. No serious injuries or loss of life is acceptable.
Individual road users are responsible for their own safety.	Safety is a shared responsibility between those who design, operate, maintain, and use the road.
Reactive to historical crashes.	Proactive and systemic prioritization.

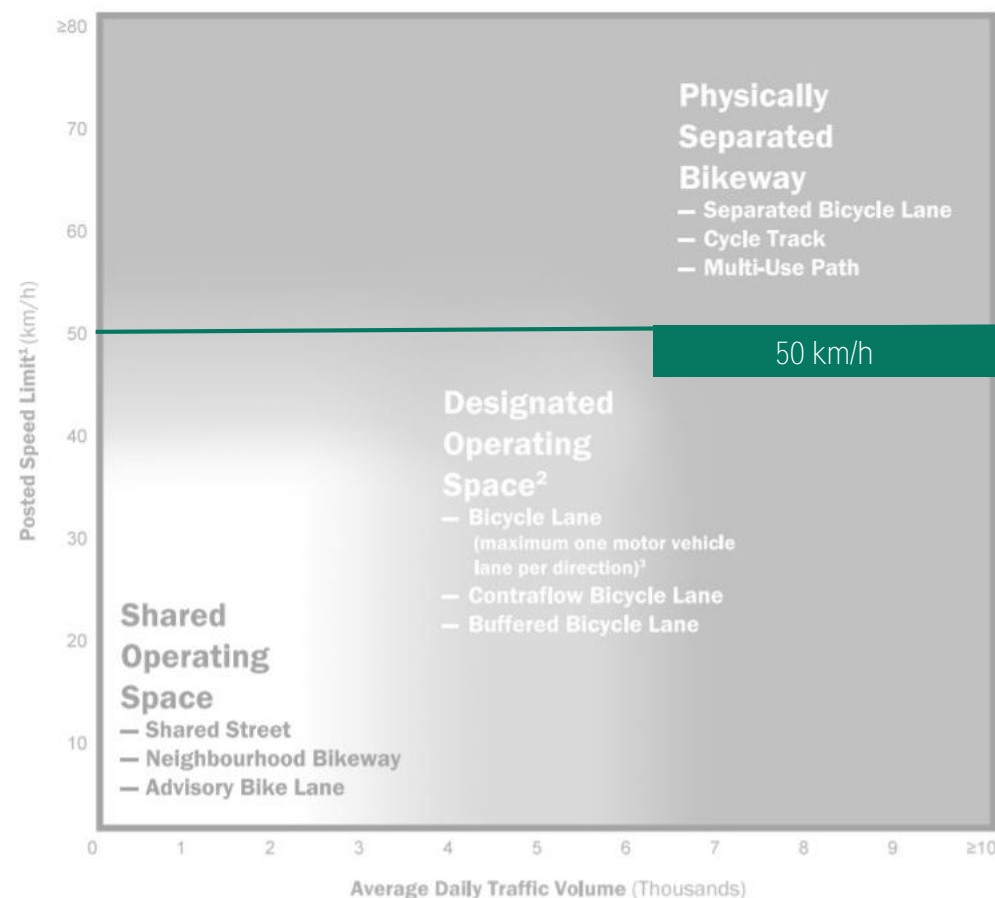
Why Consider Change? | TransformTO

- **TransformTO is Toronto's ambitious climate action strategy.**
Unanimously approved by City Council in July 2017, it includes a set of long-term, low-carbon goals and strategies to reduce local greenhouse gas emissions and improve our health, grow our economy, and improve social equity.
- On October 2, 2019, City Council voted unanimously to declare a [climate emergency](#) and accelerate efforts to mitigate and adapt to climate change, adopting a stronger emissions reduction target of net zero by 2050 or sooner.
- Transportation sources in Toronto are responsible for just over one third (38%) of local greenhouse gas emissions.
- TransformTO sets an ambitious goal that active transportation (cycling and walking) account for 75% of trips under 5 km citywide by 2050. As of 2016, only 37% of trips under 5 km citywide were taken by foot or bike.
- Redesigning streets to improve safety and comfort for people cycling and walking is one way to achieve TransformTO active transportation goals.








Why Consider Change? | Bikeway Design Guidelines

- The City of Toronto's bikeway designs are guided by Transportation Association (TAC) Geometric Design Guide for Canadian Roads, the Ontario Traffic Manual (OTM) and City adopted guidelines.
- In all of the above guiding documents, motor vehicle speed and volume are the most important criteria to identify the right bikeway for a street.
- Sheppard Avenue has over 40,000 vehicles/day and a posted speed of 50 km/hour.
- Willowdale Avenue has approximately 16,000 vehicles/day and a posted speed limit of 50 km/hour.
- Based on the speed and volume of traffic, the recommended bikeway types for Sheppard Avenue and Willowdale are cycle tracks in all the guiding documents.



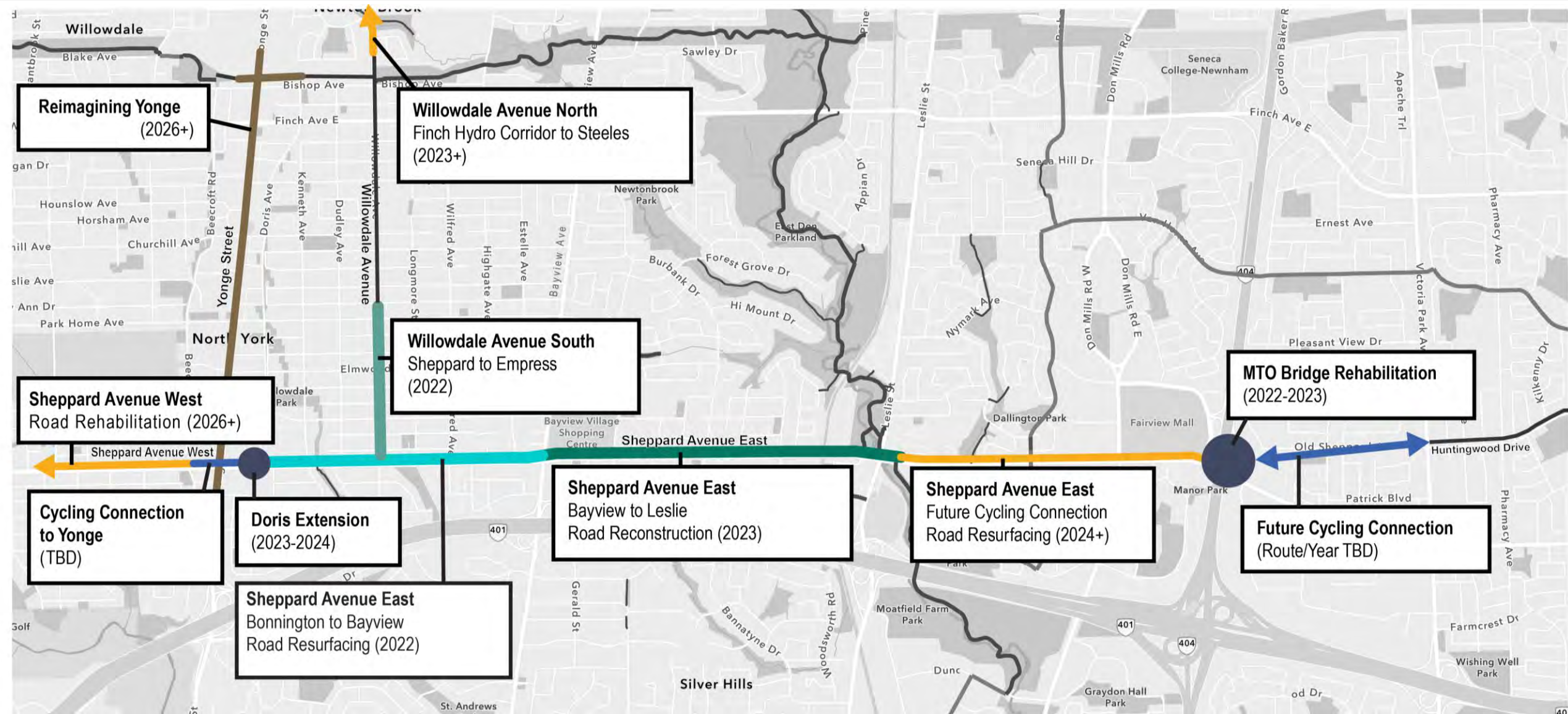
Sheppard Avenue and Willowdale Avenue vehicle volumes indicate that physically separated bikeways are recommended according to OTM

Project Goals and Opportunities

-  Improve safety for all users, especially for children and older adults
-  Better manage local traffic operations for people who drive and take surface transit including for deliveries, shopping and commuting
-  Better manage access to Highway 401 for longer distance trips
-  Enhance the walking and cycling experience
-  Increase the number of trees and planted areas

Project Background

Background | Planned Future Work



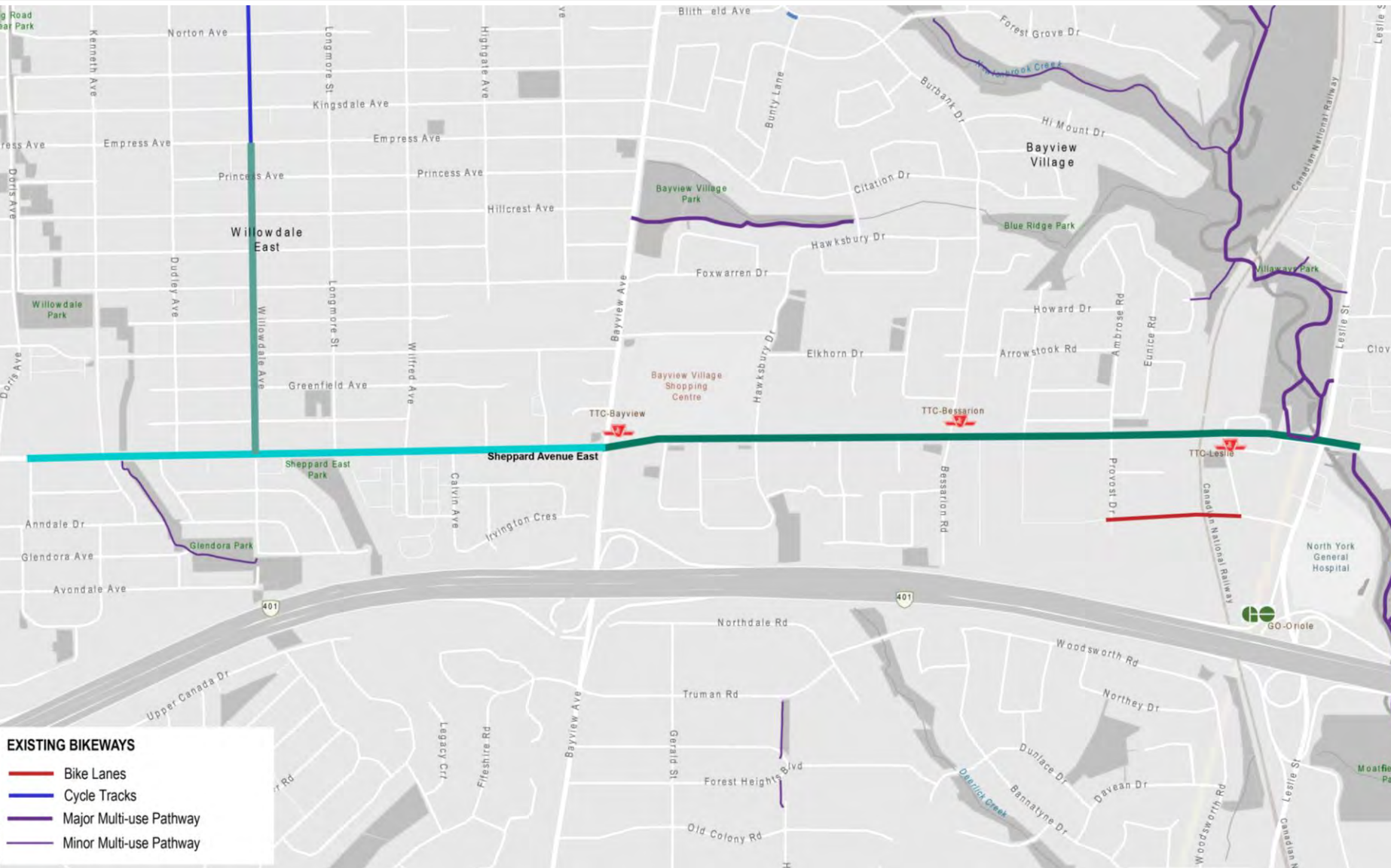
Background | Motor Vehicle Volumes



- Sheppard is a high-volume major arterial with daily volume of approx. 40,000 vehicles
- Bayview and Leslie are the heaviest-volume cross streets, with similar volumes as Sheppard
- Heavy turn movements at Bayview and Leslie, particularly for traffic going to/from Hwy 401

Source: 8-hour traffic movement count from Toronto Transportation

Background | Cycling Network



- The area has an extensive trail network, but limited to no on-street connections
- In 2020, cycle tracks were installed on Willowdale Ave from Empress Ave to Bishop St to connect to the Finch Hydro Trail
- Sheppard Avenue was identified as a Major City-Wide Cycling Route, which represent important corridors for future cycling connectivity.

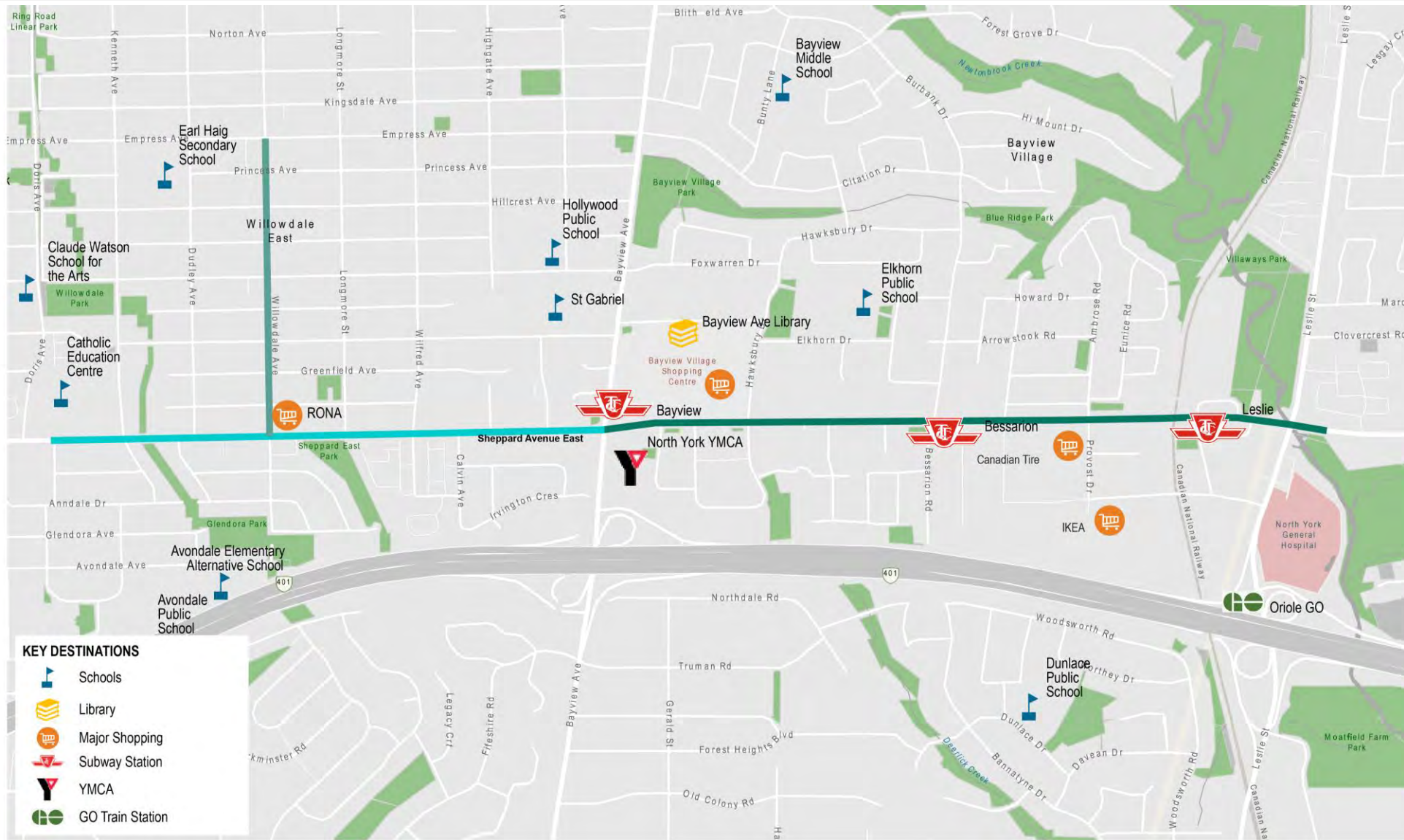
Background | Existing Cycling Conditions



Some people choose to cycle despite lack of dedicated infrastructure. Without safe bikeways, many choose to cycle on sidewalks illegally.



Background | Key Destinations



Background | Existing Walking Conditions



Narrow sidewalks and asphalt in disrepair



Large intersections with long pedestrian crossings



Accessibility issues

Key Design Features

Key Design Features



Boulevard

The part of a street that is not used for vehicle travel, and is between the roadway and the sidewalk.



Median

The strip of land between the lanes of opposing traffic on a divided roadway.



Streetscape

What you can see on a street, including the road, sidewalks, street furniture, trees and open spaces, that combine to form the street's character.

Key Design Features



Green infrastructure
Green infrastructure allows for runoff water from the street to be naturally filtered and slowed down before entering the sewer system.



Transit Stops
The location of transit stops is generally guided by the safety and comfort of transit users, spacing between stops, and nearby intersections and land uses.



Curb Radii Reduction
Reduced curb radii reduce pedestrian crossing distances and encourages lower motor vehicle speeds.

Key Design Features



Truck Aprons

These allow large vehicles to navigate the curb without striking fixed objects or other road users, while creating slower turns for smaller vehicles.



Raised Crossings

These raised areas at intersections improve the visibility of people crossing and increase awareness **of drivers' speeds.**



Left Turn Calming

Speed bumps encourage drivers to approach the crosswalk at a sharper angle, resulting in slower turning speeds and better visibility.

Key Design Features



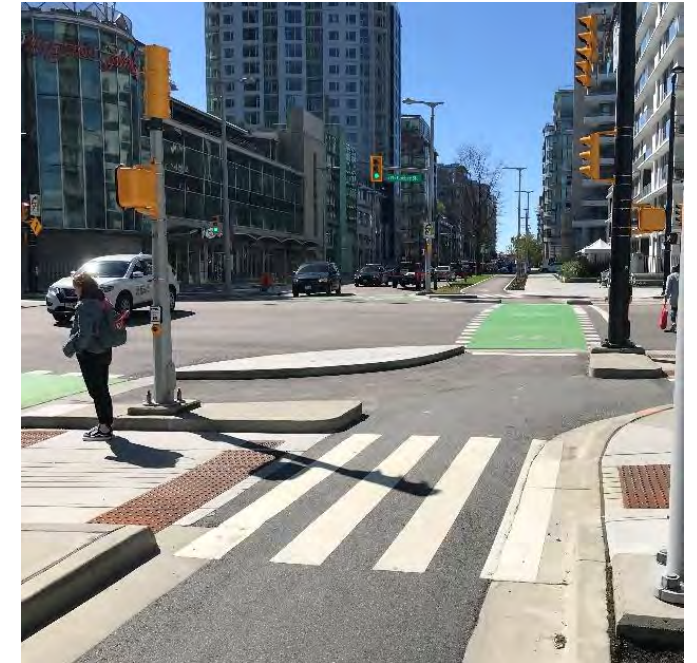
Raised Cycle Track

Vertically separated from motor vehicle traffic, and may be at the level of the adjacent sidewalk or combined with a parking lane or other barrier from the roadway.



Street-level Cycle Track

Bollards Mounted on Curbs
Cycle tracks are physically separated from motor vehicle traffic by curbs or bollards, at the same level as the road.



Protected Intersection

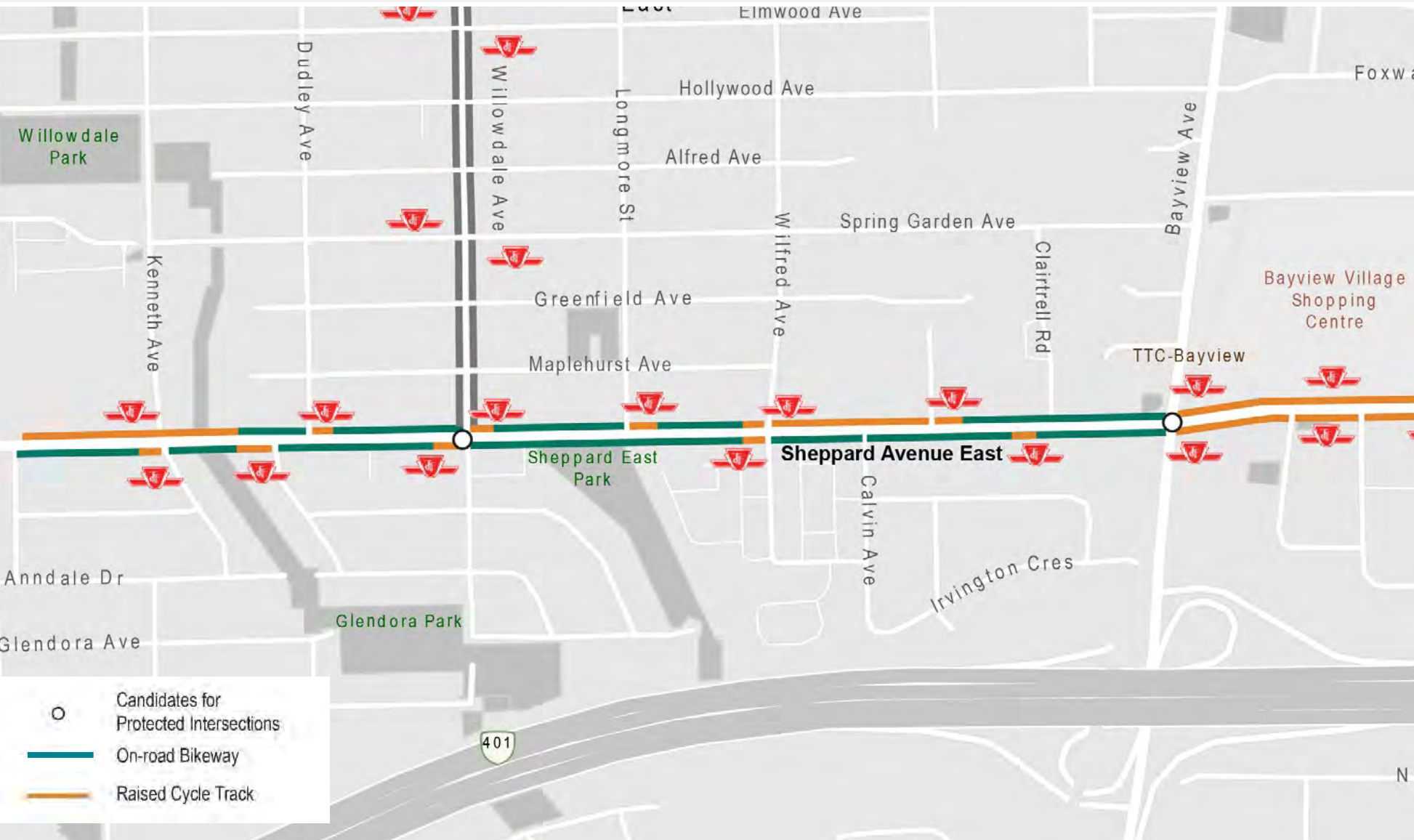
A protected intersection is a design where the bikeway remains separated, where enhanced measures mitigate the conflict between people cycling, people walking and drivers turning.

Design Proposal

A. Sheppard Ave E Resurfacing

Bonnington Pl to Bayview Ave

A | Sheppard Avenue Resurfacing Overview



- In 2022, Sheppard Avenue between Bonnington Place and Bayview Avenue is programmed for road resurfacing.
- This is a once in a 25-35 year opportunity to implement changes.
- Sheppard is a high-volume major arterial with daily volume of approximately 40,000 vehicles.
- The proposed plans reflect the need to improve safety for people of all ages no matter how they move around, while maintaining and improving operations for people who drive.

A | Bonnington to Bayview Existing Conditions



A | Bonnington to Bayview Existing Conditions

South boulevard has many poles between sidewalk and curb



Some portions of the north boulevard are wide and surfaced in asphalt

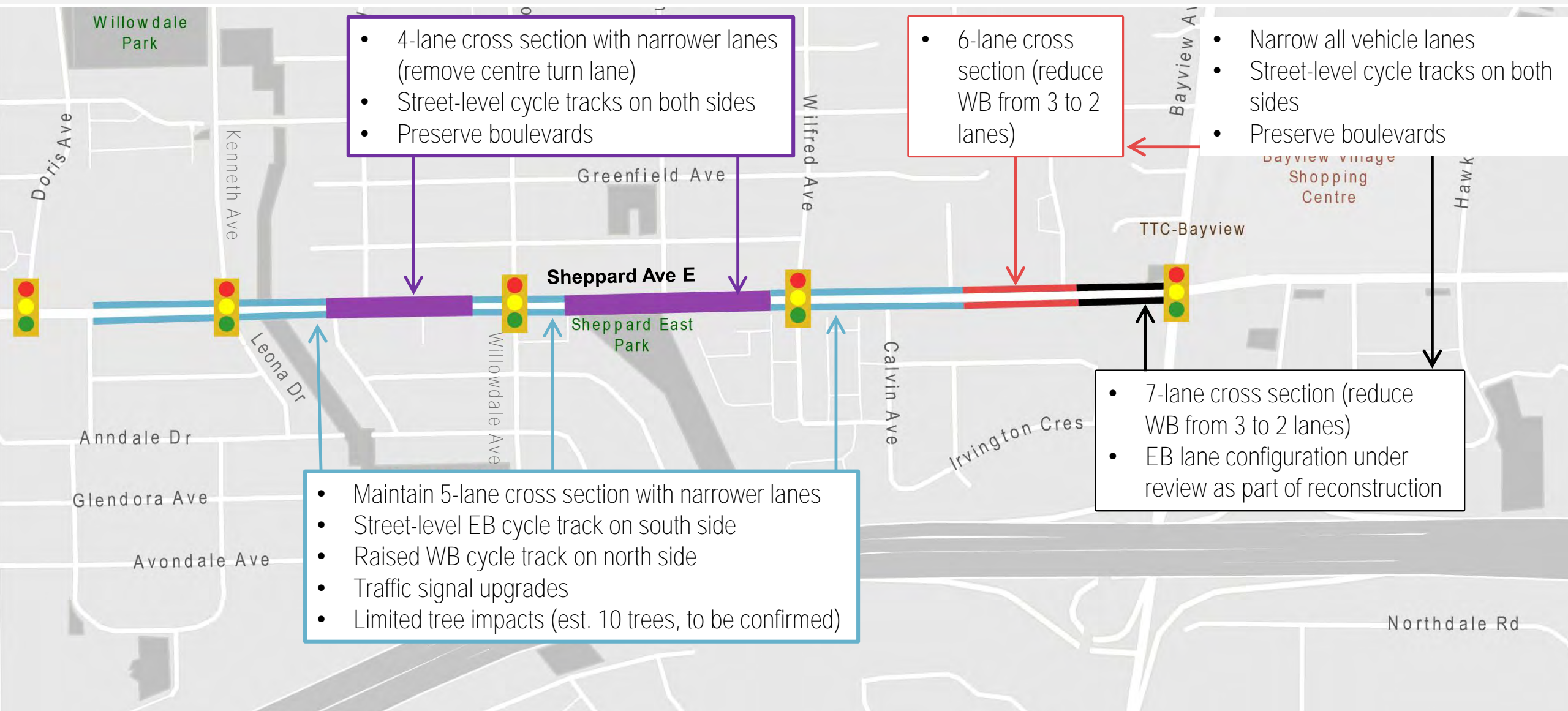
A | Road Resurfacing Design Features

The asphalt on Sheppard Avenue East between Bonnington and Bayview Avenue is in disrepair. The City is planning road resurfacing work, which involves replacing the asphalt surface. This is an opportunity to improve conditions, generally within existing curbs.

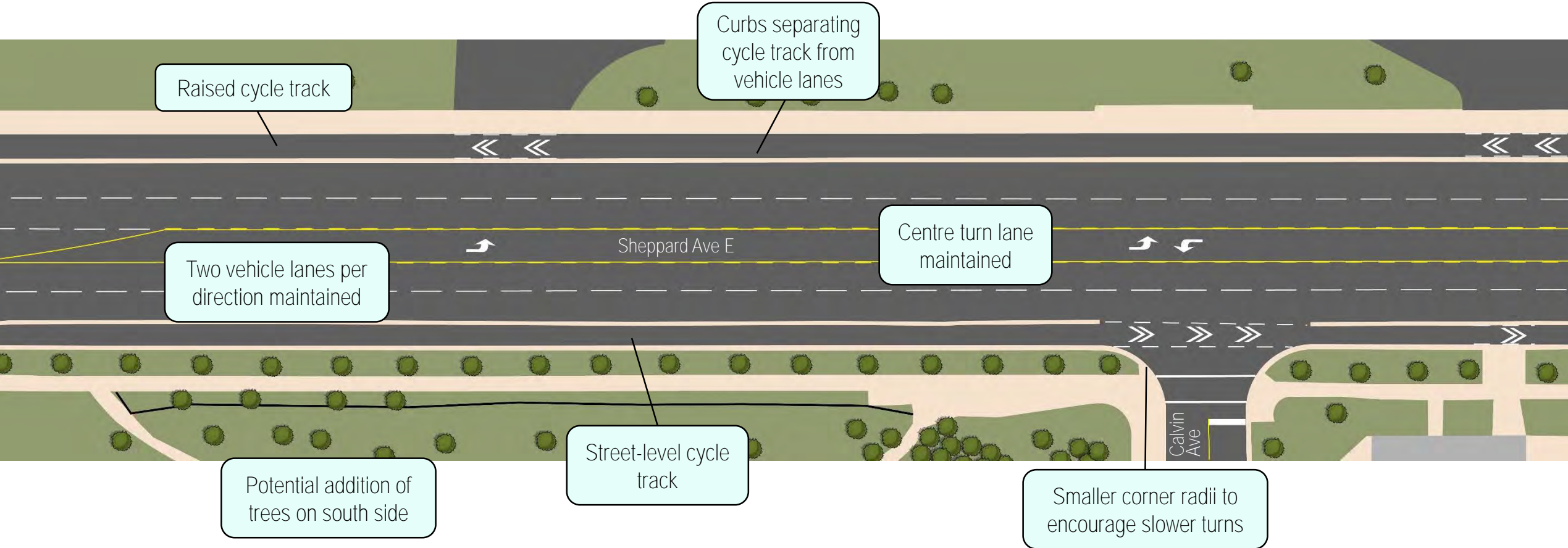
Key features proposed are:

- Intersection safety measures including corner radii reductions and signal phasing changes
- Protected intersection under review at Willowdale Ave intersection: additional stakeholder consultation planned
- Maintaining vehicular travel lanes and narrowing to encourage reduced speeding in off-peak hours
- Accessibility measures at all transit stops and intersections
- Uni-directional cycle tracks
- There are no impacts to parking in this section

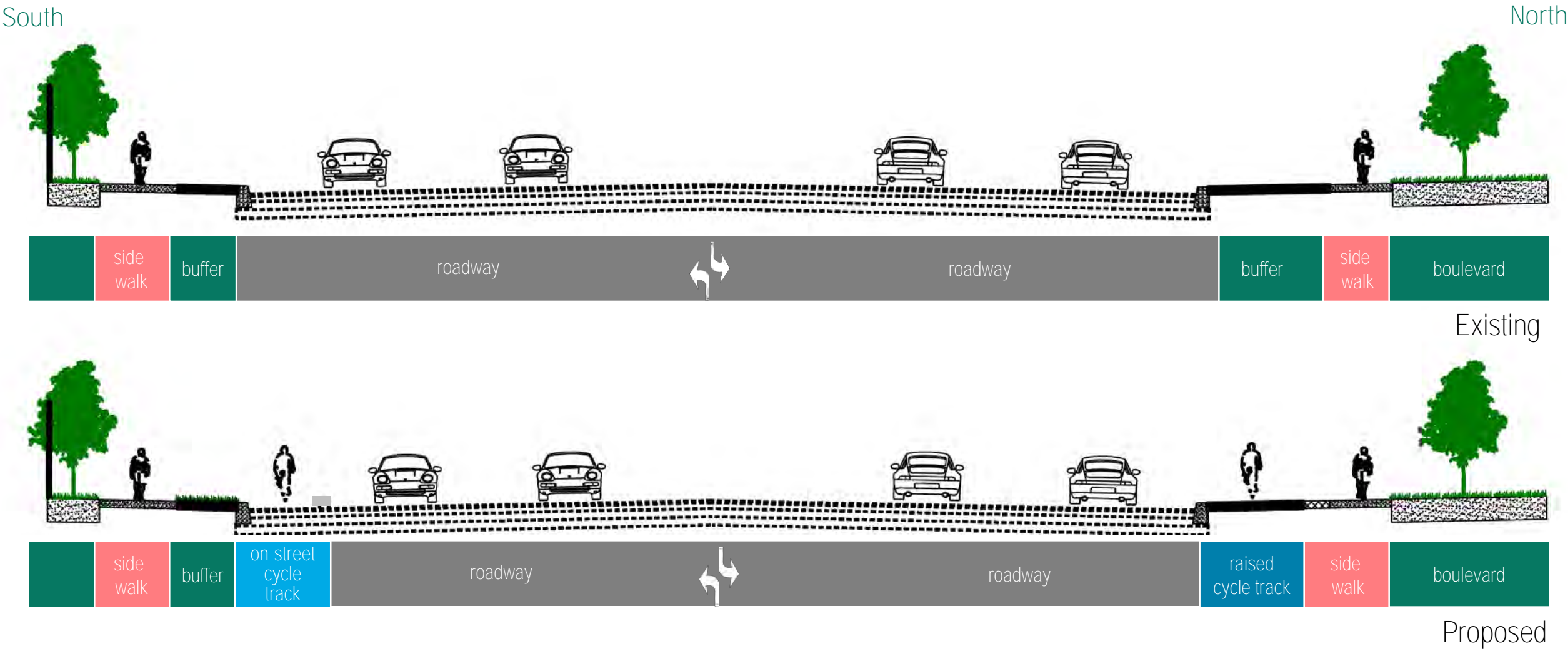
A | Road Resurfacing Design Summary



A | Sample Plan View East of Wilfred

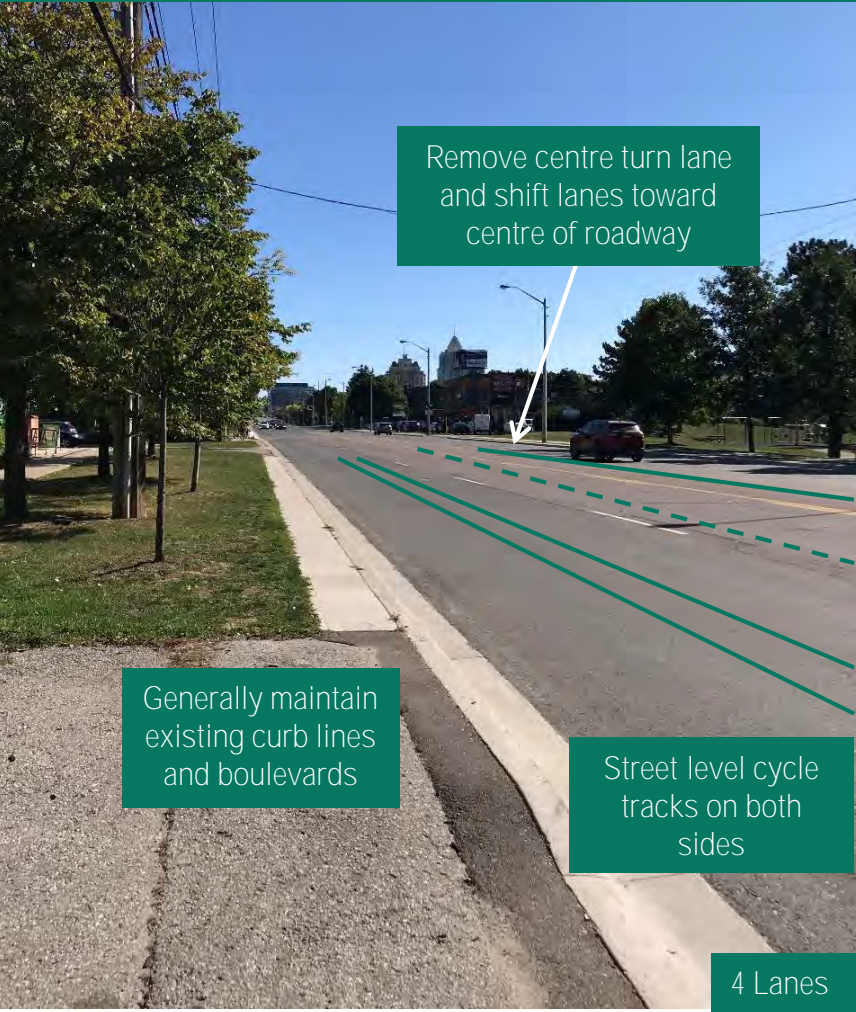


A | East of Wilfred Proposed Cross-section

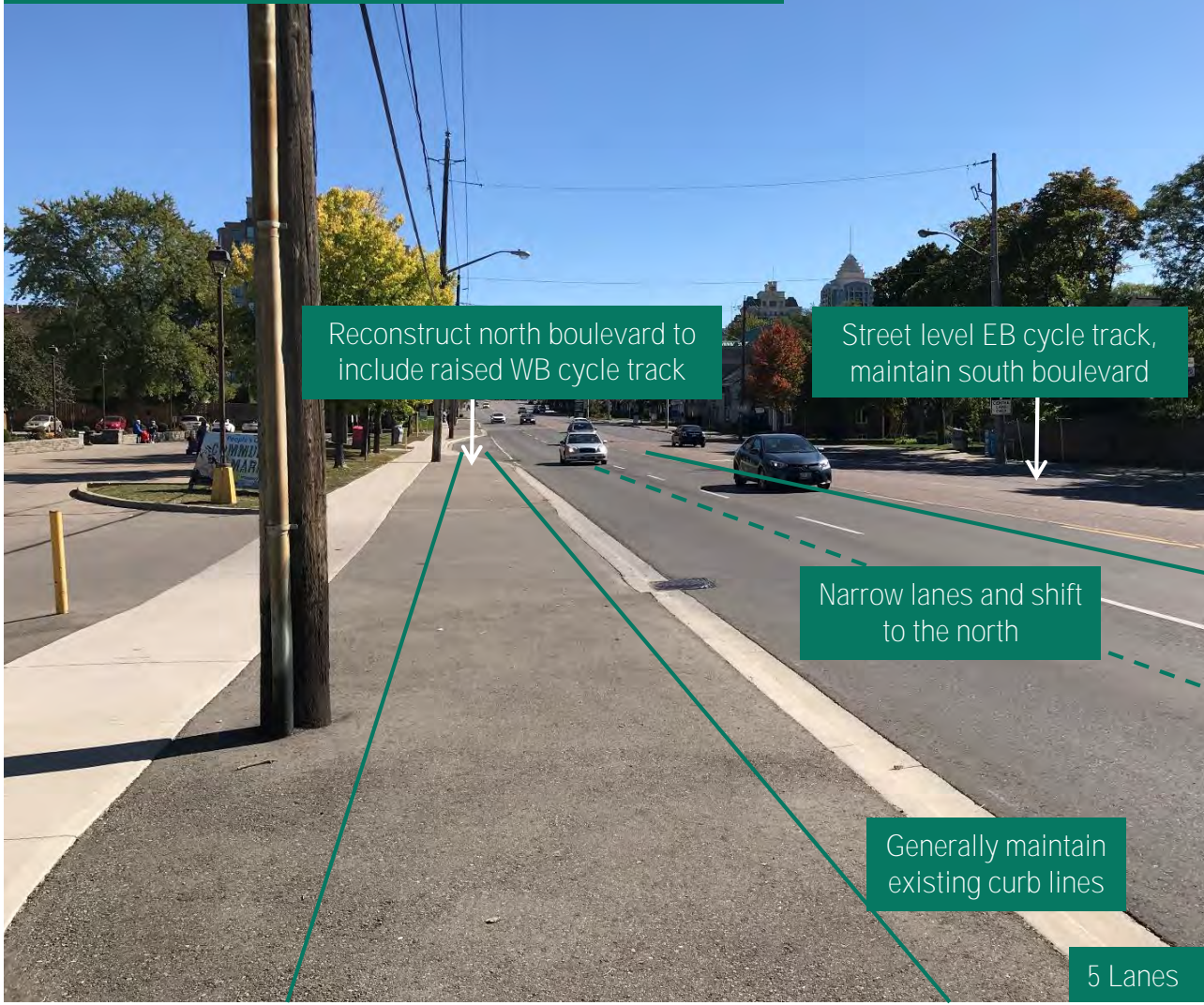


A | Bonnington to Bayview On Street and Raised Cycle Tracks

Street-level Street Cycle Track Configuration



Raised Cycle Track Configuration



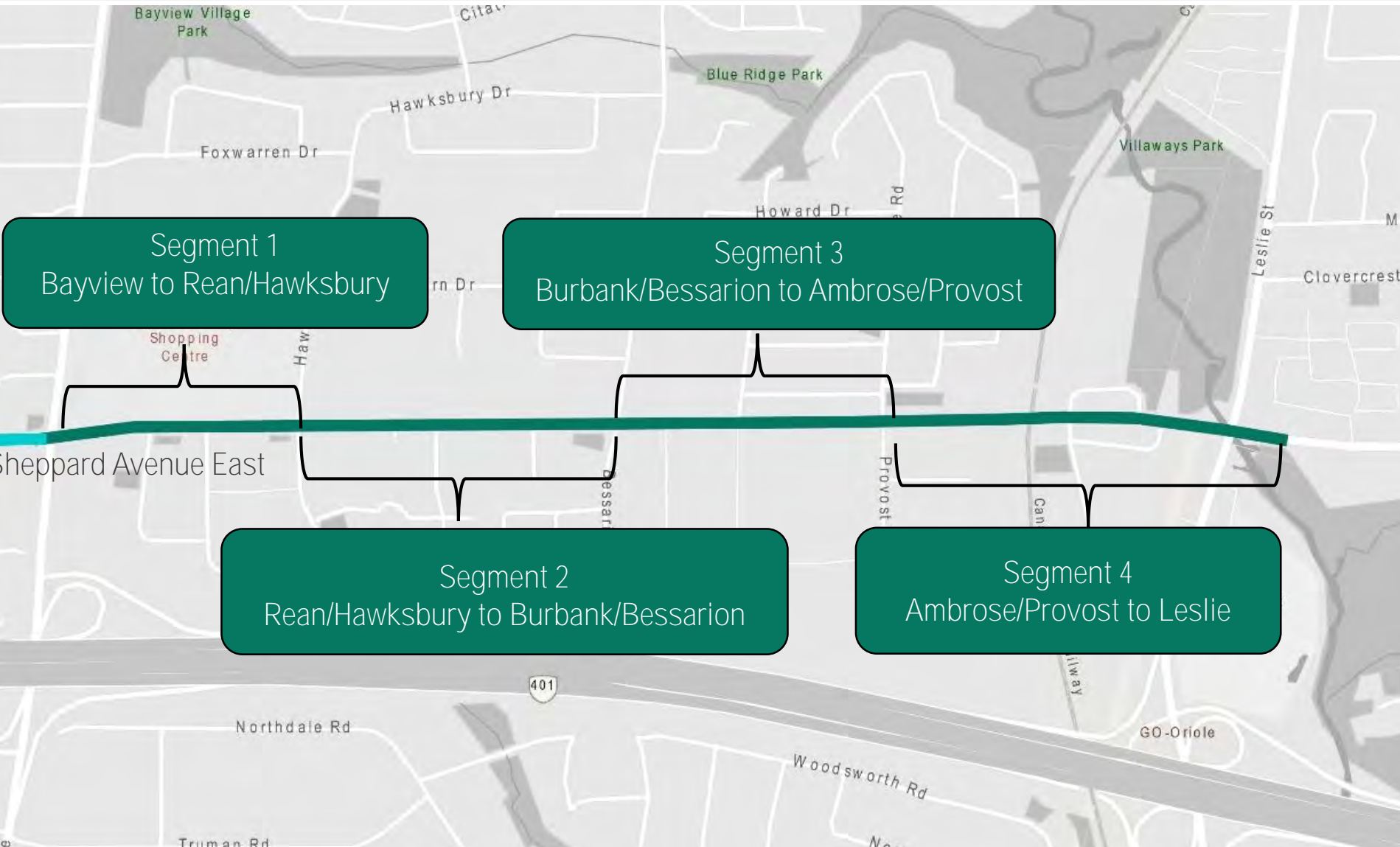
A | Summary of Opportunities and Impacts

A. Bonnington to Bayview Road Resurfacing	Opportunities and Impacts
Vehicular Lanes	<ul style="list-style-type: none">• Maintain two travel lanes per direction• Maintain left turn lanes at signalized intersections and centre turn lane where possible• Remove centre turn lane between signals between Kenneth and Wilfred• Lane width narrowing for safer speeds• Improved predictability of the roadway
Intersections	<ul style="list-style-type: none">• Corner radii reductions for safer turns and better sight lines• Signal phasing changes under consideration for improved safety for all users
Parking/Loading	<ul style="list-style-type: none">• No impacts (parking/loading does not currently exist in this section)
Cycle Tracks	<ul style="list-style-type: none">• Uni-directional cycle tracks would provide a safe option for people on bikes and reduce conflicts with motorists and pedestrians
Accessibility	<ul style="list-style-type: none">• Upgrade existing pedestrian signals to be accessible
Sidewalks	<ul style="list-style-type: none">• State of good repair of existing sidewalks and potential widening where possible

B. Sheppard Ave E Reconstruction

Bayview Ave to Leslie St

B | Bayview Ave to Leslie St Overview

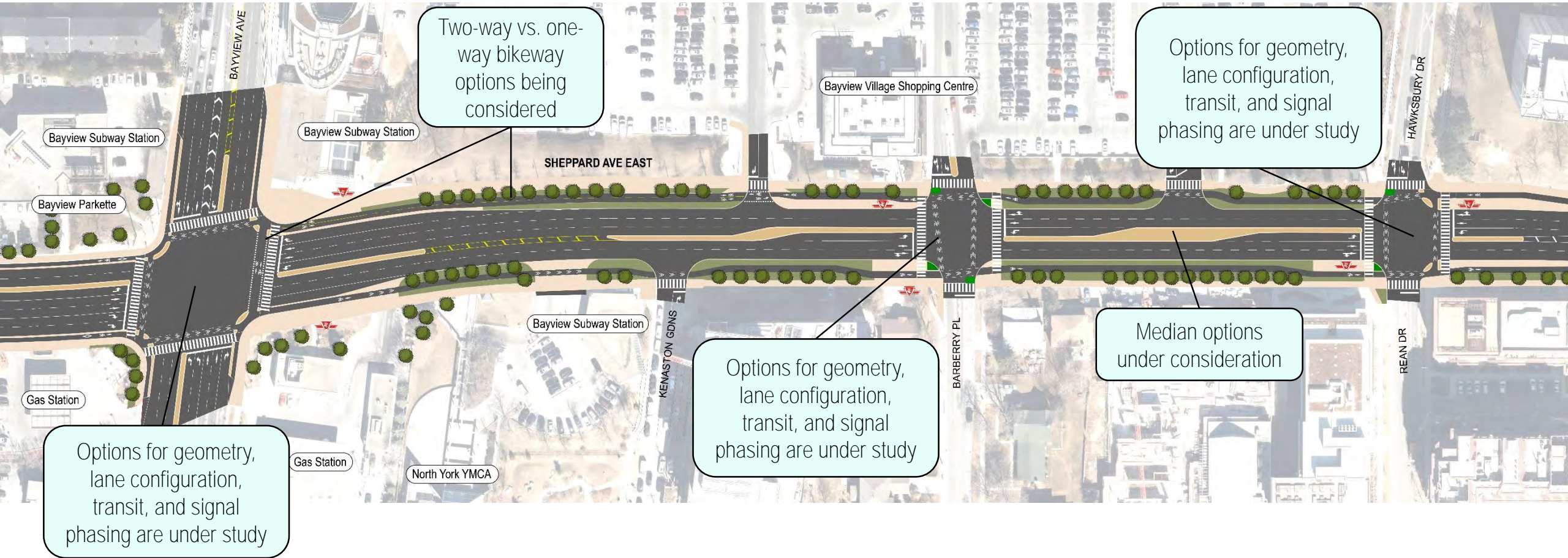


- The City is planning a road reconstruction on Sheppard Avenue East from Bayview Avenue to Leslie Street in 2023/2024. This involves removing and replacing both the asphalt surface of the road and the concrete road base, as well as curbs and sidewalks.
- Road reconstruction typically takes place every 50 to 100 years and presents an opportunity for the City to improve the design of a street with consideration to current policies and design guidelines, as well as future needs of the community.

Segment 1

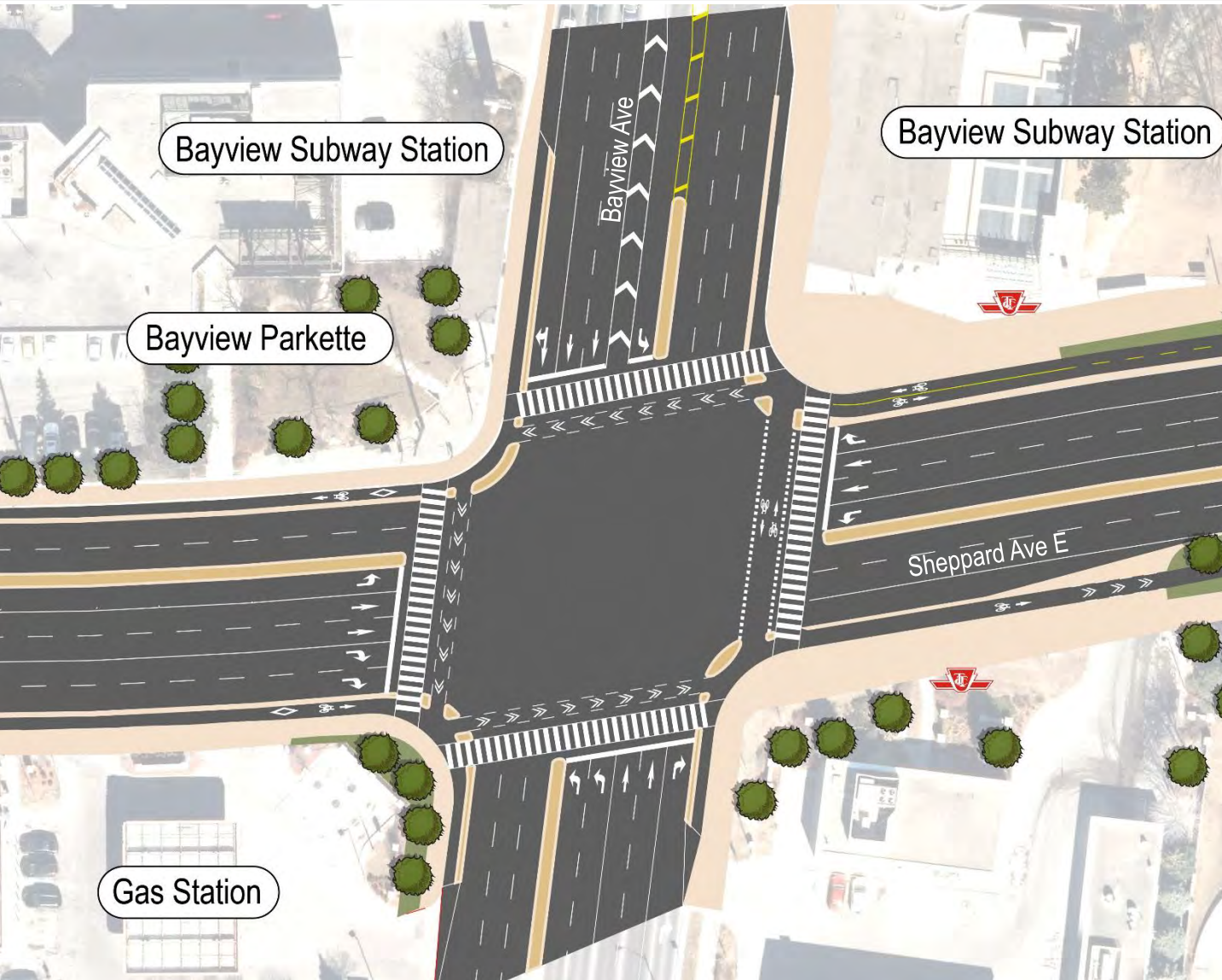
Sheppard Ave E Reconstruction . Bayview Ave to Rean Dr/Hawksbury Dr

B1 | Bayview to Rean/Hawksbury Overall Plan



*Conceptual Plan

B1 | Bayview Ave Intersection



Existing Highlights

- An important and heavily travelled intersection
- Current operational issues and visibility issues / safety issues
- Future development + connectivity to subway station

Proposed Approach

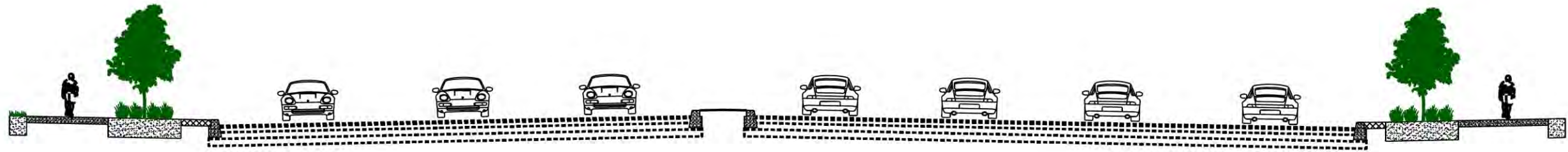
- Maintain capacity for people driving, particularly for movements to/from Hwy 401
- Protected intersection
- Connection to future development / bike connectivity to transit
- Left turn calming
- Options for geometry, lane configuration, transit, and signal phasing are under study and will be informed by public feedback

*Conceptual Plan

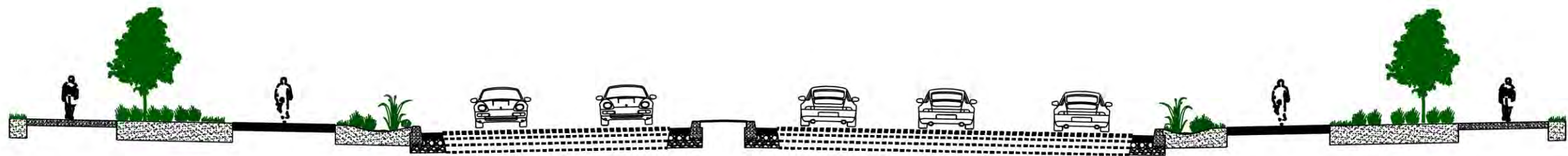
B1 | Sample Cross Section East of Barberry

South

North



Existing

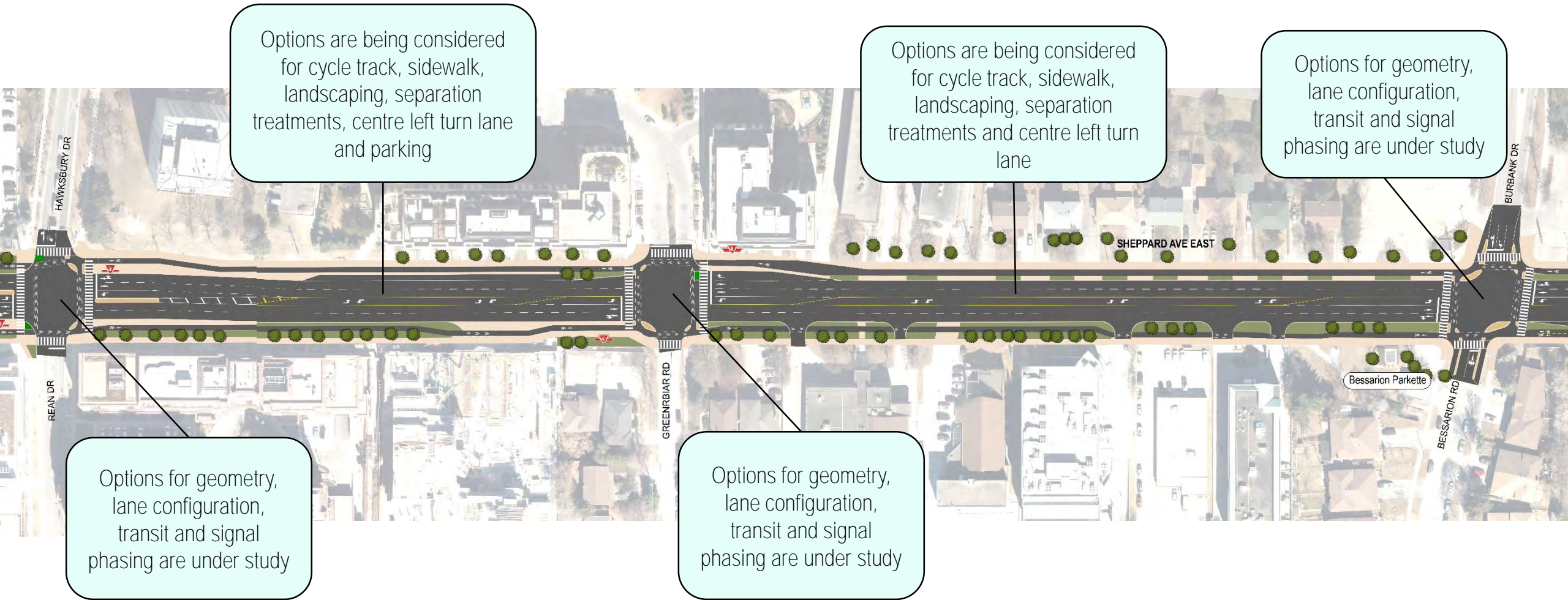


Proposed

Segment 2

Sheppard Ave E Reconstruction . Rean Dr/Hawksbury Dr to Bessarion Rd/Burbank Dr

B2 | Rean Dr/Hawksbury Dr to Bessarion Rd/Burbank Dr

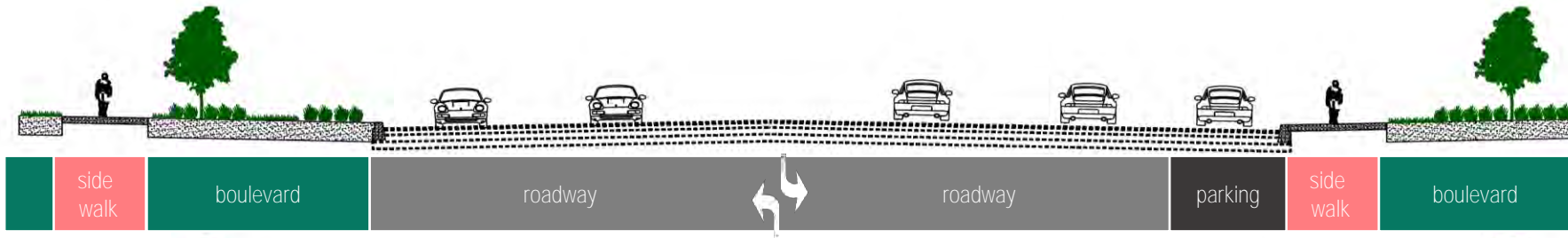


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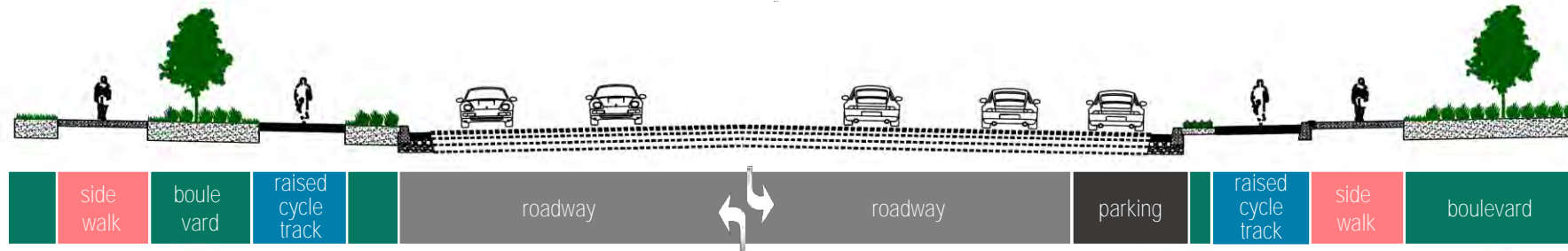
B2 | Sample Cross Section West of Greenbriar Rd

South

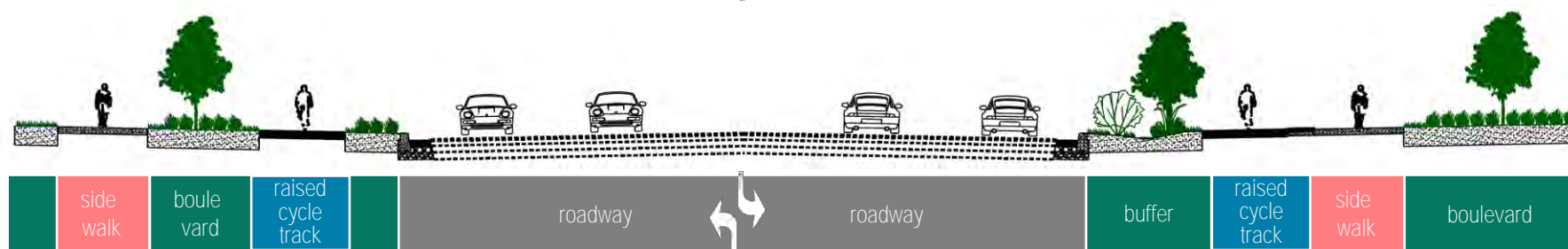
North



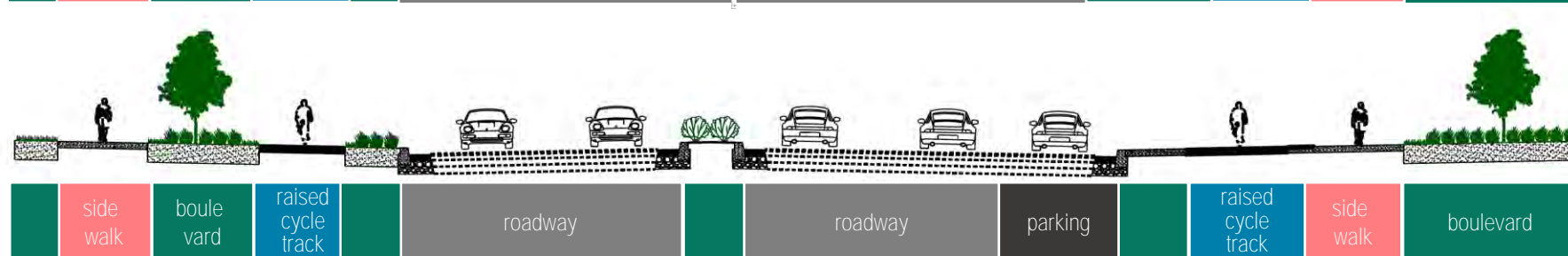
Existing



Proposed Option A



Proposed Option B

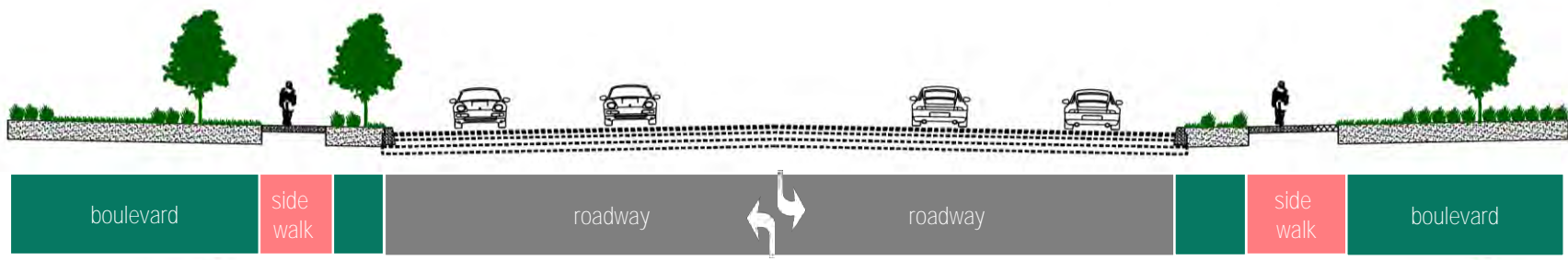


Proposed Option C

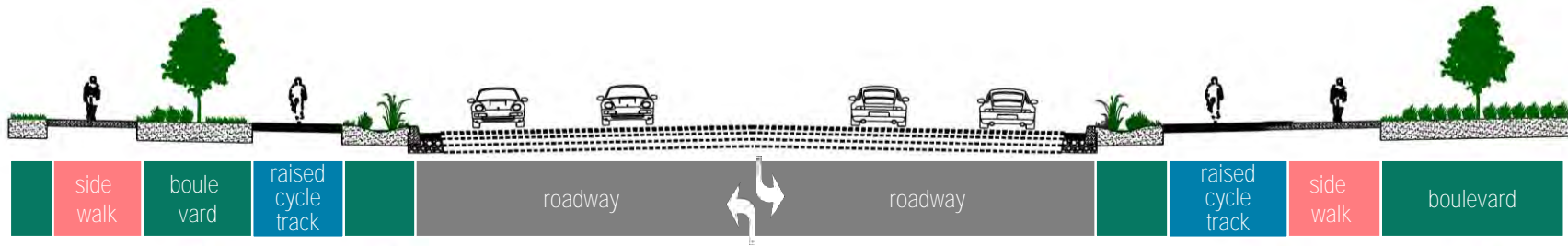
B2 | Sample Cross Section | West of Bessarion Rd

South

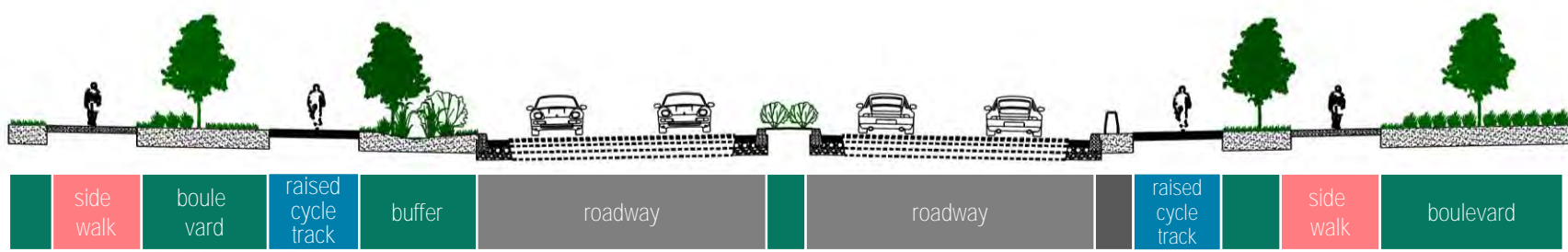
North



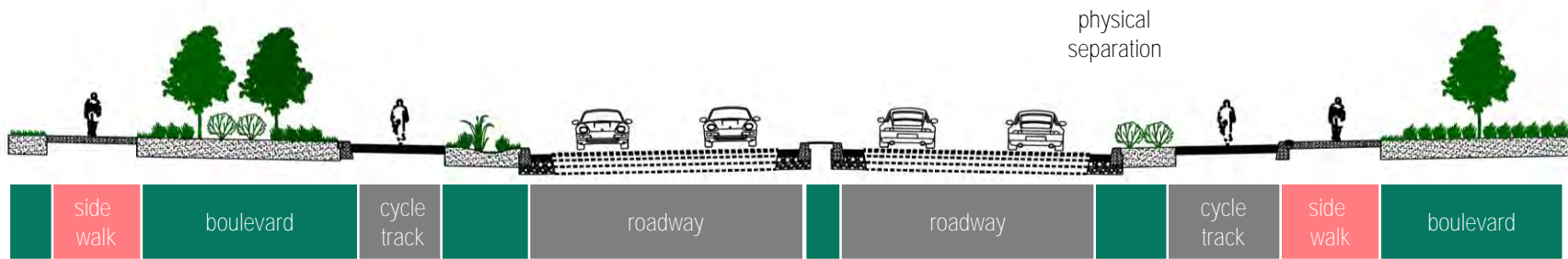
Existing



Proposed Option A



Proposed Option B



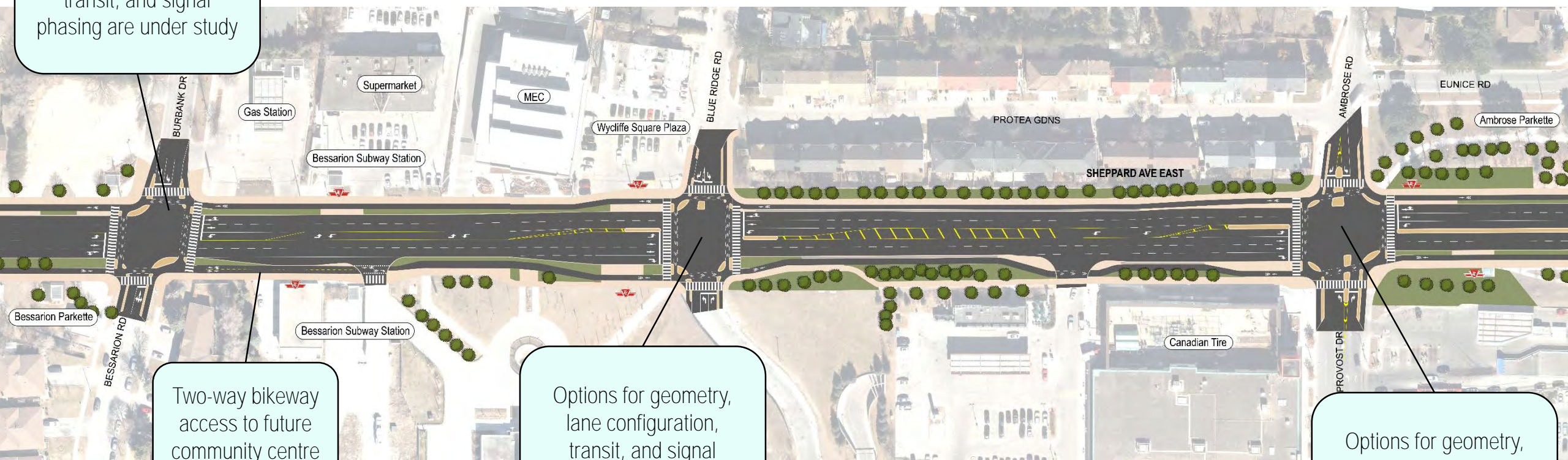
Proposed Option C

Segment 3

Sheppard Ave E Reconstruction . Burbank Dr/Bessarion Rd to Ambrose Rd/Provost Dr

B3 | Burbank Dr/Bessarion Rd to Ambrose Rd/Provost Dr

Options for geometry, lane configuration, transit, and signal phasing are under study



Two-way bikeway access to future community centre

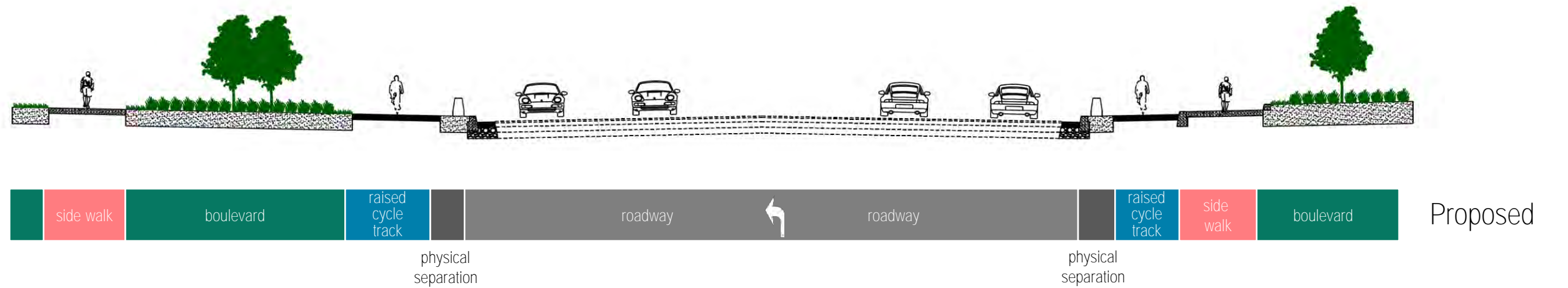
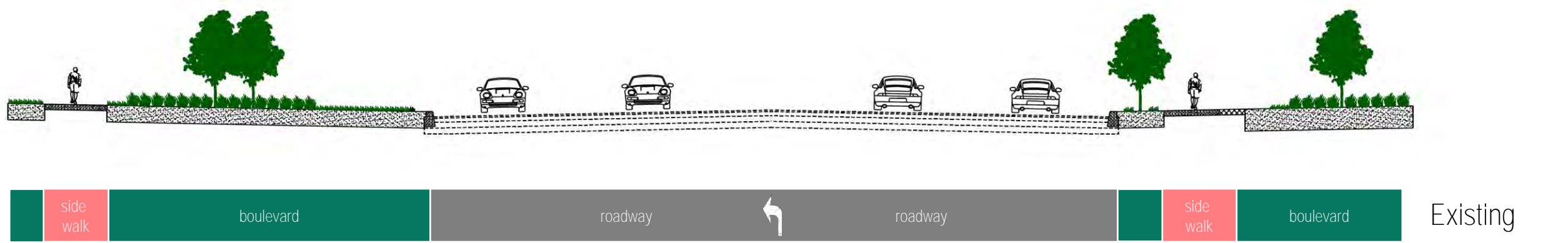
Options for geometry, lane configuration, transit, and signal phasing are under study

Options for geometry, lane configuration, transit, and signal phasing are under study

*Conceptual Plan

B3 | Sample Cross Section West of Ambrose Rd/Provost Dr

SouthNorth



Segment 4

Sheppard Ave E Reconstruction . Ambrose Rd/Provost Dr to Leslie St

B4 | Ambrose Rd/Provost Dr to Leslie St

Options are being considered for cycle track, sidewalk, landscaping, and separation treatments

Options for geometry, lane configuration, transit and signal phasing are under study

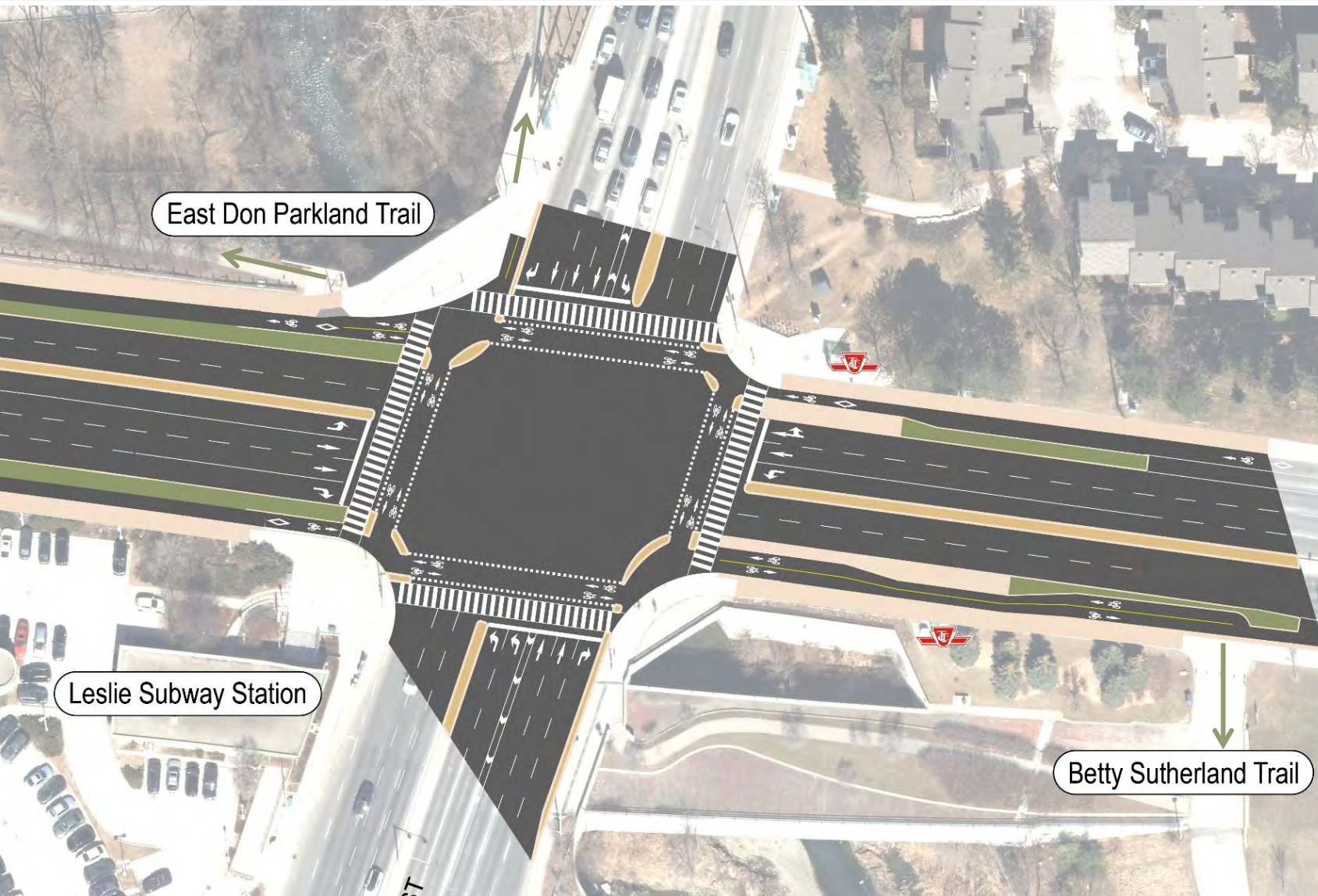
Options are being considered for cycle track, sidewalk, landscaping, and separation treatments

Options for geometry, lane configuration, transit and signal phasing are under study



*Conceptual Plan

B4 | Leslie St Intersection



Existing Highlights

*Conceptual Plan

- An important and heavily travelled intersection
- Current operational issues and visibility issues / safety issues
- Connectivity to Betty Sutherland Trail and Leslie Subway Station

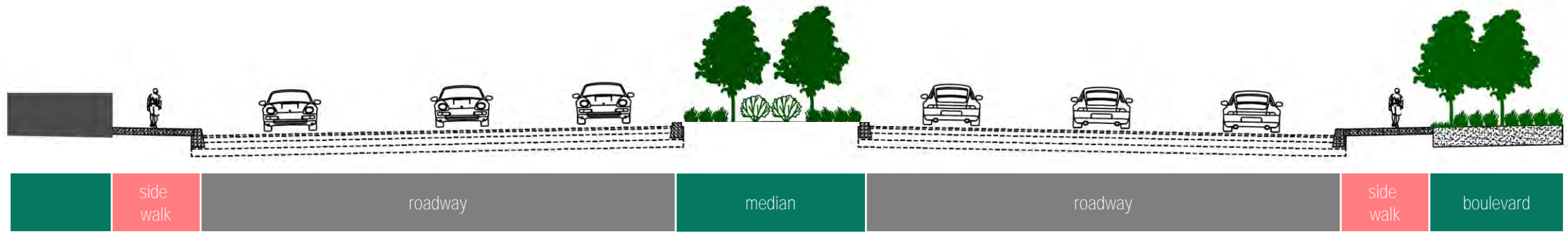
Proposed Approach

- Maintain capacity for people driving, particularly for movements to/from Hwy 401
- Protected intersection
- Connection to future development / bike connectivity to transit
- Left turn calming
- Options for geometry, lane configuration, transit, and signal phasing are under study and will be informed by public feedback

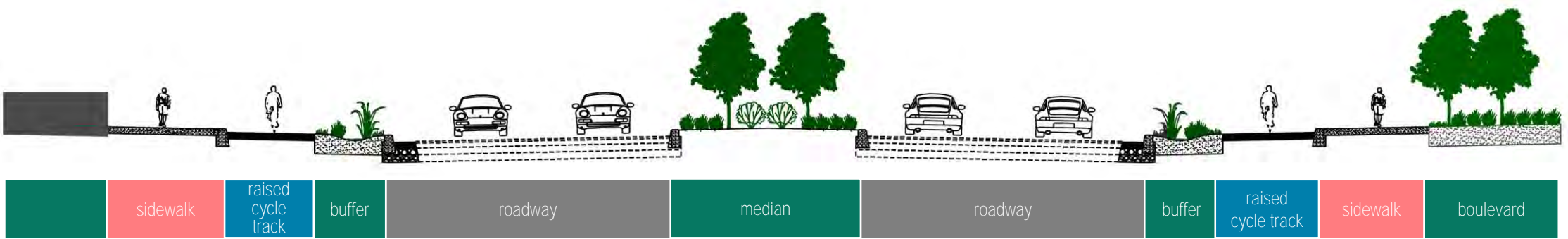
B4 | Sample Cross Section At Rail Overpass

South

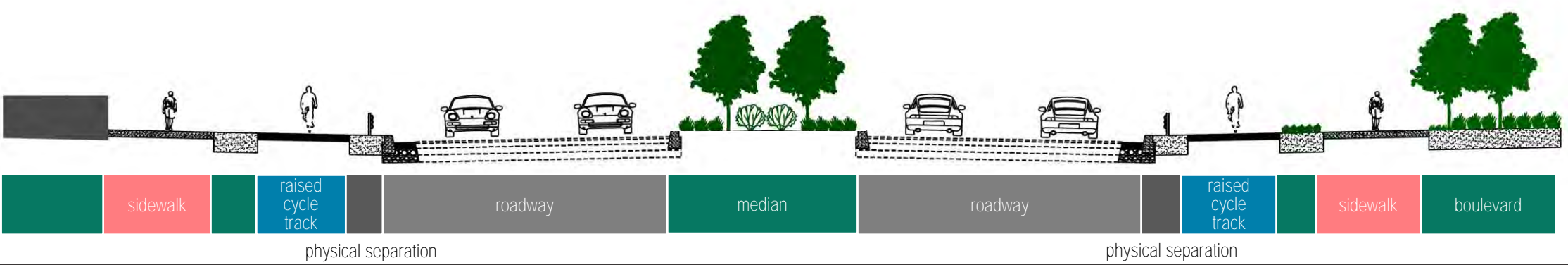
North



Existing



Proposed Option A



Proposed Option B

B4 | Sheppard Ave Looking West Towards Ambrose Road



*Artist's Rendering

Two motor vehicle travel lanes per direction maintained, with new raised cycle track and widened sidewalk added with green infrastructure

B4 | Sheppard Ave E Looking East Towards Leslie Street



*Artist's Rendering

B | Summary of Impacts and Opportunities

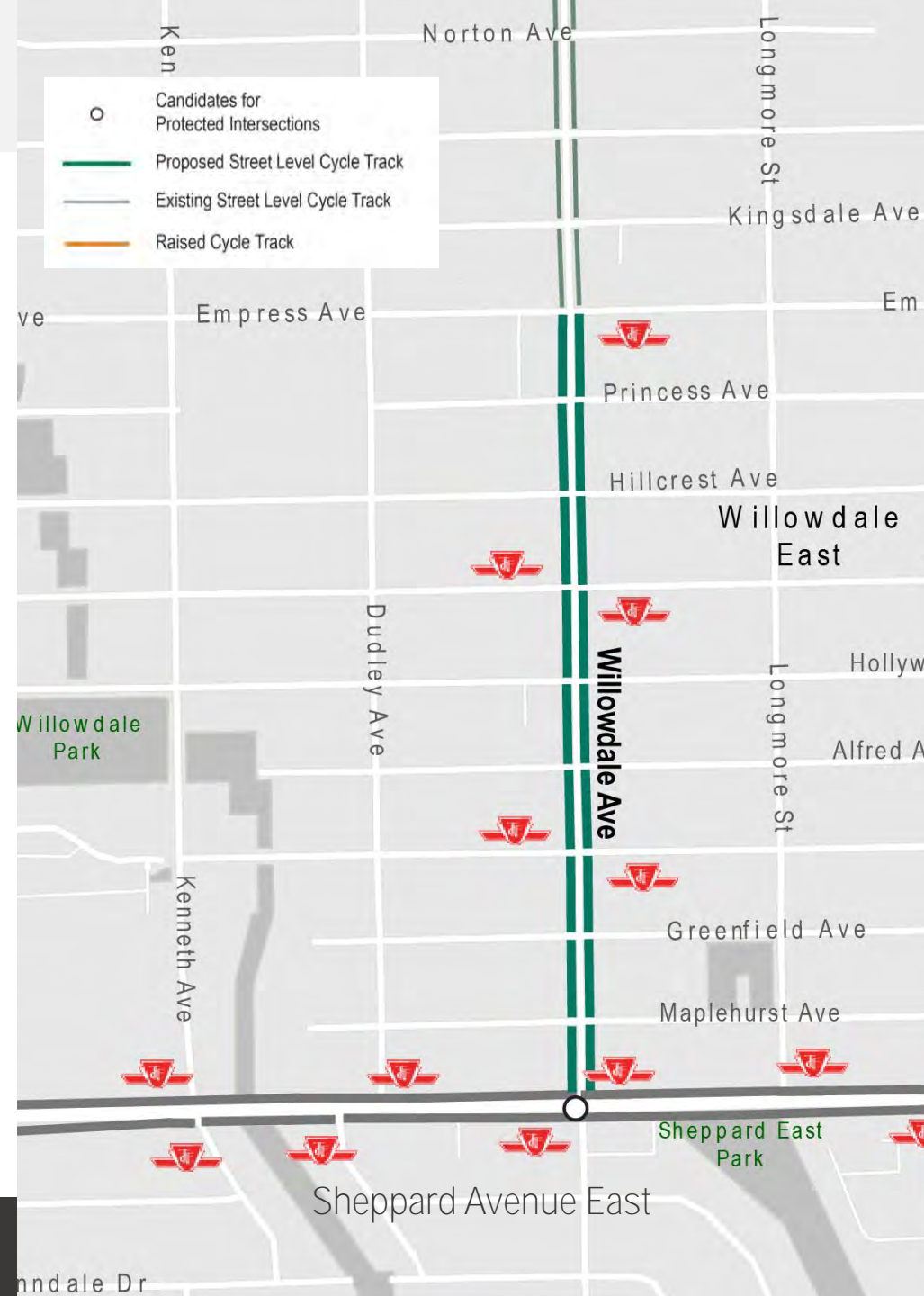
B. Bayview Avenue to Leslie Street Reconstruction	Impacts and Opportunities
Vehicular Lanes	<ul style="list-style-type: none">• At least two through lanes maintained per direction• Location-specific lane reductions• Lane width narrowing to reduce speeds• Options to remove centre turn lane• Improved predictability of roadway
Intersections	<ul style="list-style-type: none">• Signal phasing changes for improved safety and conflict-free turning time• Corner radii reductions for safer turns and better sight lines• Protected intersection elements for safety of all road users• Accessible platforms at transit stops
Parking/Loading	<ul style="list-style-type: none">• Options to retain or remove on-street parking
Cycle Tracks	<ul style="list-style-type: none">• Uni-directional cycle tracks would provide a safe option for people on bikes and reduce conflicts with motorists and pedestrians• Sections of two-way cycle tracks where there is a key destination
Sidewalks	<ul style="list-style-type: none">• Widening of sidewalks where undersized
Accessibility	<ul style="list-style-type: none">• Accessible platforms at transit stops• Upgrade existing pedestrian signals to be accessible
Landscaping	<ul style="list-style-type: none">• Green infrastructure (e.g., trees, planted swales) at certain locations

C . Willowdale Ave Connection

Empress Ave to Sheppard Ave E

C | Willowdale Avenue Overview

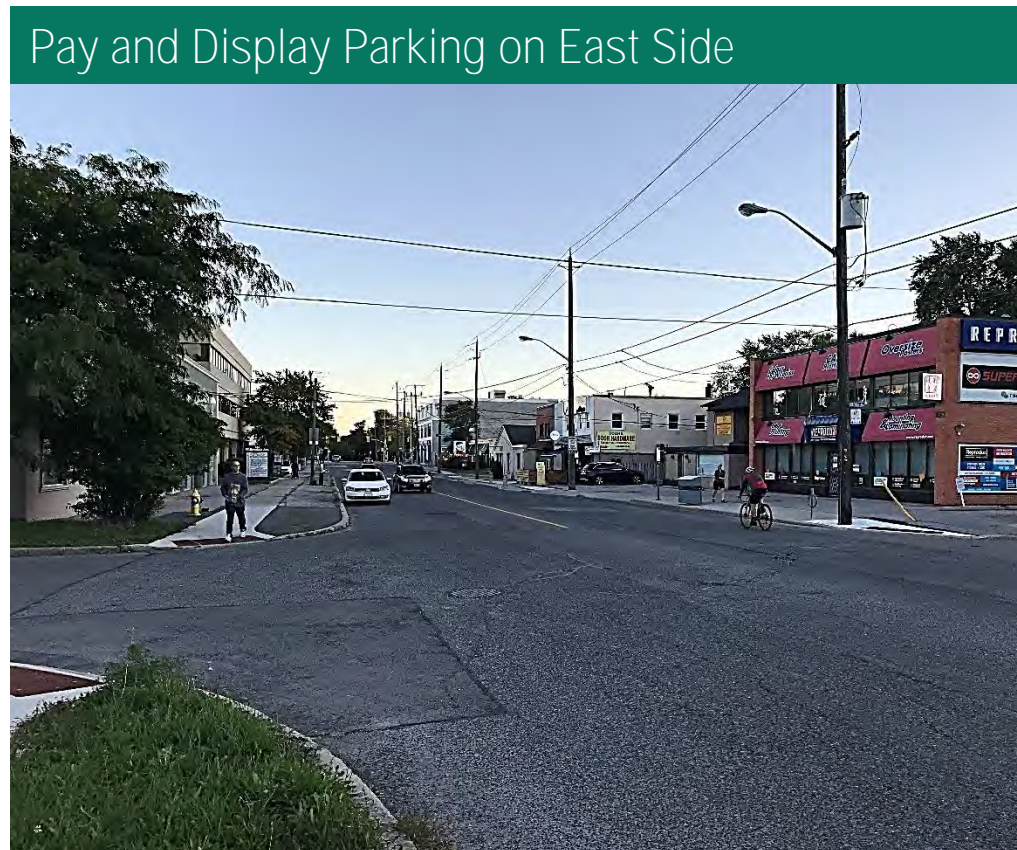
- Other than the Sheppard intersection, there is no near-term road work planned on Willowdale Avenue, but due to the Sheppard Avenue work, there is a significant opportunity to create a connecting bikeway network in the area.
 - Would complete a loop using Sheppard, Willowdale, Finch Hydro Trail, and East Don Trail
- The City is proposing the extension of the existing cycle tracks from Empress Avenue to Sheppard Avenue East.



C | Willowdale Avenue Existing Conditions



Wide Single Vehicular Lane Each Direction



Pay and Display Parking on East Side



Approach to Empress Intersection

C | Willowdale Avenue Existing Conditions



Existing Willowdale Cycle Track,
north of Empress Ave

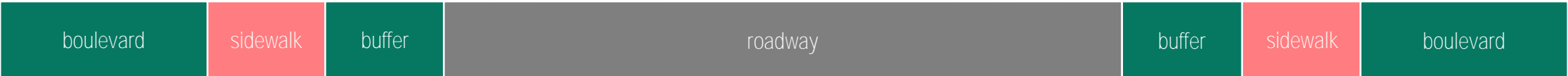
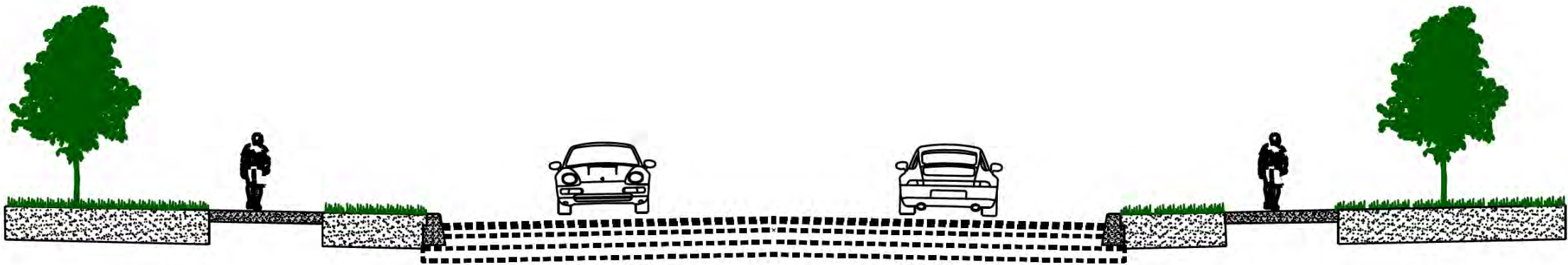


View of Missing Cycle Track
Connection South of Empress Ave

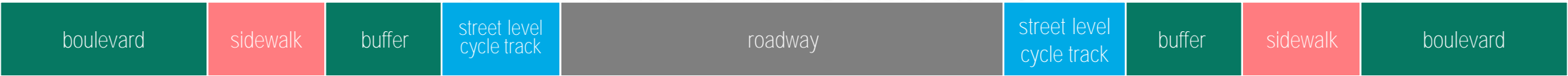
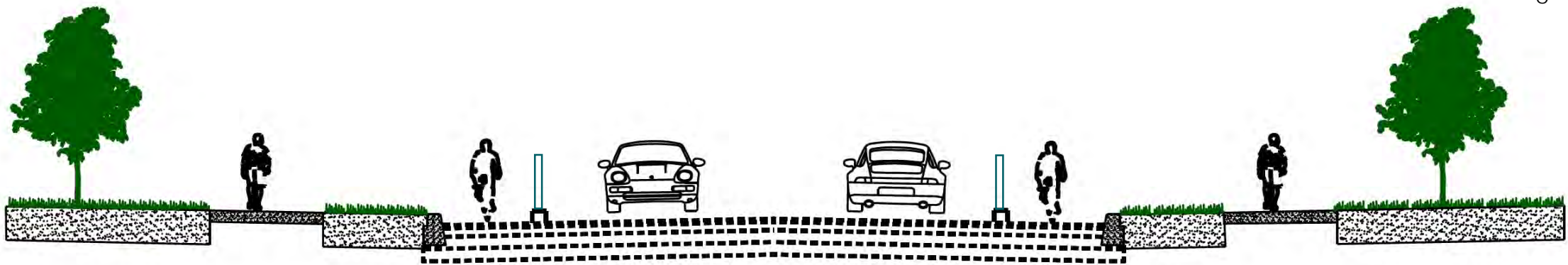
C | Willowdale Avenue | Proposed Cross-section

West

East



Existing








Proposed

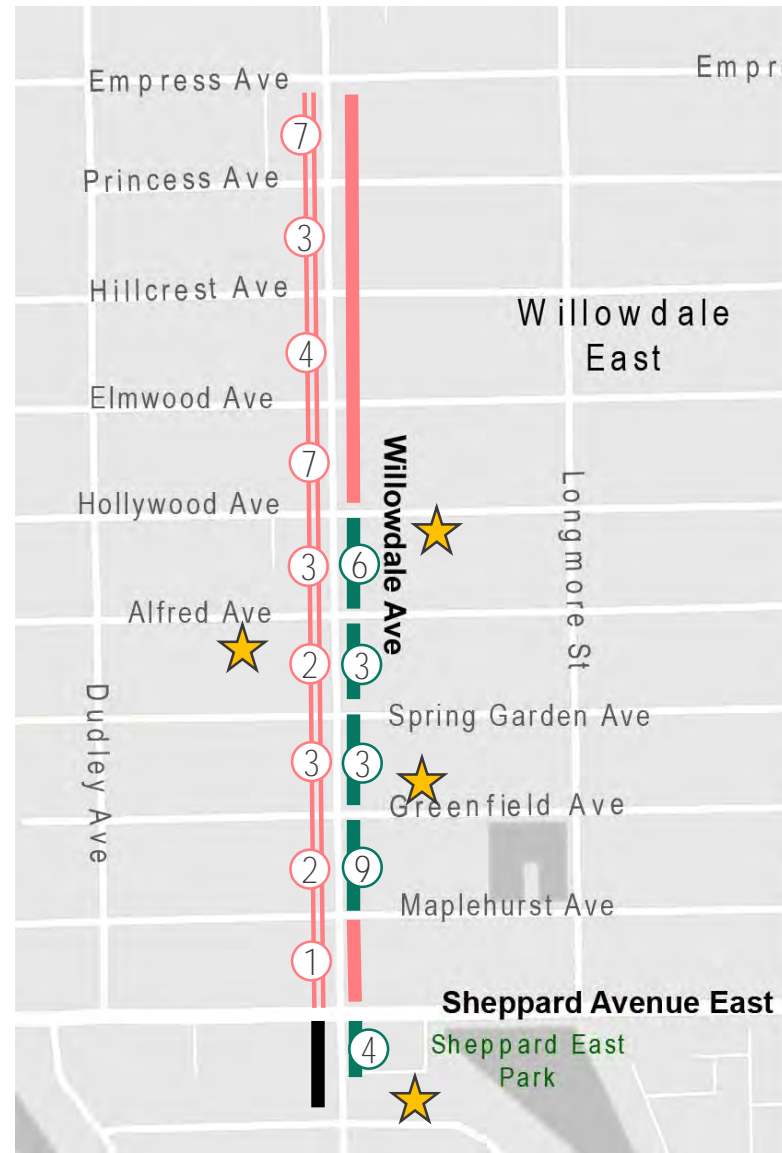
C | Willowdale Avenue Parking Summary

- East side has 21 Green P pay-and-display spaces between Maplehurst and Hollywood and 4 spaces south of Sheppard
- West side has no weekday daytime parking (8 AM – 6 PM), 3-hr evening / weekend parking allowed
- Parking demand is low
 - Max pay-and-display usage north of Sheppard (2019): 33% (7 spaces)
 - Heaviest demand observed between Maplehurst and Greenfield
 - Minimal parking demand observed on west side, generally limited to brief stops (deliveries)
- Opportunities on side streets for replacement pay-and-display parking or loading space under review

LEGEND

-  Pay-and-display
-  No Parking M-F 8A-6P, otherwise 3-hr
-  No Parking anytime
-  No Stopping
-  Best opportunities for replacement parking

Numbers indicate number of available spaces



C | Summary

C. Willowdale Avenue Connection	Impacts and Opportunities
Vehicular Lanes	<ul style="list-style-type: none">• Maintain number of travel lanes• Maintain southbound left turn lane at Sheppard• Remove left turn lanes at Spring Garden Avenue
Parking/Loading	<ul style="list-style-type: none">• Removal of pay-and-display and 3-hour restricted on-street parking• Opportunities for replacement parking/loading on side streets under review
Accessibility/Safety	<ul style="list-style-type: none">• Accessible platforms where needed and feasible• Bus stop consolidation under review
Cycle Tracks	<ul style="list-style-type: none">• Uni-directional on-street cycle tracks would provide a safer option for people on bikes and reduce conflicts with motorists and pedestrians• Painted buffer to provide additional separation between vehicular travel lanes and people on bikes• Physical separation in the buffer area wherever possible (bollards and/or precast curbs in some locations)

Next Steps

Process



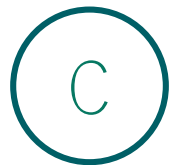
Sheppard Avenue Road Resurfacing

- Design refinement
- Additional stakeholder engagement for the Willowdale intersection
- Infrastructure and Environment Committee, Spring 2022
- Summer/Fall 2022 Road Resurfacing



Sheppard Avenue Road Reconstruction

- Design development based on stakeholder priorities
- February 2022 second Stakeholder and Public Meeting
- Infrastructure and Environment Committee, Spring/Summer 2022
- Detailed design 2022
- Utility work and road reconstruction 2023/2024



Willowdale Ave Cycle Track Extension

- Design refinement
- Infrastructure and Environment Committee, Spring 2022
- Summer/Fall 2022 installation

*Timelines are subject to change

Next Steps

Project Survey

[Toronto.ca/SheppardAvenueEast](https://toronto.ca/SheppardAvenueEast)

Deadline is December 30, 2021

Feedback Analysis and Recommendations to Infrastructure & Environment Committee (Spring 2022) for:

- Sheppard Ave E Road Resurfacing
- Willowdale Ave Cycle Track Extension

Follow-up Consultation

February 2022

Recommendations to Infrastructure & Environment Committee (Spring/Summer 2022) for:

- Sheppard Ave E Road Reconstruction



CONTACT US

If you have any questions or concerns feel free to contact:

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