The Ottawa Hospital Connection to Dow's Lake Station Environmental Assessment Study

Consultation Group Meetings

Transportation Planning, PDBS

June 18, 2024

Ottawa

Virtual Meeting Participation Protocol

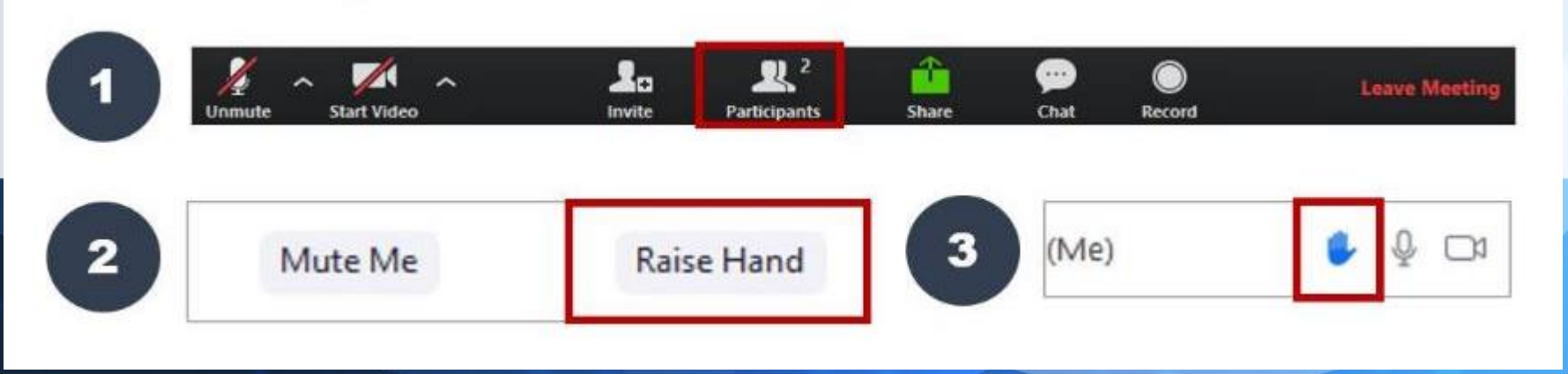
1) All participants are automatically on mute during presentation.
2) If you have a question you can submit those through the chat function.

Thank you for your patience!

Protocole en place pour les réunions

1) Tous les participants seront automatiquement placés en mode silencieux pour la présentation.
2) Pour poser une question, utilisez l'espace de clavardage

Merci de votre patience!



Land Recognition

Ottawa is located on unceded territory of the Anishinabe Algonquin Nation.

The peoples of the Anishinabe Algonquin Nation have lived on this territory for millennia.

Today, Ottawa is home to approximately 40,000 First Nations, Inuit and Métis people.

Ottawa's indigenous community is diverse, representing many nations, languages and customs.

The City honours the land of the First Peoples, as well as all First Nations, Inuit and Métis in Ottawa and their valuable past and present contributions to this land.

Reconnaissance du territoire

Ottawa est située sur un territoire non cédé de la nation Anishinabe algonquine.

Les peuples de la nation Anishinabe algonquine vivent sur ce territoire depuis des millénaires.

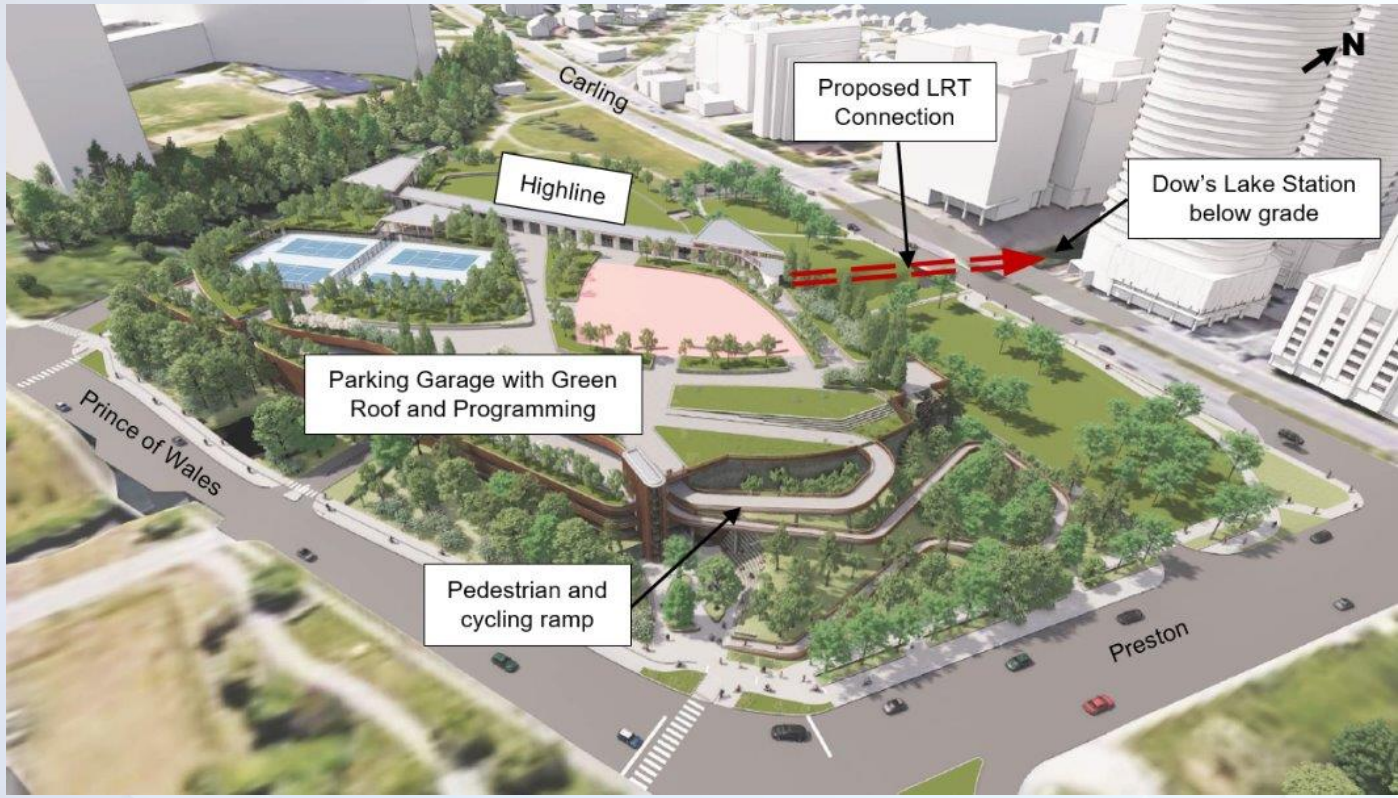
Aujourd'hui, Ottawa compte environ 40 000 membres des Premières Nations, Inuits et Métis.

La communauté autochtone d'Ottawa est diverse et représente de nombreuses nations, langues et coutumes.

La Ville rend hommage au territoire des premiers peuples, ainsi qu'à l'ensemble des membres des Premières Nations, des Inuits et des Métis d'Ottawa, de même qu'à leurs précieuses contributions passées et présentes à ce territoire.

Agenda

1. Study Scope & Progress to Date
2. Key Considerations
3. Concept Designs
4. Evaluation and Selection of Preliminary Preferred Option
5. Preliminary Preferred Design
6. Next Steps



Study Scope and Progress to Date

Study Scope

Based on the Master Site Plan conditions imposed by the City and National Capital Commission (NCC):

- A multi-use connection between Dow's Lake Station and The Ottawa Hospital parking garage is required prior to the opening of the main Hospital Building. The connection must:
  - Be direct, universally accessible, seamless, intuitive, weather protected
  - Provide adequate, secure and highly visible bicycle parking
  - Provide adequate wayfinding
  - Have public access to street

Progress to Date

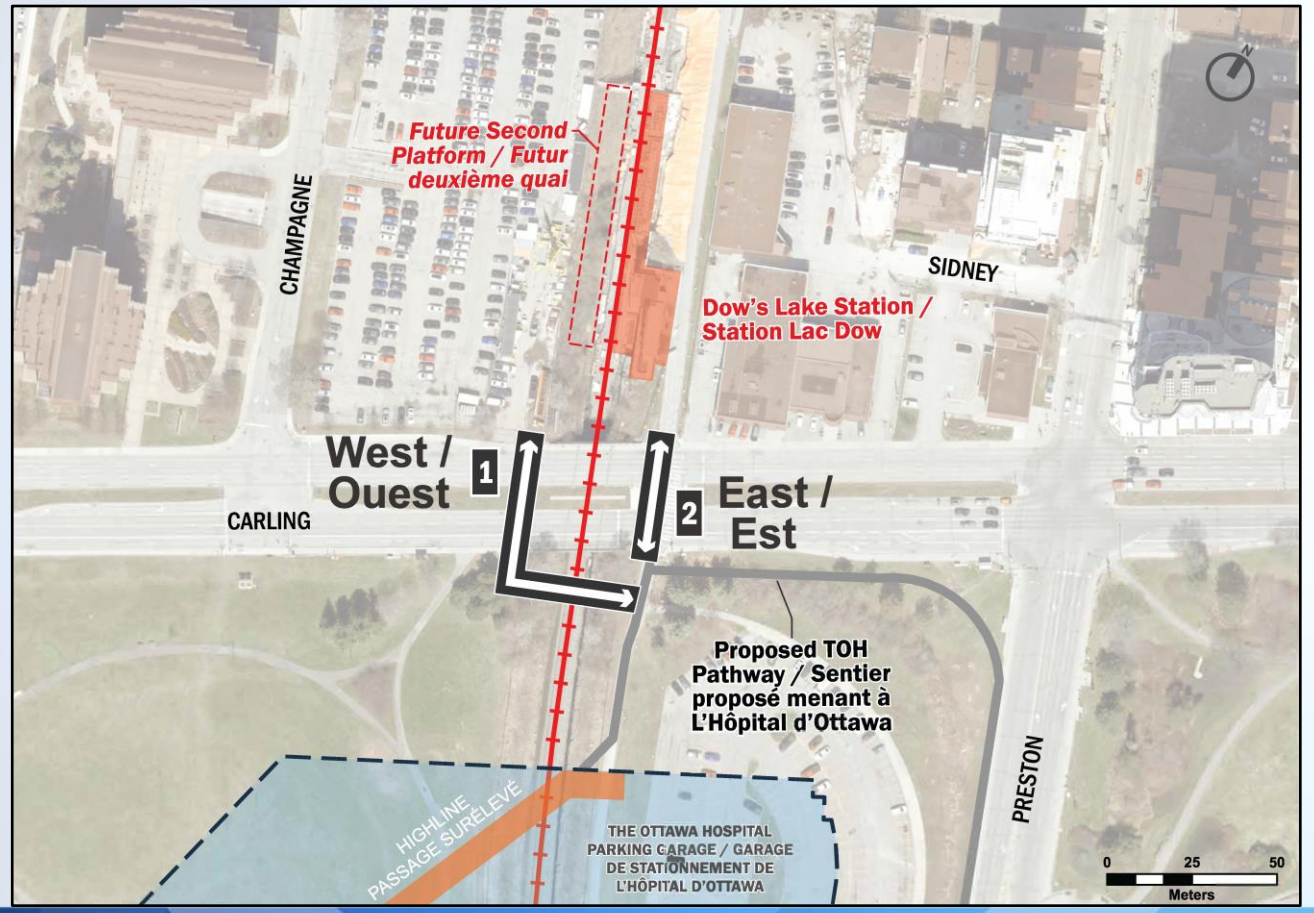
- Following the Municipal Class EA Schedule B process as provincially legislated
- Compiled existing conditions within the Study Area
- Developed, evaluated and selected preferred crossing location
- Developed tunnel and bridge concept design options
- Presented findings at the first round of Consultation Group meetings (October 2023)

Since then:

- Reviewed and incorporated feedback from consultation
- Continued stakeholder engagement (Rail Office, Ottawa Hospital Team)
- Refined tunnel and bridge design options
- Assessed, evaluated and selected preliminary preferred option
- Developed preliminary preferred design

Alternative Crossing Locations Considered

Alternative 1: West Side	**X** Not Preferred • Less direct and longer crossing • Need to cross LRT tracks to access station • Significant property impacts
Alternative 2: East Side	✓ Preferred • Most direct and shorter crossing • Avoids crossing LRT tracks to access station • Less property impacts



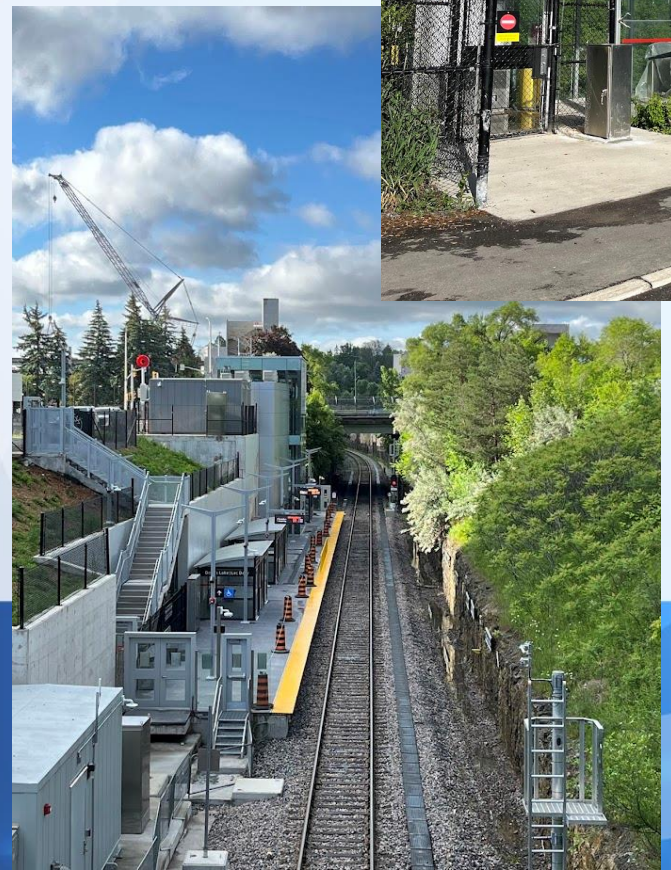
Consultation - Comments To Date

- Reduce vertical changes – challenges navigating varying elevations
- Larger capacity elevators to fit more than 1 mobility device and support persons
- Provide escalators to reduce long queues during special events
- Wayfinding – appropriate lighting and wayfinding measures
- Improve existing mid-block at-grade crossing
- Connection should separate bicycles and pedestrians
- Confusion over LRT station location

Key Considerations

Key Considerations

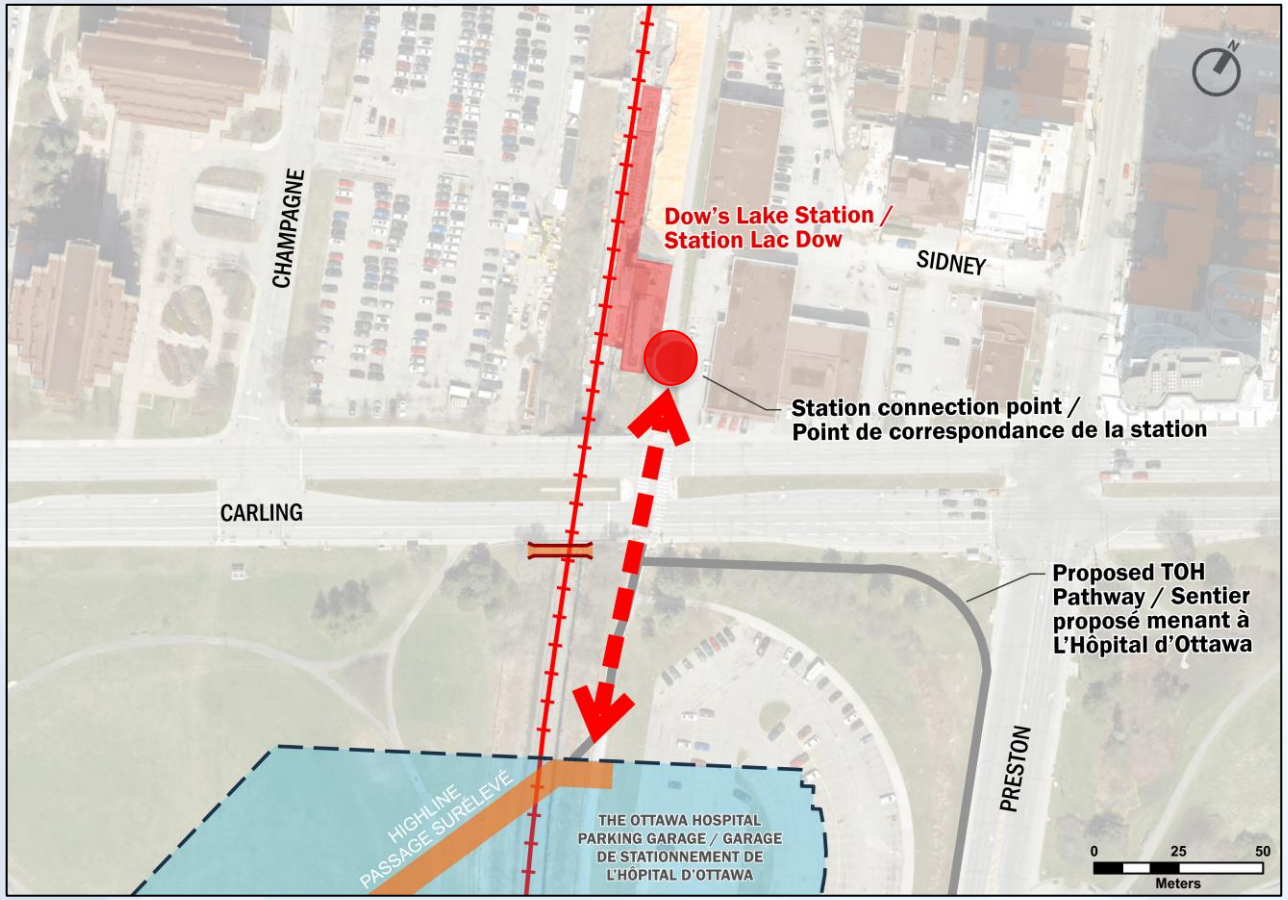
- Type of connection (bridge or tunnel)
- Public access to street level
- Integration with Dow's Lake Station
- Integration with Hospital parking garage and future development south of Carling Ave
- Connectivity to bus lanes along Carling Ave
- Development timing and phasing
  - 2029: Expected Hospital opening day
- Impacts of future projects
  - Dual tracking of Trillium Line and station expansion
  - Ultimate Carling Ave Rapid Transit



Dow's Lake Station currently under construction

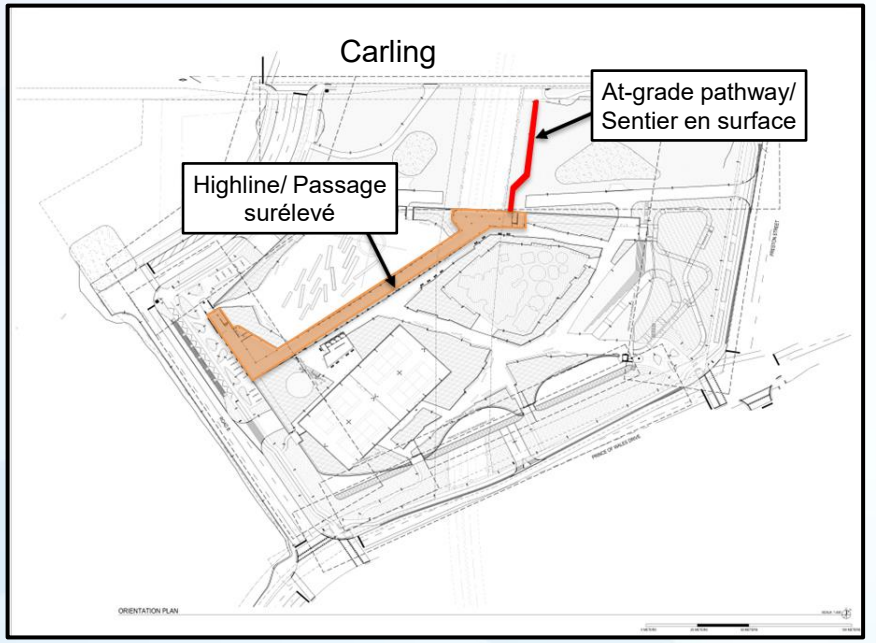
Dow's Lake Station Integration

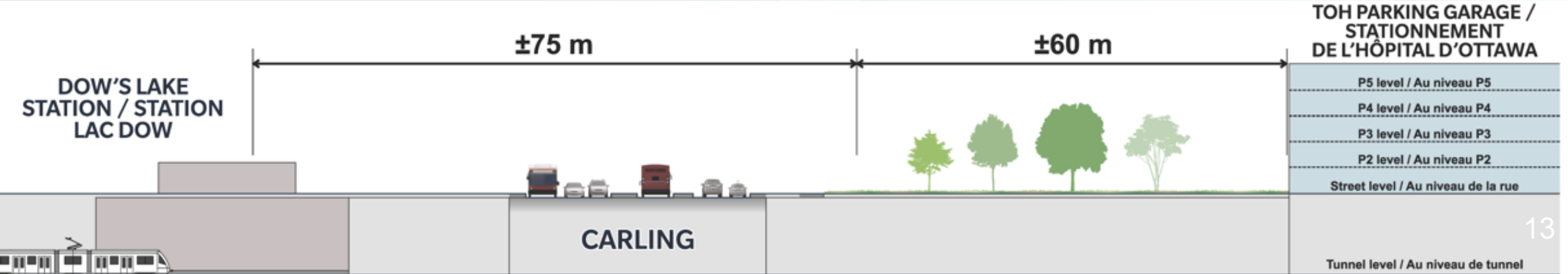
- Connect to existing infrastructure, minimize modifications
- Maintain fare paid zone at the station
- Area needed on north side of Carling Ave to fit stairs/elevators
- Efficient connection to transit along Carling Ave
- Protect space for future expansion of LRT Station on west side of tracks



Hospital Parking Garage Integration

- Potential connection to parking garage:
  - 2nd level for bridge
  - At-grade for tunnel – no lower level available
- Space needed for stairs, elevators and potential headhouse
- Flexibility for potential integration with future development south of Carling Ave





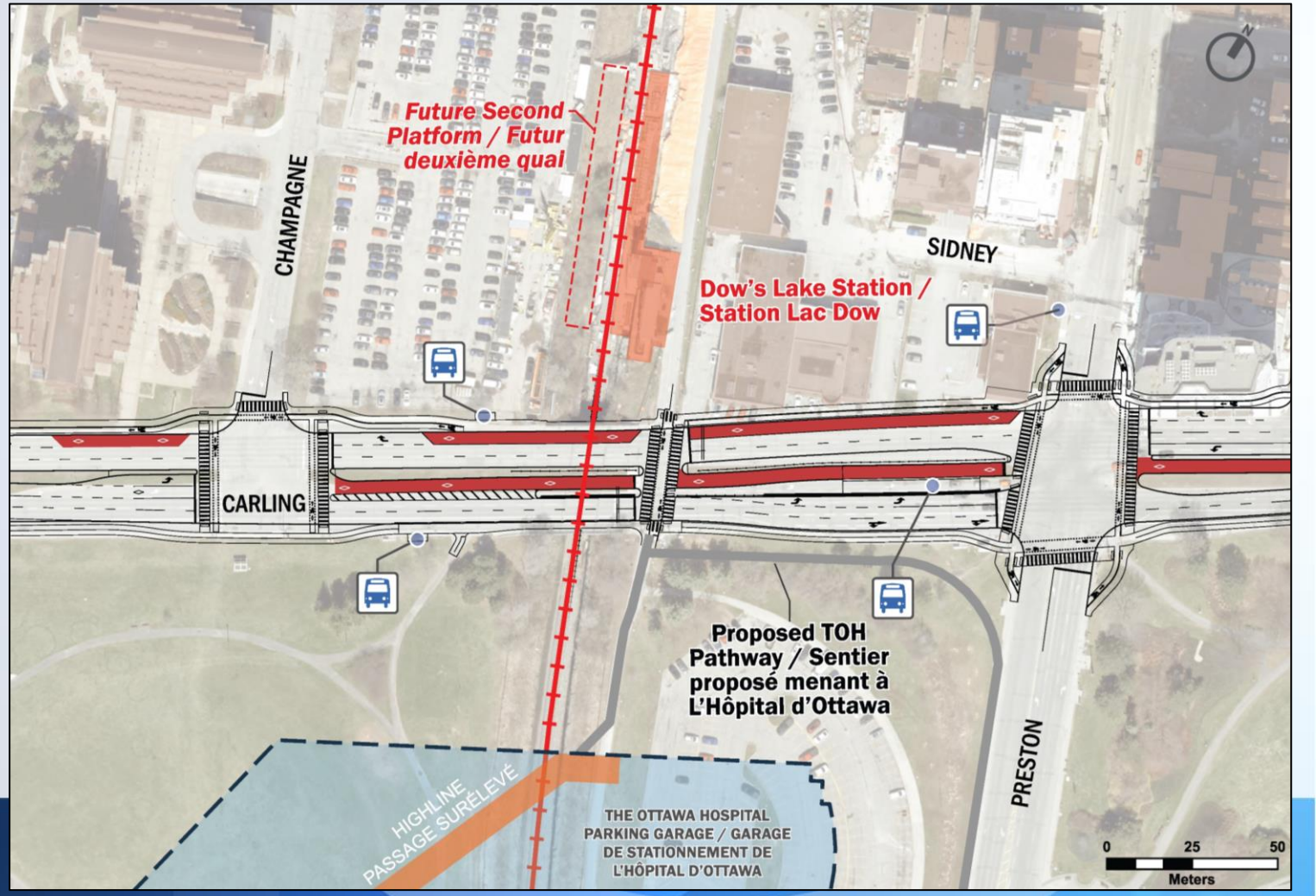
Carling Avenue Transit Integration

Planned Transit Priority

- Efficient connection to bus stops for pedestrians and cyclists

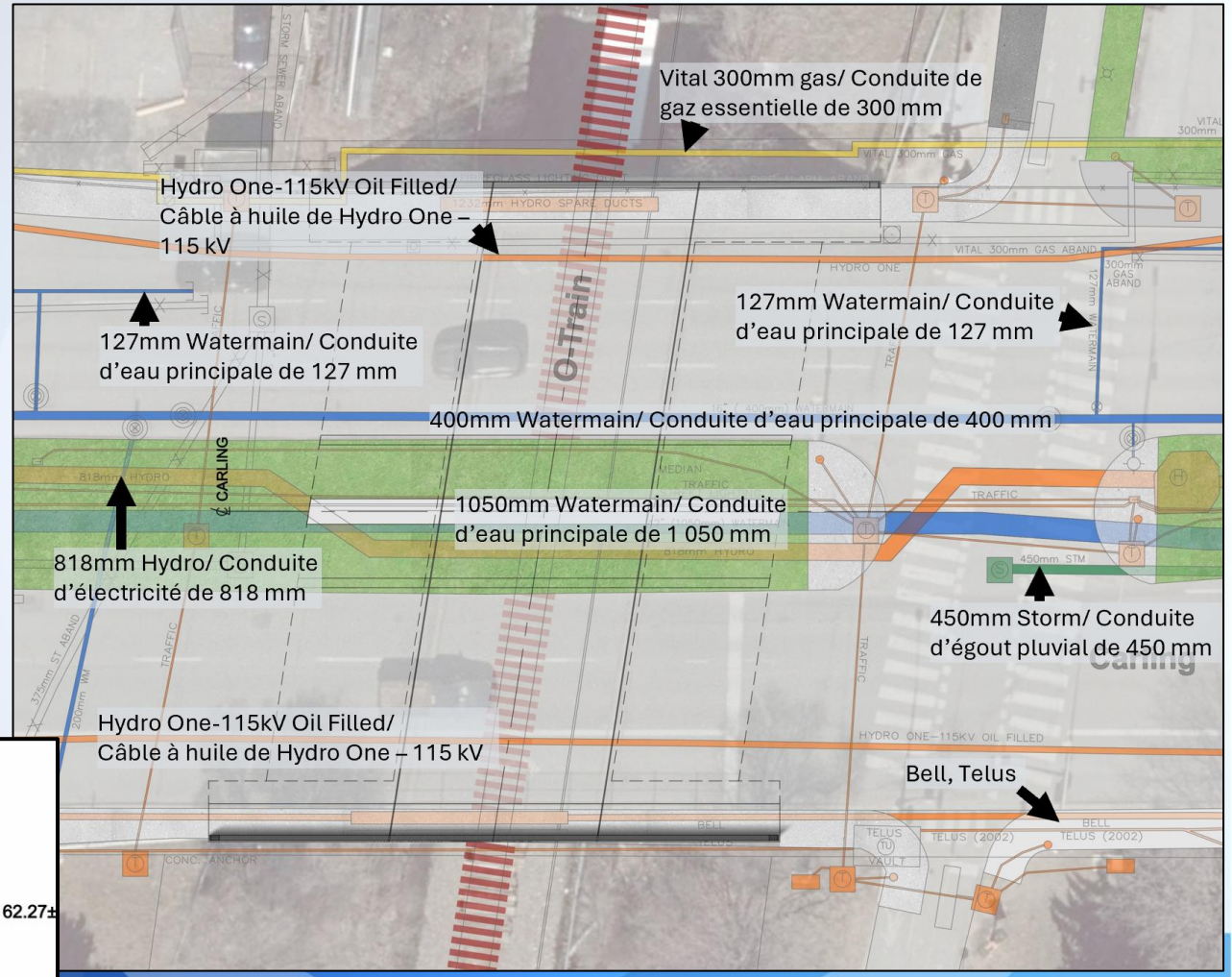
Ultimate Rapid Transit Corridor

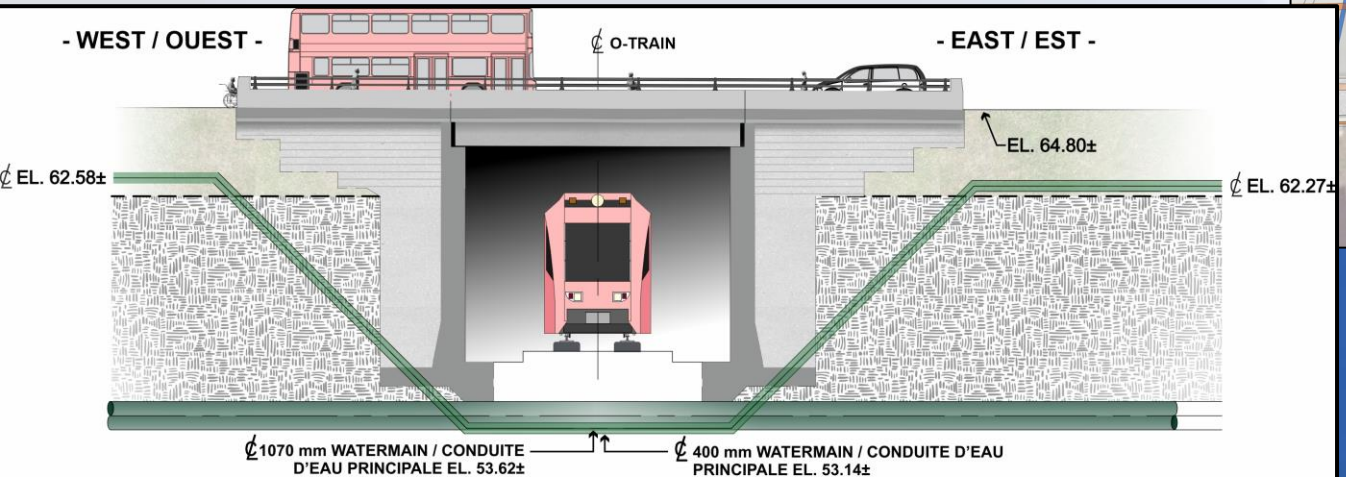
- Currently under review as part of the update to the City's Transportation Master Plan
- Important to protect space for future configuration



Existing Infrastructure

- Geotechnical challenges
- Active rail corridor
- Numerous utility impacts
  - Watermains
  - Combined sewer
  - Storm sewer
  - Gas main
  - Hydro
  - Bell and Telus underground duct banks

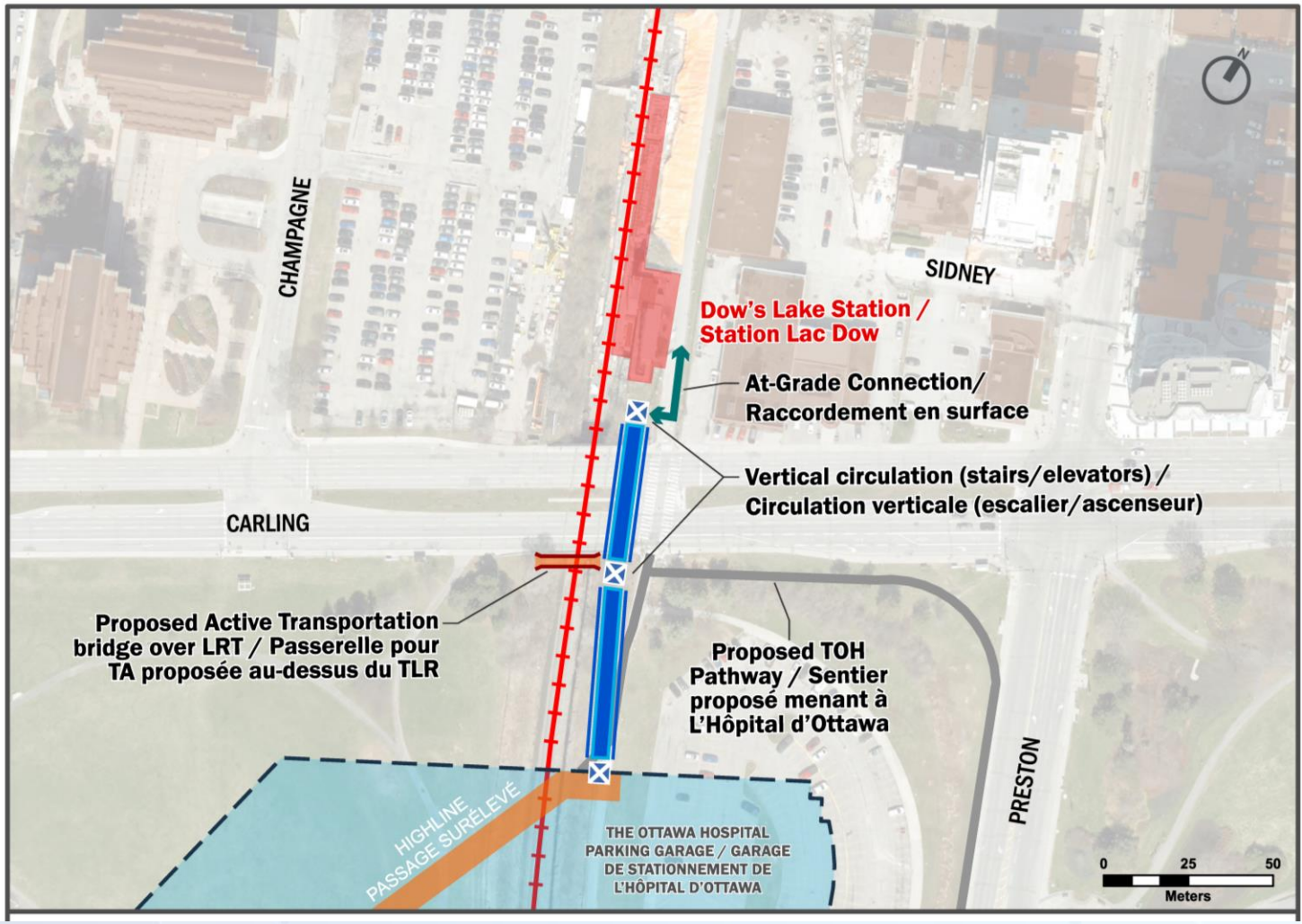


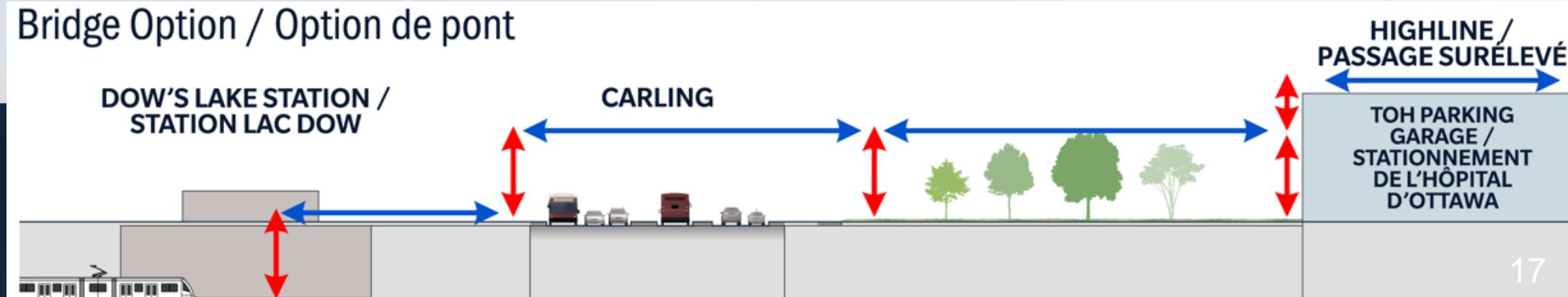


Concept Designs

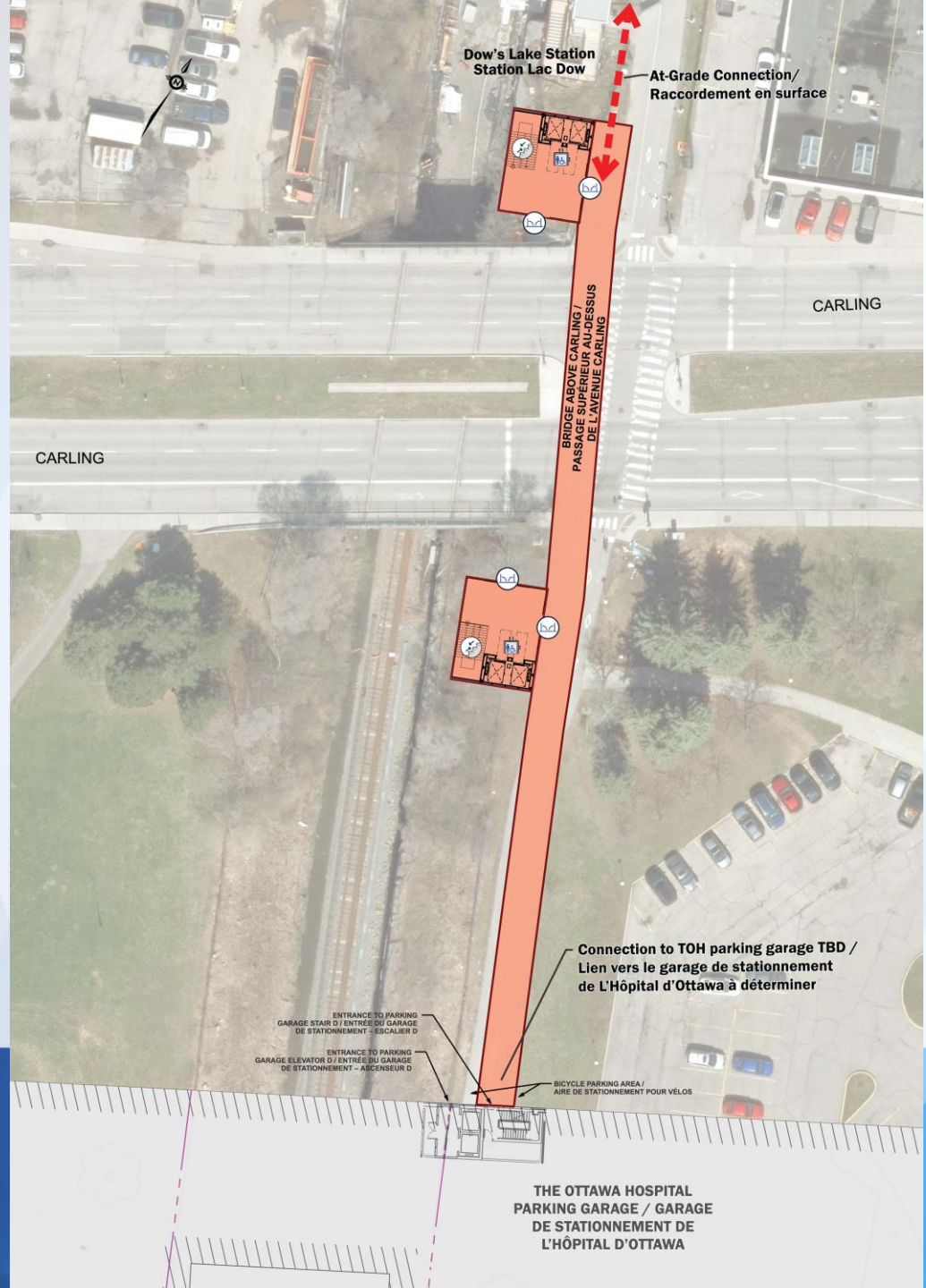
Bridge Concept Routing

- Requires 3 vertical changes between LRT Station and Highline



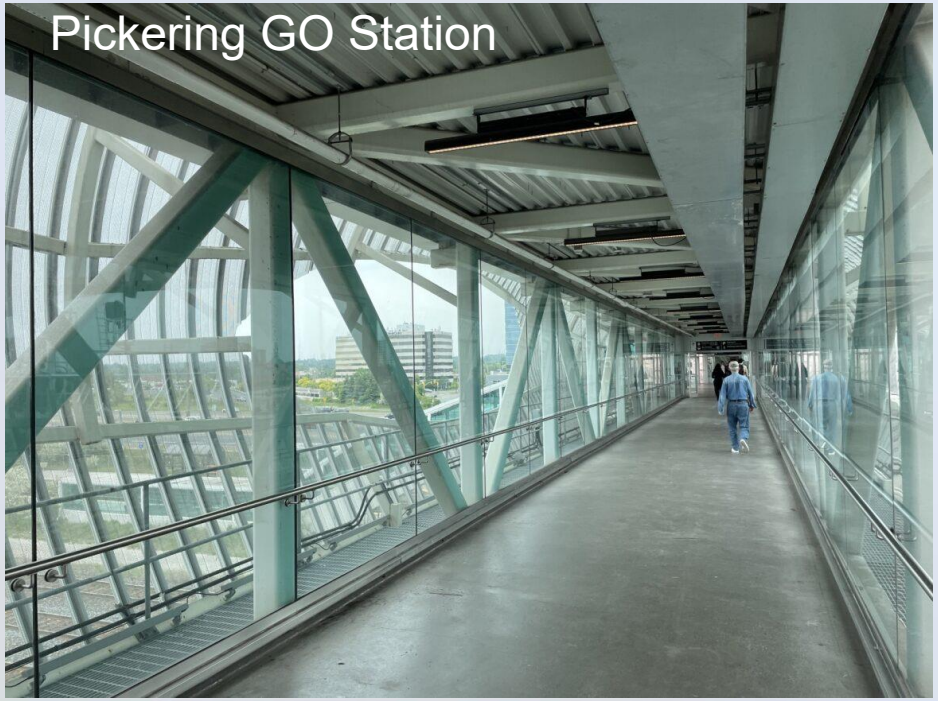


Bridge Concept Footprint and Design



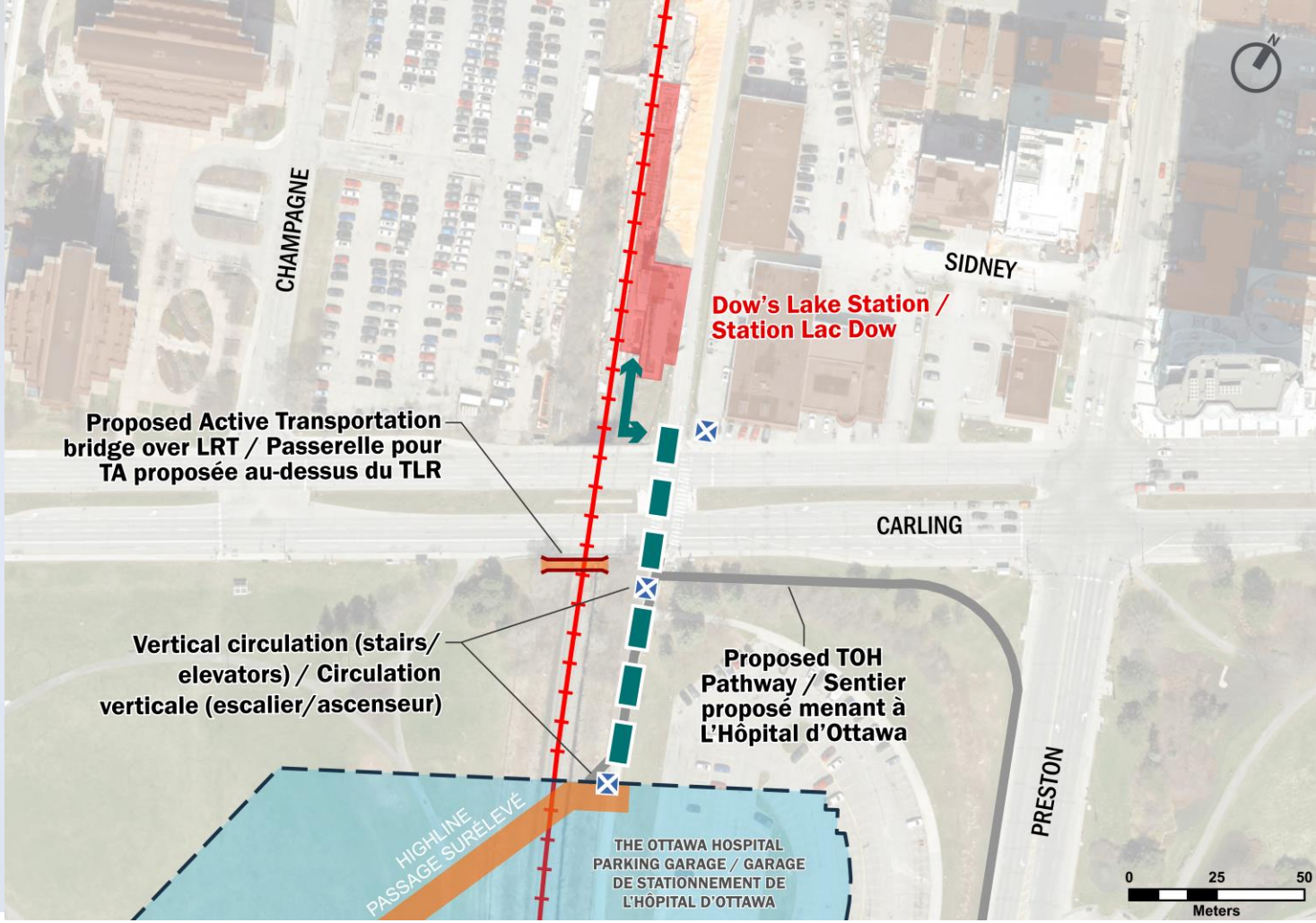
Example Bridge Designs

Provided for illustrative purposes. The design of any structure at Carling would be developed as part of subsequent studies.

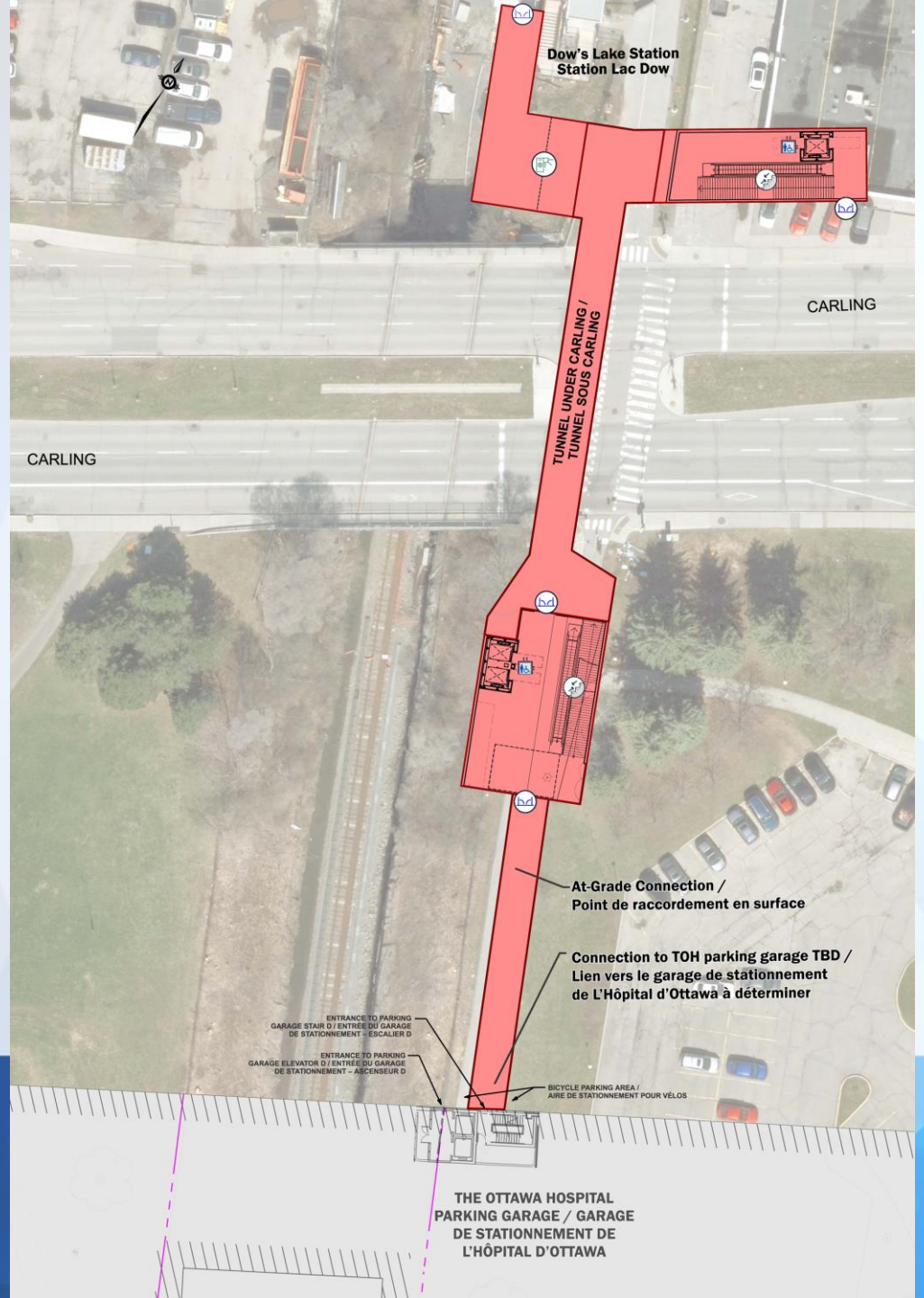


Tunnel Concept Routing

- Requires 2 vertical changes between LRT Station and Highline



Tunnel Concept Footprint and Design



Example Tunnel Designs

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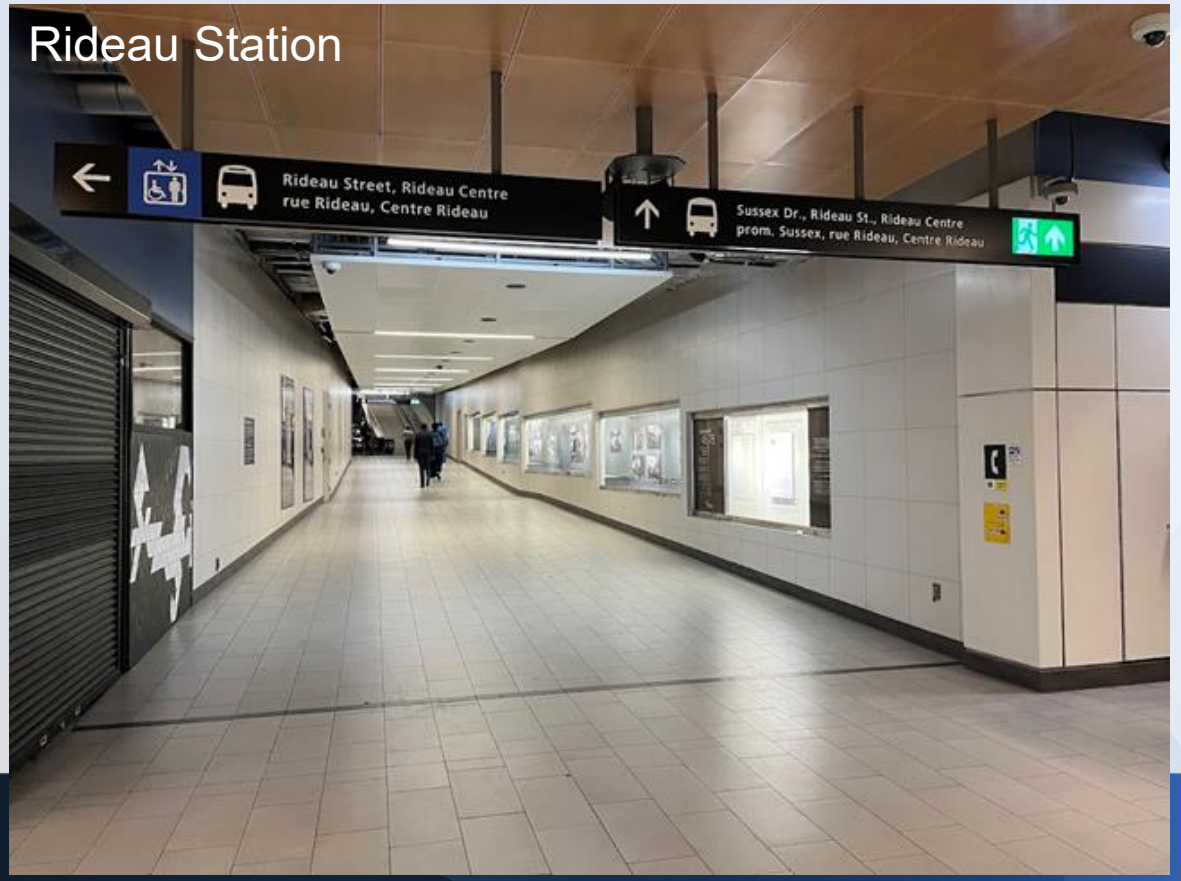
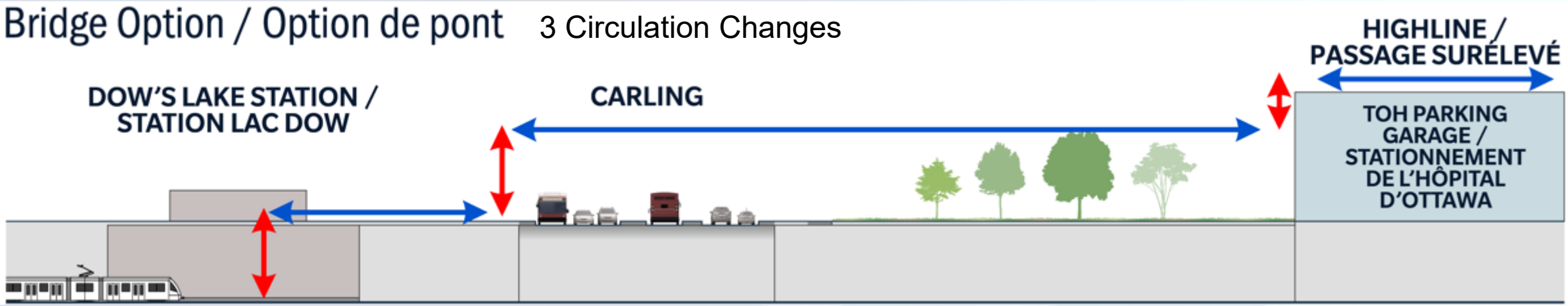


Comparison of Travel Routes between Dow's Lake Station and Highline

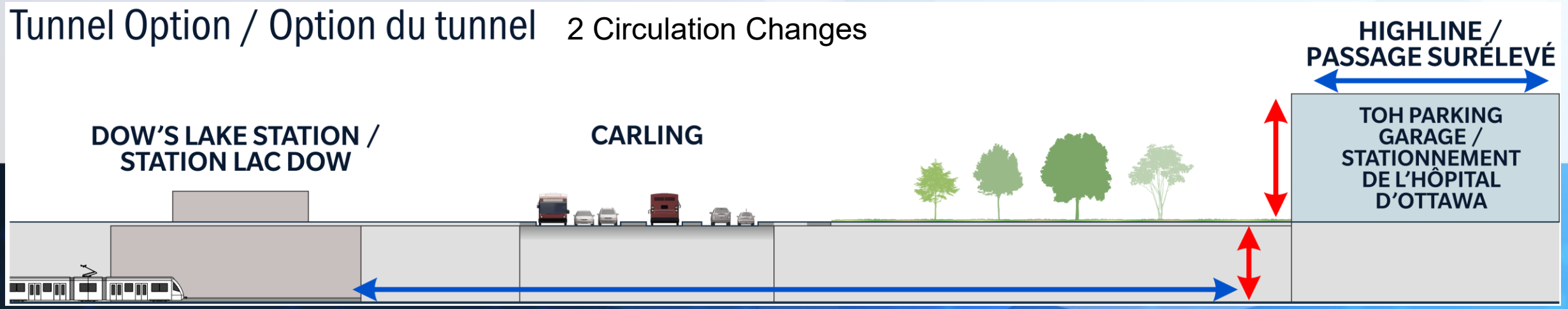
Bridge Option / Option de pont

3 Circulation Changes



Tunnel Option / Option du tunnel

2 Circulation Changes



Evaluation and Selection of Preferred Option

Evaluation Criteria

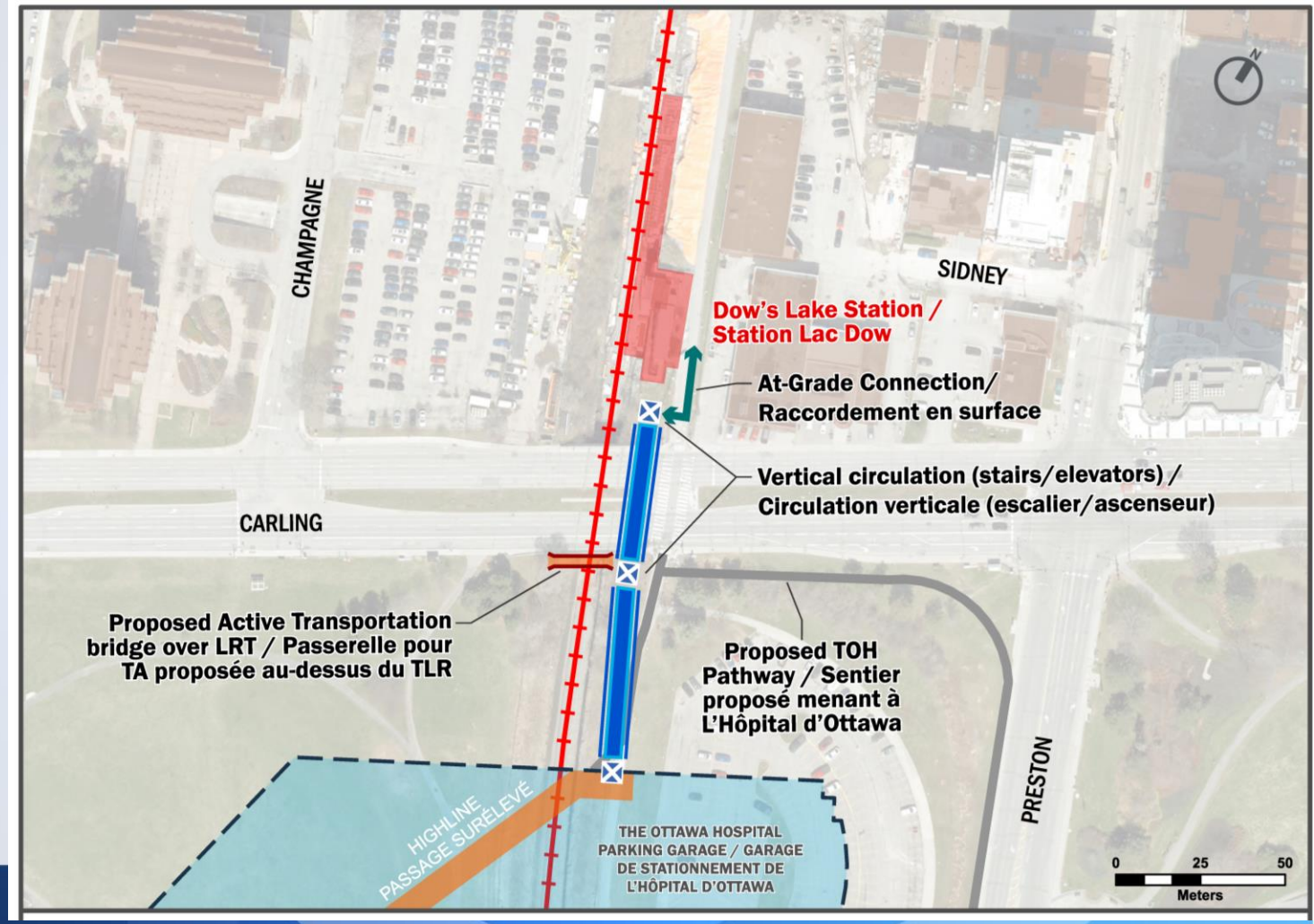
Category	Criteria
Transportation Environment	▪ Integration Potential with LRT ▪ Integration Potential with Carling Avenue Transit ▪ Integration Potential with Active Transportation Facilities
User Experience	▪ Directness, Intuitiveness and Wayfinding ▪ Weather Protection ▪ Perceived Safety – Crime Prevention through Environmental Design (CPTED)
Social Environment	▪ Public Realm Enhancement Opportunities ▪ Visual Environment Impacts ▪ Property Impacts ▪ Integration Potential with The Ottawa Hospital
Economic Environment	▪ Capital Costs ▪ Operating and Maintenance Costs ▪ Construction Complexity

Evaluation Results

Criteria		Bridge		Tunnel
Transportation Environment	✅	• More efficient design (requires less infrastructure) to integrate with future expanded LRT Station and future development south of Carling • Minimizes impacts to existing LRT operations	❌	• Less efficient design (requires more infrastructure) to integrate with future expanded LRT Station and future development south of Carling
User Experience	➖	• Less direct route and more vertical changes to access LRT • Bright, airy, better perceived personal safety	➖	• Better user experience as most direct route and two vertical changes to access LRT – potentially one vertical change with added cost • Lower perceived personal safety
Social Environment	➖	• Less property impacts • High visual impact • Best integrates with future development on south side of Carling and direct connection to the parking garage	➖	• Greater property impacts • Low visual impact • More complex integration with future development and not possible to connect directly to the parking garage
Economic Environment	✅	• Lower cost • Less impact on existing underground infrastructure • Less complex to construct	❌	• Higher cost • Geotechnical challenges with rock conditions • Significant impacts on existing underground infrastructure (gas, watermain, cable, hydro) • More complex to construct • Potential impacts to active rail corridor • Connection to 2nd platform needs to be resolved when LRT is twinned with new west side southbound platform
Conclusion	✓ Recommended		✗ Not Recommended	

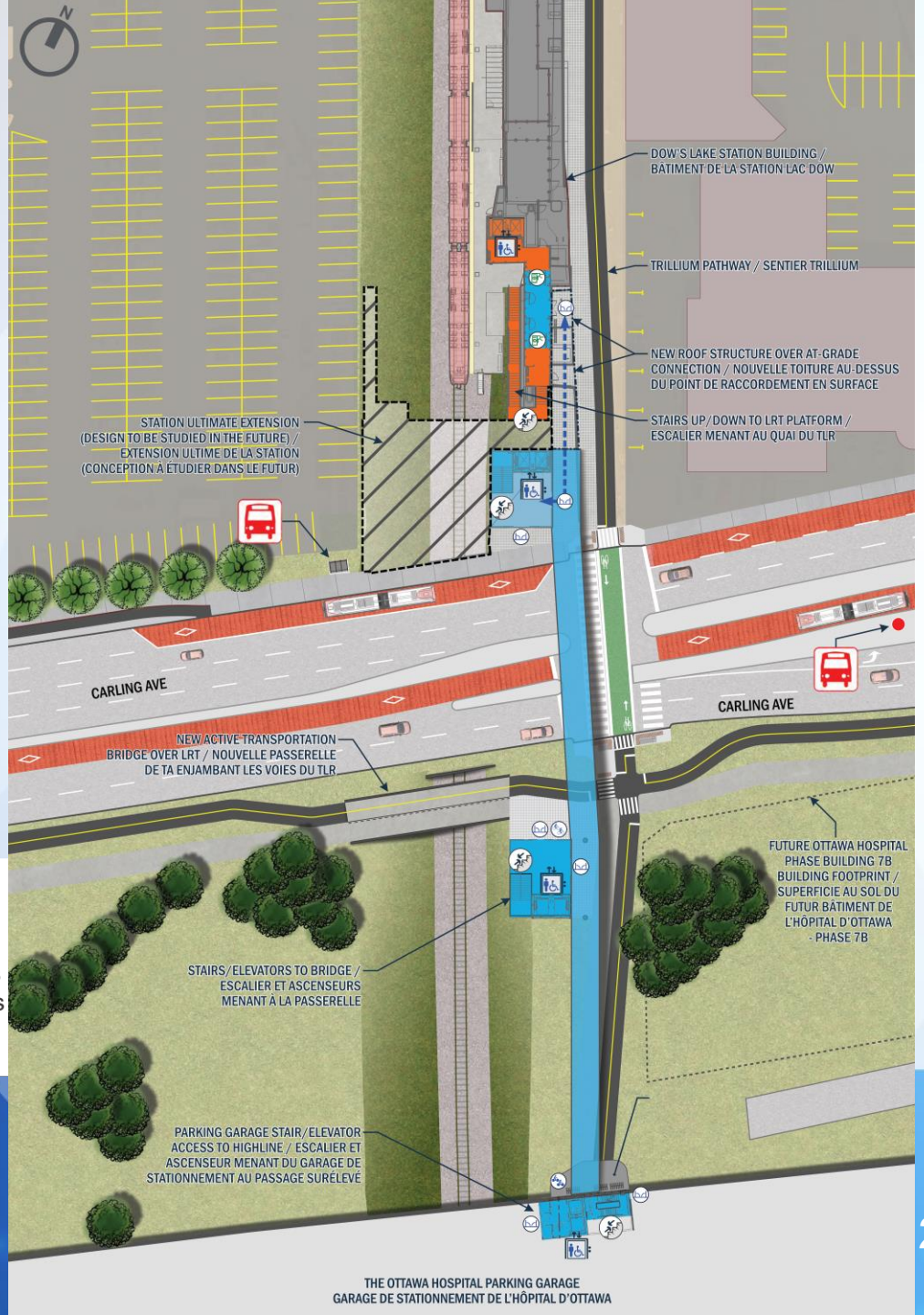
Benefits of Bridge Design

- Most efficient design for integration with the existing and long-term concept for Dow's Lake Station
- Better potential to directly integrate with the existing parking structure and future planned development south of Carling Avenue
- Lower cost to implement
- Less property impacts
- Minimizes impacts on LRT operations and underground infrastructure



Preliminary Preferred Design

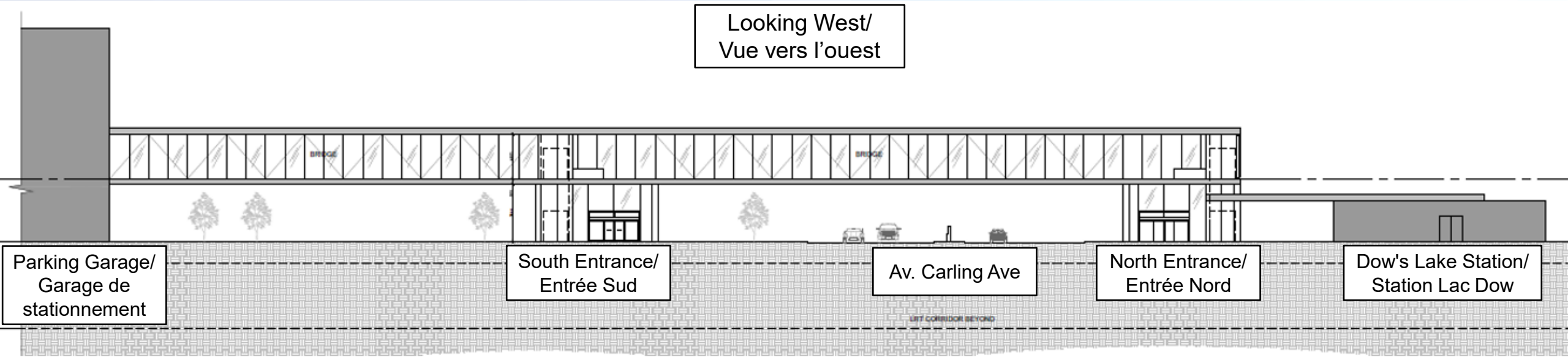
Preliminary Preferred Design



Circulation (Fare Free Area)	Circulation (zone gratuite)	Elevator(s)	Ascenseurs
Circulation (Fare Paid Area)	Circulation (zone de tarification contrôlée)	Stairwell	Escaliers
At-Grad Connection	Point de raccordement en surface	Entrance/Exit	Entrée/Sortie
Bikes Lanes (uni/bi-directional)	Pistes cyclables unidirectionnelles et bidirectionnelles	Fare Gate	Portillon d'accès
		Bike Racks	Supports à vélos
New Sidewalk/Pathway	Nouveau trottoir/sentier	Bus Stop	Arrêt d'autobus
Dedicated Bus Lane	Voie réservée aux autobus		

Preliminary Preferred Design Cross-Section

- Parking garage construction underway
- Connection to parking garage to be determined



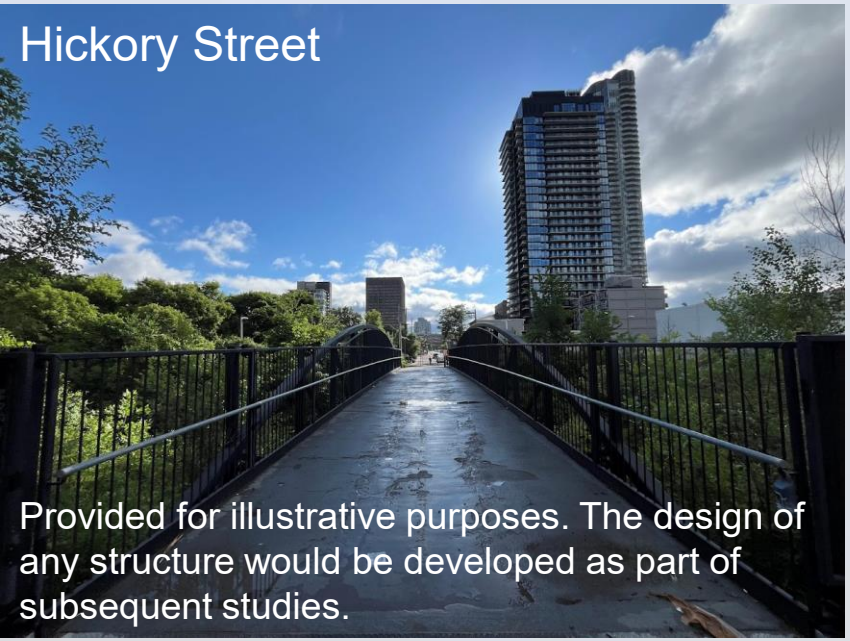
Existing Mid-Block Crossing of Carling

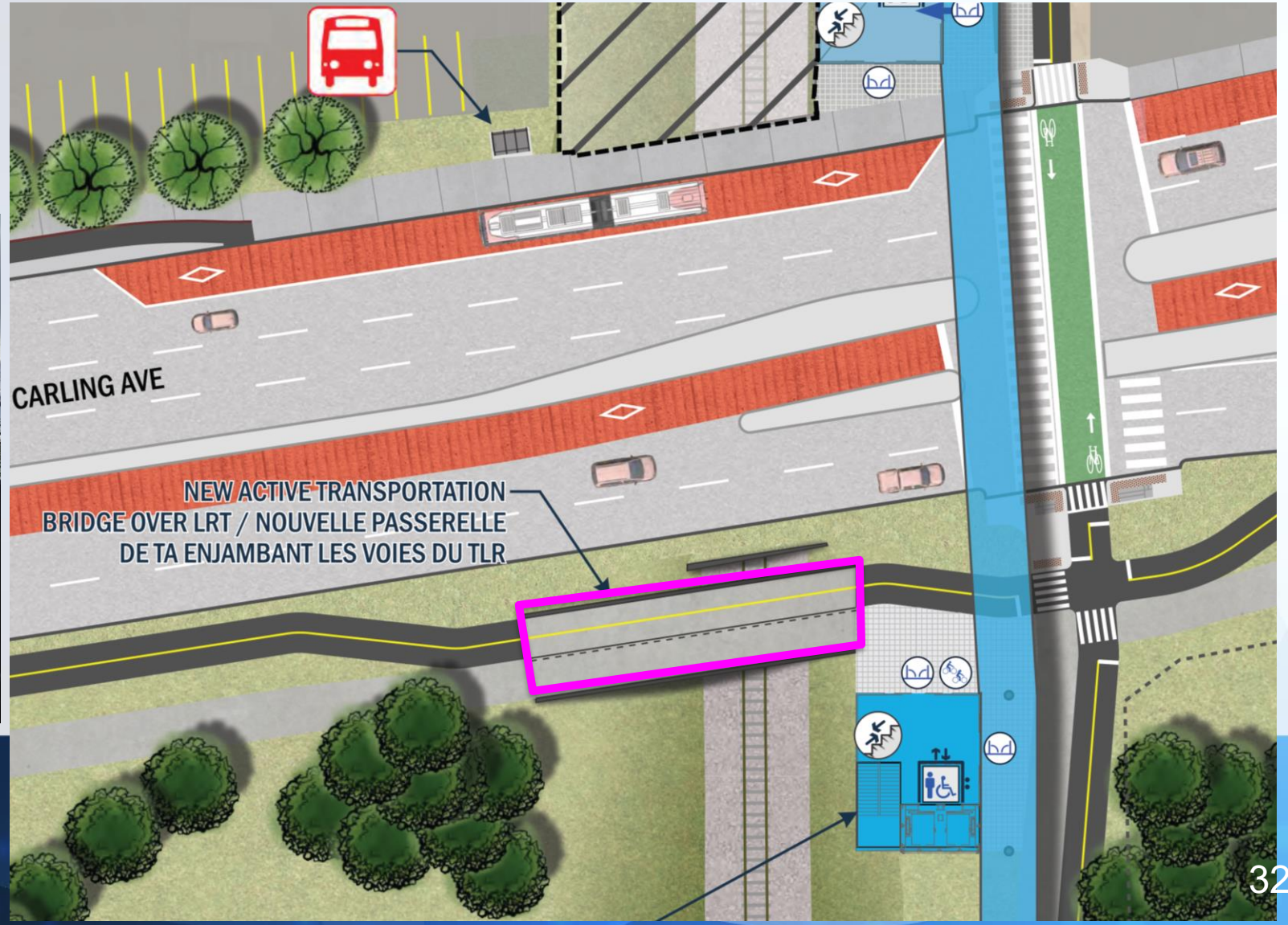
- Vital north-south pedestrian and cycling link
- Most direct and shortest route between LRT Station and parking garage
- Important connection to the planned transit facilities on Carling
- Opportunity to review the need for enhancements to the crossing:
  - Reconfigure to separate pedestrians and cyclists
  - Integrate with planned Carling transit priority lanes and active transportation facilities

Carling mid-block crossing facing north/Passage pour piétons en section courante sur l'avenue Carling, en direction nord

Carling mid-block crossing facing south/Passage pour piétons en section courante sur l'avenue Carling, en direction sud

New Multi-Use Pathway Crossing over LRT Tracks





Next Steps

Next Steps

- Consider all comments/feedback from public consultations
- Phased implementation plan proposed:
  - Improvements to existing at-grade crossing on Carling Avenue
  - Ultimate crossing when funding becomes available
- Develop functional design and cost estimate
- Public Open House Events
  - Virtual : June 24, 2024, 6:00-8:30 p.m.
  - In person : June 25, 2024, 6:00-8:30 p.m. (Tom Brown Arena)
- Fall 2024 – Transportation Committee and Council
  - Approval of Recommended Plan
- December 2024 – Study completion

Discussion

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