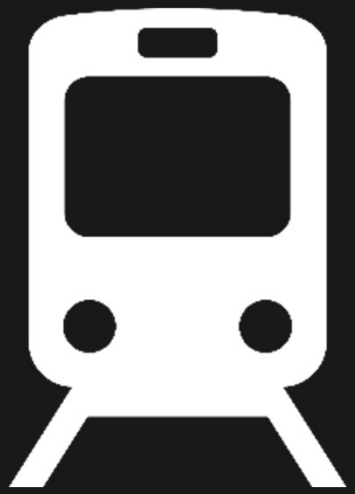

Welcome to the Elevated Guideway Open House

Eglinton Crosstown West Extension

METROLINX

Who we are

AECON

National Canadian Construction and Infrastructure Development company with global experience. Delivering integrated solutions to private and public sector clients in the Civil, Urban, Transportation, Nuclear, Utility and Industrial Sectors as well as Project Development, Financing, Investment and Management Services.

Aecon is well-positioned in the Canadian marketplace as an industry leader in the development and construction of infrastructure. We have a roster of ongoing major projects, in Canada and abroad, that is diversified across multiple sectors and durations. We are in a strong market position, but we are ultimately aiming higher.

1962
GARDINER
EXPRESSWAY

1976
CN TOWER
TORONTO

2015*
CROSSTOWN
LRT

2016*
DARLINGTON
REFURBISHMENT

2018*
GORDIE HOWE
INTERNATIONAL BRIDGE

2019*
PATTULLO
BRIDGE

2021*
WINNIPEG
NORTHWWTP

2014
WATERLOO
LRT

2023
SCARBOROUGH
SCARBOROUGH SUBWAY

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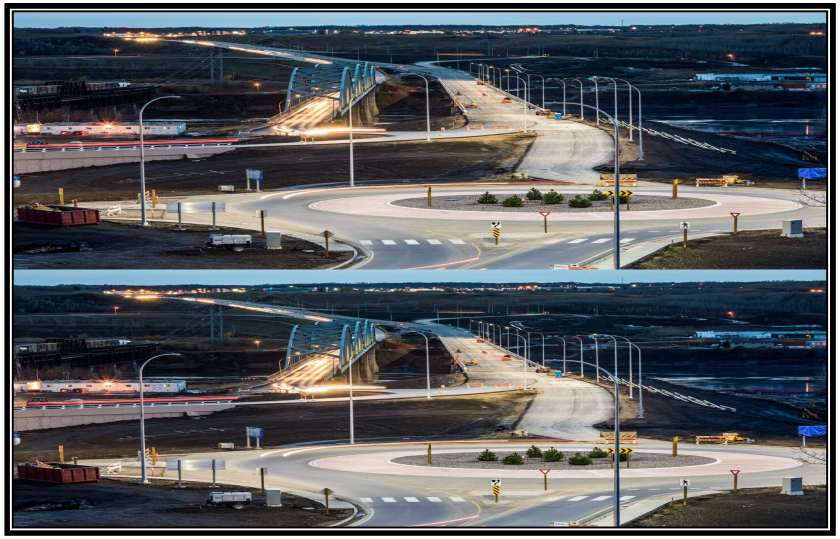
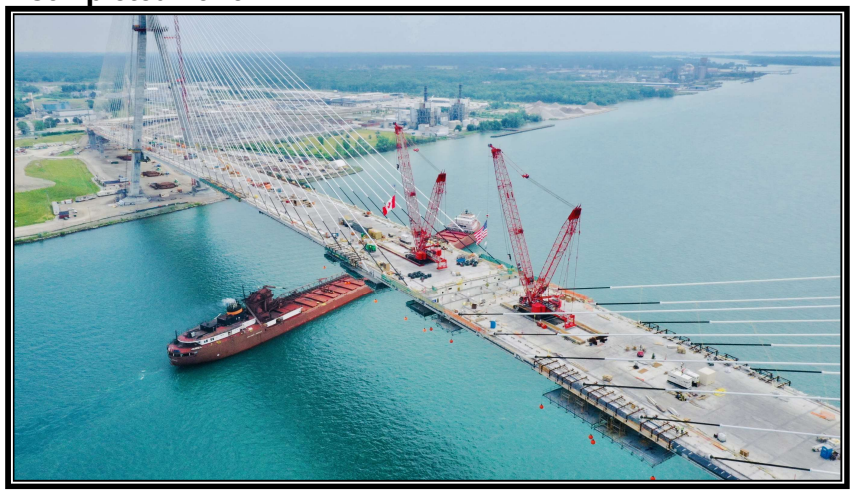
Bridges Aecon has built

St-Jacques Bridge (Montreal, Québec) - Completed 2018



Peace River Bridge Twinning (Peace River, Alberta) - Completed 2020

Bow River Bridge Twinning Project (Calgary, Alberta) - Completed 2023



Gordie Howe International Bridge (Detroit, Illinois/Windsor, Ontario) – Under Construction

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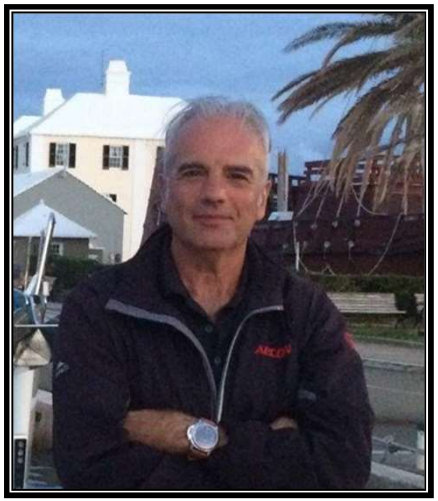
Meet the Aecon team

Varni Tayalan
Communications and Public Engagement Lead

Varni possesses a profound reservoir of expertise accumulated over 15 years of experience executing award winning portfolios in Community Benefits, Community Engagement, and Diversity & Equity domains.

Jonathan Sammut
Environmental Manager

Jonathan is a seasoned environmental professional with a proven track record of achievements spanning 11 years within the construction industry.



John Rigitano
Manager - Health and Safety

John is an expert construction management professional with over 40 years of experience in the field specializing in civil construction and safety.

Yves Phillippe
Assistant Superintendent

Yves is a seasoned civil engineer with expertise and experience in the construction industry in civil construction projects.

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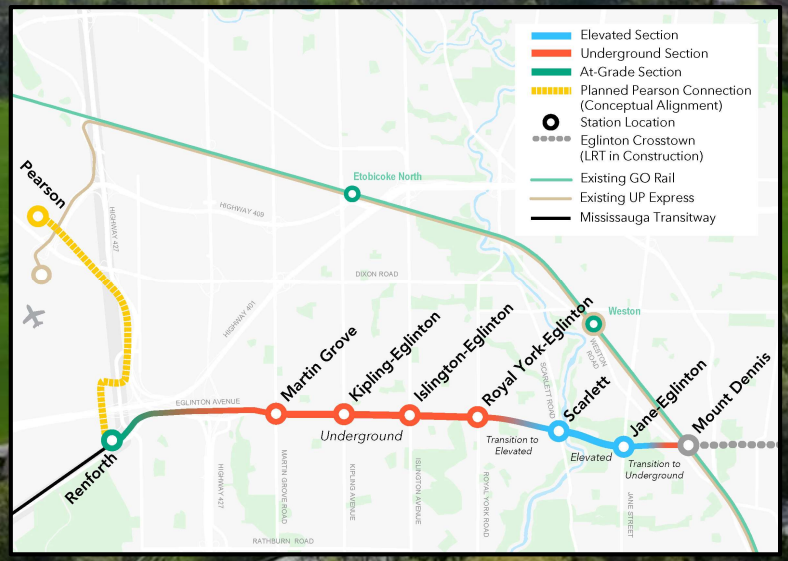
What we're building



Aecon Group Inc. will design and build the 1.5-kilometre elevated guideway (represented in blue on the map) that will run along the north side of Eglinton Avenue West, from Jane Street to Scarlett Road.

The elevated stations along the line will be delivered by another construction partner as part of a separate package of work for the project that is currently in procurement.

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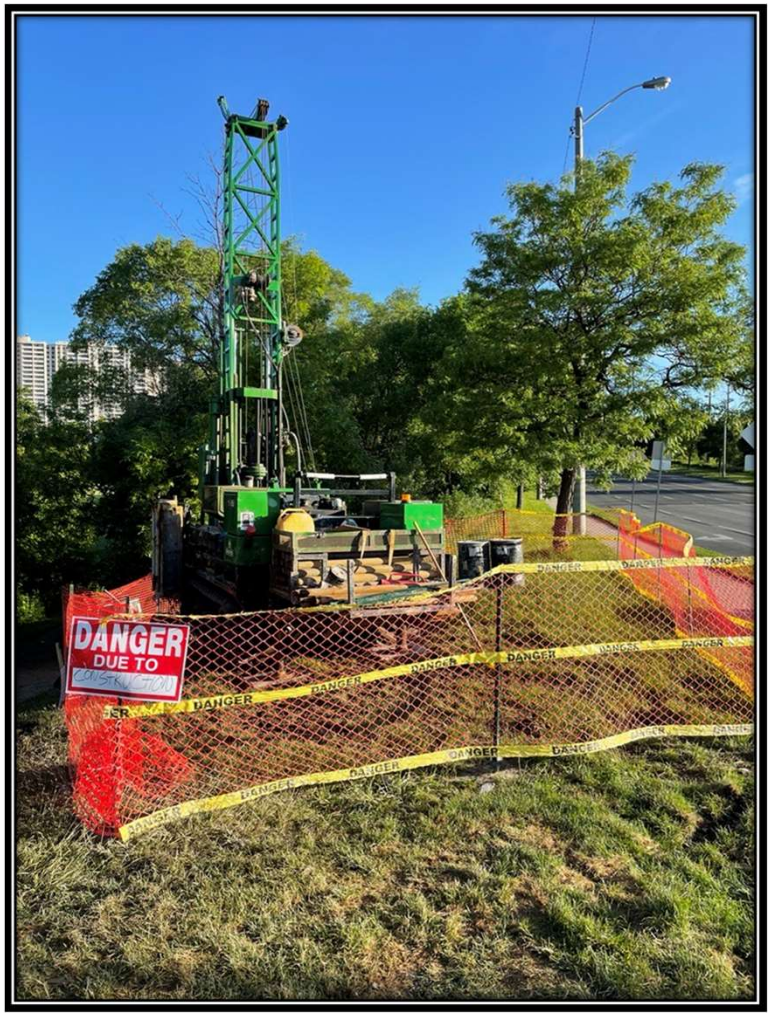
Works currently being completed

Borehole drilling

- A borehole is a narrow vertical shaft bored in to the ground to determine ground suitability.
- A 6-inch hole is drilled down the bedrock, with a length of 4 m to 36 m in the soil.
- For the elevated guideway, close to 56 boreholes have been drilled along the alignment.

Purpose of this work

- Through borehole drilling, samples of soil and bedrock are collected to determine the soil's physical and chemical properties.
- This will confirm the quality of the soil and the rock that will support the foundation of the bridge.



Borehole drilling along the elevated guideway

Works currently being completed

Subsurface Utility Engineering (SUE)

- The SUE process combines civil engineering, surveying, and geophysics. It utilizes several technologies, including vacuum excavation and surface geophysics.

- SUE works will be carried out throughout the alignment of the project from Scarlett to Jane on Eglinton Avenue West.

Source: https://wginc.com

The workers in this picture are investigating buried utilities.

Purpose of this work

- Obtain accurate three-dimensional mapping of existing underground utilities during the preparation works of this elevated guideway project.

Disclaimer - The images are for conceptual purposes only and not a representation of the elevated guideway.

Stage 1 - Construction of piers

The piers are the vertical support structures of bridges. It is constructed by first drilling caissons which is a deep foundation into the bedrock.

Concrete pier columns will then be constructed above the caisson foundations topped off with a pier cap.

The elevated guideway will feature single and double column pier configurations.

Source : www.civildigital.com

Disclaimer - The images are for conceptual purposes only and not a representation of the elevated guideway.

Stage 2 - Construction of ramps

Once the piers are built, the next stage involves constructing the abutments and associated ramps that will transition the route of the Eglinton Crosstown West Extension between the above-ground and underground segments of the line. These ramps will be designed to ensure a smooth and efficient connection between the tunneled sections and the elevated guideway.

Humber College portal at Finch West LRT project, Toronto

Disclaimer - The images are for conceptual purposes only and not a representation of the elevated guideway.

Stage 3 - Construction of the deck

The deck is the structure that will span between each of the piers or abutments, providing the surface on which transit vehicles will travel. The deck will be formed and poured on site and constructed from sturdy, durable reinforced concrete.

Source: www.ulmaconstruction.com

Disclaimer - The images are for conceptual purposes only and not a representation of the elevated guideway

Stage 4 - Deck construction completed

Once the deck is complete, the stage will be set for installation of the rails and systems that will support extended Eglinton Crosstown LRT service. This phase of construction will begin after a future partner is brought on board.

Elevated guideway once the rails are constructed

Construction method to enter the Humber river

Source: www.pery.com

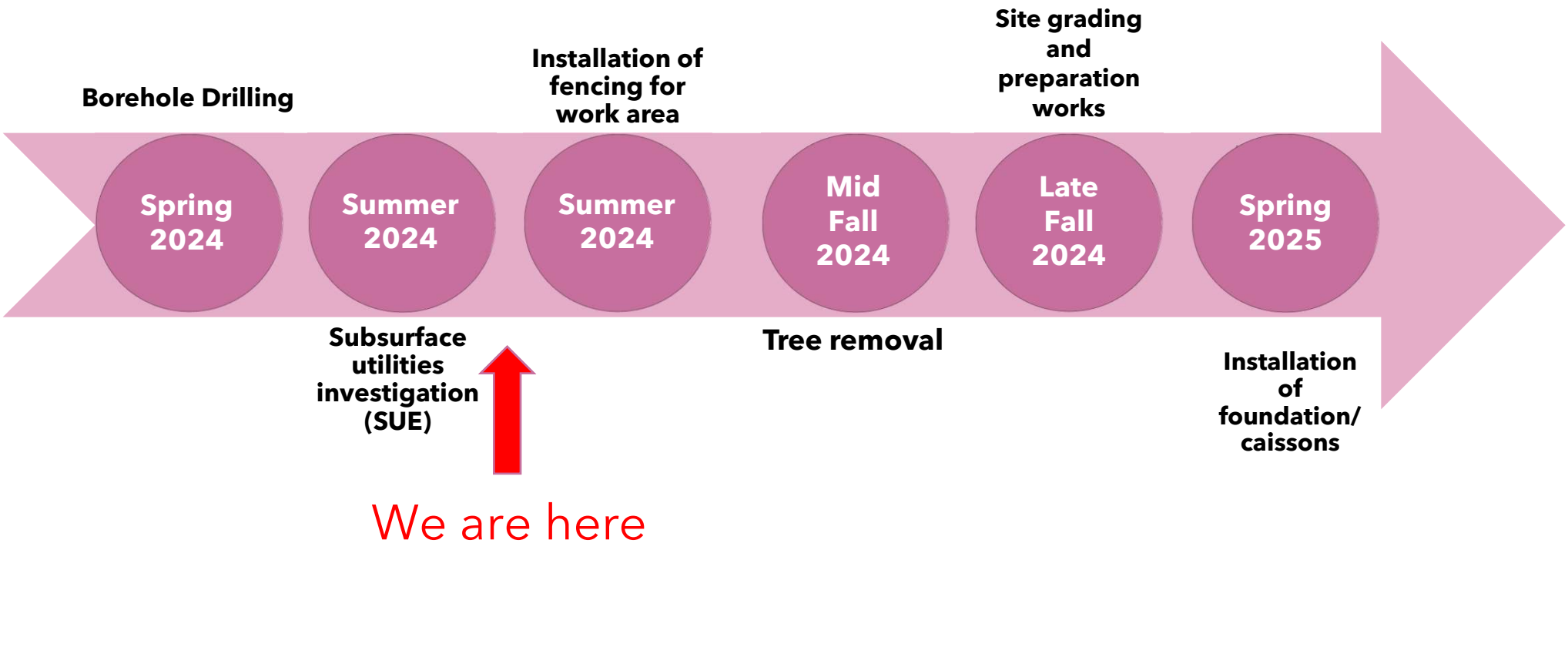
- In order to not enter the Humber river, Aecon will utilize the balanced cantilever bridge construction method.

- Balanced cantilever bridge construction method is used in situations where access is limited, and long span bridges need to be constructed.

- Aecon will use two cantilever bridge travellers to build the bridge from each side of the Humber river and connect at the centre of the river.

Disclaimer - The images are for conceptual purposes only and not a representation of the elevated guideway.

Sequence of work



Construction impacts and mitigation

Construction Impacts	Mitigation
Safety	Pedestrian detours around heavy construction areas Adjustment of access to public parks
Noise and Vibration	Noise and vibration threshold monitoring Activities completed during daytime hours
Lane Closures	Signs, flag persons, detours
Local Businesses	Business continuity plans such as advertising, maintaining access, and buying locally throughout the project
Mud Tracking (from project site onto sidewalk or street)	Street sweepers using vacuum suction and mud mats will be used
Dust and Air Quality	Dust suppression will be used on regular basis – watering the grounds regularly to keep the dust suppressed, which helps maintain air quality.
Construction Debris	Daily housekeeping to prevent buildup of construction waste

Protecting the Humber River and watercourses

Measures to protect the Humber River, other surface drainage features and wetlands

- Design the elevated guideway to clear the river so there is no in-channel work activity, and the river is free to flow naturally
- Install construction fencing barriers around the perimeter of work areas to prevent encroachment into sensitive natural areas
- Retain and protect as much of the natural vegetation as possible to maintain watercourse bank stability, buffer watercourses and as an erosion risk mitigation measure.
- Implement stormwater management practices to maintain water balance (e.g., flow, retention) in wetlands and watercourses
- Use erosion and sediment control to prevent the release of silt, or sediment-laden water to receiving water bodies
- Follow Fisheries and Oceans Canada (DFO) advice and best practices for protecting fish and fish habitat

A view of the Elevated Guideway spanning the Humber River

Protecting wildlife

Measures to protect and minimize disturbance to wildlife:

- Follow wildlife timing restrictions for construction activities (e.g., removing vegetation outside of bird nesting and bat active seasons)
- Install bat habitat boxes in accordance with the *Endangered Species Act* permit to provide shelter for bats during their roosting season (spring, summer, and fall)
  - Along the alignment, we have installed 19 bat boxes
  - Metrolinx is currently conducting research on various bat box designs to improve the effectiveness of the boxes in providing better habitat for bats
- Install fencing around work areas to help prevent wildlife from entering the construction zone
- Have a qualified biologist conduct wildlife searches within the fenced area, allowing safe exit or relocation to suitable habitat

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Managing vegetation & tree impacts

We are working towards mitigating impacts on vegetation and trees by:

- Following Metrolinx's Vegetation Guideline:
  - Quantifies the number of new tree & vegetation plantings required
    to offset removals through restoration of natural and landscape areas affected by construction,
  - Integrated vegetation management
- Consulting with municipalities and conservation authorities regarding local by-laws and environmental regulations
- Providing additional compensation when tree/vegetation removals are in designated natural areas (e.g., ravines/natural features) with large/mature trees and established ecological communities
- Ensuring no project activities occur within wetlands

Scan QR code for the Metrolinx Vegetation Guideline

Work has already started to plant approximately 8,500 new trees. This will offset roughly 1,300 tree removals needed in the area, about half of which are invasive species. Metrolinx is working with the Toronto and Region Conservation Authority and the City of Toronto to plant new trees as early as we can with approximately 1,200 new trees already planted.

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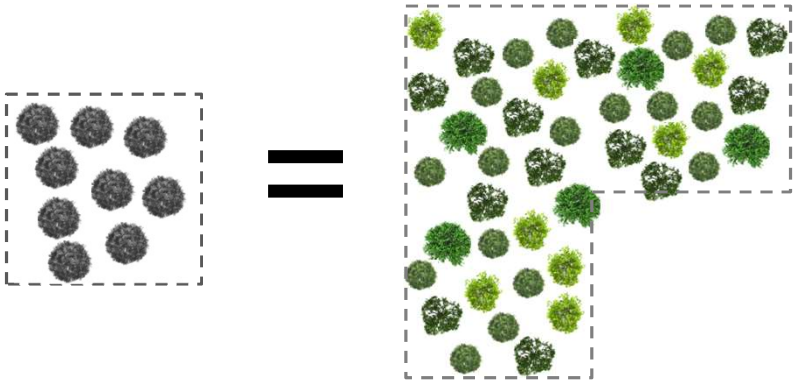
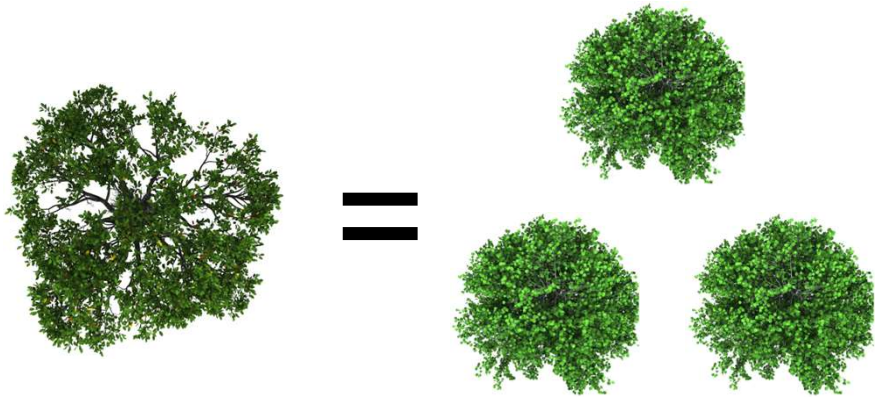
Measures to manage vegetation and trees

Metrolinx has a detailed process to minimize impacts, which includes removing and restoring vegetation and trees in a deliberate, careful and responsible way.

- ☑ Take an inventory to identify trees and natural features in the area that will be potentially affected by a project. As well, create a database with detailed tree and natural heritage information, including tree species, condition (e.g., excellent, good, fair, dead), and ownership (City of Toronto, TRCA).
- ☑ A qualified arborist studies project plans to confirm which trees must be removed or protected to accommodate safe project construction.
- ☑ Develop a tree protection plan and other mitigation measures and submit it for review and approval by the City of Toronto and the TRCA.
- ☑ Implement arborist recommendations to manage dead and hazardous trees and control the growth of invasive plants, wherever possible.
- ☑ Develop a restoration plan to outline trees, shrubs, and other vegetation to be restored in areas temporarily disturbed by construction -- a requirement for tree removal permits in the City of Toronto. Prioritizing the planting of native and pollinator species helps improve the health of local ecosystems.

Compensation for Tree Removals





- Removals within an area regulated by the TRCA are compensated by the **area disturbed**. Example: for every square metre of woodland removed, from 3 to 8 square metres are to be planted
- The TRCA requires so many trees and shrubs per hectare (10,000m^2) depending on the type of ecology, but this can range anywhere from 500-3000 trees per hectare

- Tree removals within lands regulated under a City Private, Park, Street Tree By-laws are compensated based on the number of trees removed at a ratio of 3:1 (e.g., for 10 tree removals, 30 trees would be planted
- Removals with ground disturbance in the Ravine & Natural Feature Protection (RNFP) area are compensated on an area basis

Community benefits and supports

Employment opportunities through inclusive hiring

Our Goals

- 10% of new hires will be women
- 10% of new hires will be from the communities of the Black, Indigenous and people of colour
- 10% of new hires will be apprentices

Key tactics

- Collaborative approach with community organizations and unions
- Consistent engagement with sub-contractors
- Internship opportunities/Mentoring & Job shadow programs/Construction site tours
- Workshops on career pathways in construction
- Requirement for all contractors to have anti-racism, anti-discrimination and anti-harassment policies in place

Local business supports

Key strategies

- Develop business continuity plans
- Create business opportunities in the project

Key tactics

- Buying goods and services locally for the project
- Mitigating construction impacts
- Shop local signage/promotion of businesses
- Consistent engagement to help promote business

Construction breakdown – east tunnel (Strabag)

Time	Activity	Details & Purpose	What to Expect
Summer - Fall	**Jane Portal –** Large drilling to support excavation	• Creating the structure for the tunnelling procedure.	• Augers have been brought in to remove soil, allowing the workers to pour concrete into casing and install steel piles inside. This will create a structure for the tunnel. • The community can expect some noise and movement of hauling truck.
Summer – Fall	**Mount Dennis**– Site preparation	• Preparation of the site for building the Shaft.	• Fencing, removal works (concrete planters, concrete, small trees, lights, benches), grading, site equipment delivery and utility relocation.
Summer - Fall	**Phase 2 of Cycle Track –** Construction	• Completing the second phase of the Cycle Track which is located on Eglinton Avenue West, between Weston Road and Black Creek Drive.	• Modifications to curb, pavement, traffic signals and pavement markings, new signage installation and concrete barriers.

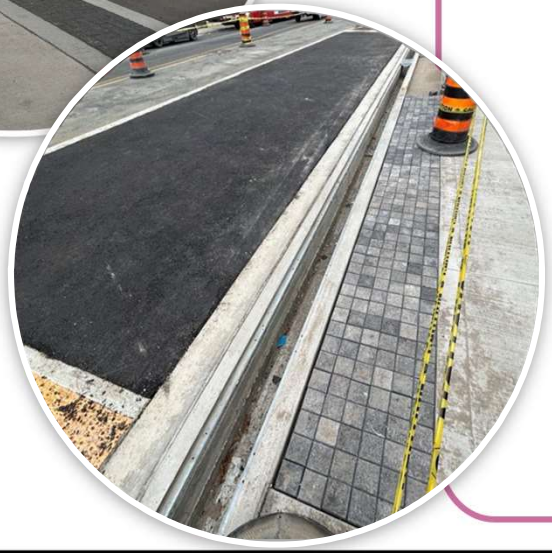
Construction breakdown – east tunnel (Strabag)

Time	Activity	Details & Purpose	What to Expect
Winter- Spring	**Jane Portal –** Continued excavation	• Creating the structure for the tunnelling procedure.	• The community can expect some noise and movement of hauling truck.
Winter- Spring	**Mount Dennis–** Large drilling to support excavation	• Creating the supporting structure for the shaft where the tunnel ends.	• The community can expect movement of hauling trucks as excavation progresses.

Jane portal and cycle track works

Jane Portal

- Site preparation for Jane portal shaft and related construction work has started.
  - This will act as the port of the tunnel as it will travel to Mount Dennis Station.
  - The Jane Portal will also connect with the elevated guideway.



Cycle Track

- Cyclists can use the new cycle track (separated bike tracks) on Eglinton Avenue West, between Jane Street and Black Creek Drive
  - Phase 1 of the works between Jane and Weston Rd is completed and operational.
  - Phase 2 of the cycle track is now under construction until October 2024.

Thank you for coming to the Open House

Visit us at the Community Office

326 Scarlett Road

Tuesdays and Thursdays,
10 a.m. - 5 p.m. or by appointment

Want to know more?

Visit: metrolinx.com/EglintonWest
Email us: EglintonWest@metrolinx.com
@EglintonWestEXT
Call us: 416-202-8001

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