

# Vaughan Committee of the Whole - Project Update

COMMUNICATION C6

ITEM NO. 7

COMMITTEE OF THE WHOLE (2)

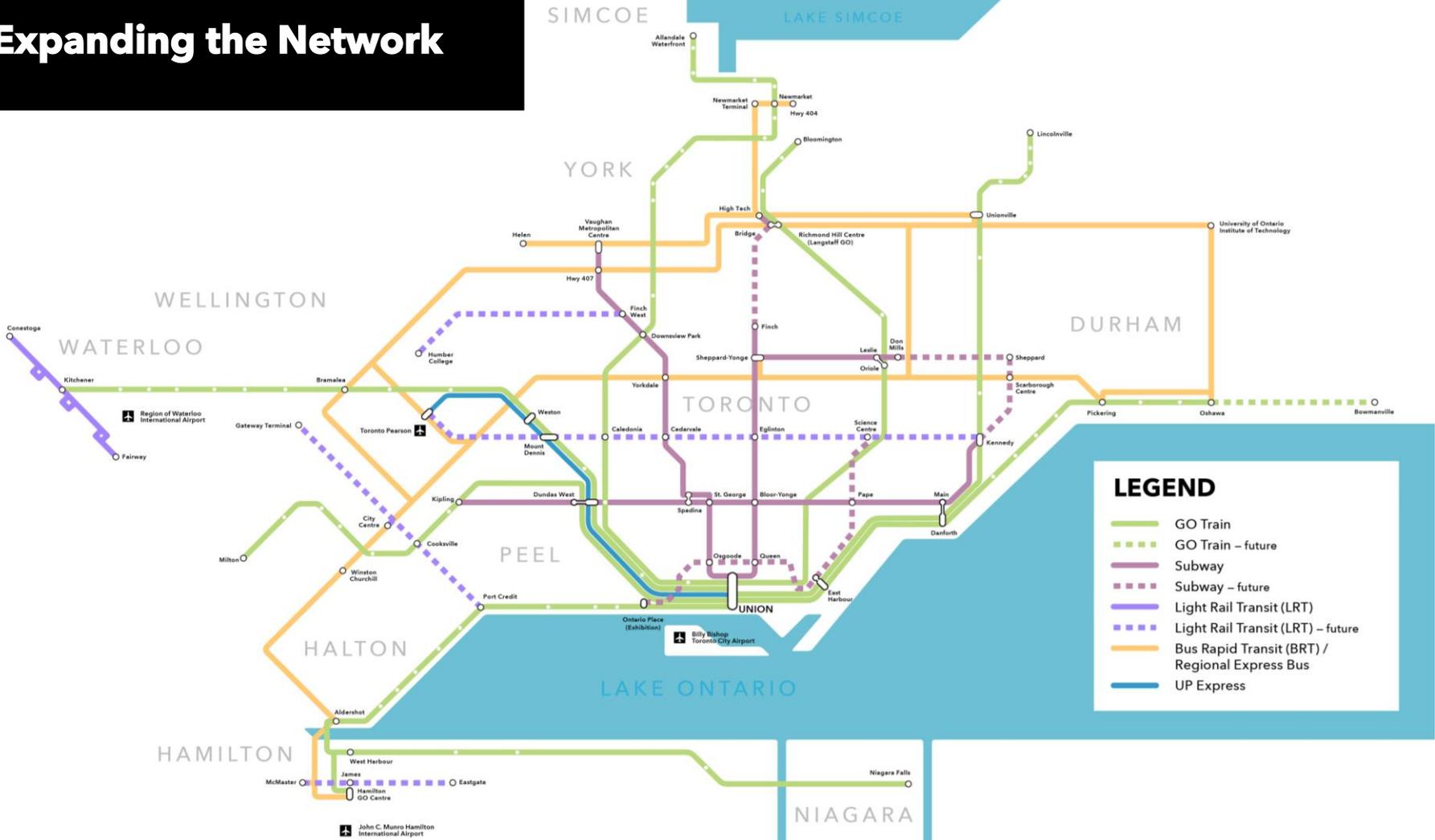
February 8, 2022



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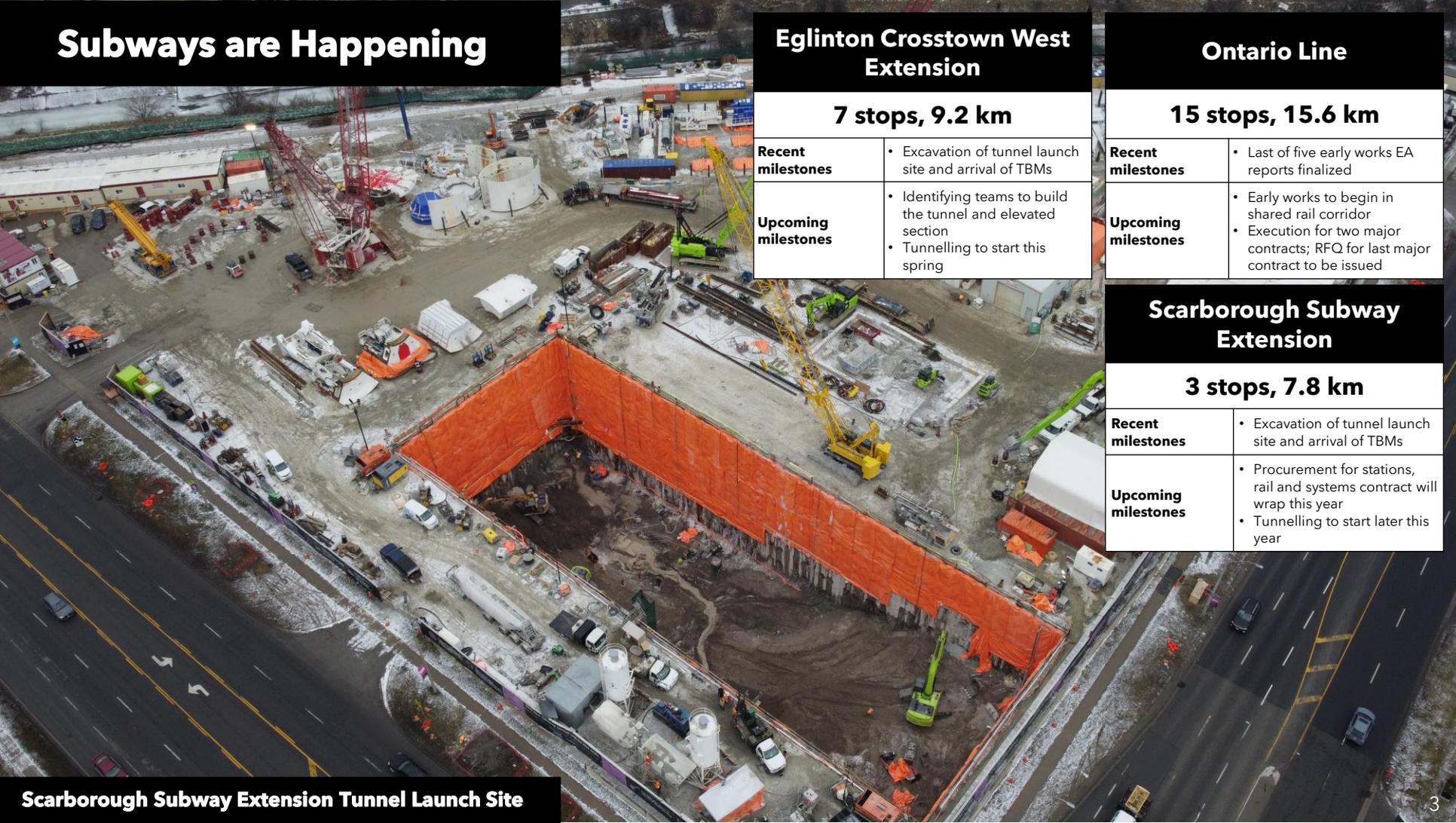
# Expanding the Network



**LEGEND**

- GO Train
- - - GO Train - future
- Subway
- - - Subway - future
- Light Rail Transit (LRT)
- - - Light Rail Transit (LRT) - future
- Bus Rapid Transit (BRT) / Regional Express Bus
- UP Express

# Subways are Happening



## Eglinton Crosstown West Extension

**7 stops, 9.2 km**

### Recent milestones

- Excavation of tunnel launch site and arrival of TBMs

### Upcoming milestones

- Identifying teams to build the tunnel and elevated section
- Tunnelling to start this spring

## Ontario Line

**15 stops, 15.6 km**

### Recent milestones

- Last of five early works EA reports finalized

### Upcoming milestones

- Early works to begin in shared rail corridor
- Execution for two major contracts; RFQ for last major contract to be issued

## Scarborough Subway Extension

**3 stops, 7.8 km**

### Recent milestones

- Excavation of tunnel launch site and arrival of TBMs

### Upcoming milestones

- Procurement for stations, rail and systems contract will wrap this year
- Tunnelling to start later this year

Scarborough Subway Extension Tunnel Launch Site

## A Much-Needed Subway Extension

- 1994 : York Region identifies the extension in Official Plan
- 2009 : York Region and City of Toronto complete first Environmental Project Report for the extension from Finch Station to Richmond Hill Centre
- 2010/2011: Cities of Markham, Richmond Hill and Vaughan adopt secondary plans for intensification that requires the extension to support planned growth
- 2014: York Region and City of Toronto complete addendum to the 2009 Environmental Project Report to include a train storage facility
- 2018: York Region and City of Toronto, supported by Metrolinx, initiate preliminary design and engineering
- 2021: Metrolinx releases initial business case for the extension and adjustments to the route in response to community concerns
- 2022: Metrolinx releases Environmental Project Report Addendum Report assessing changes since the completion of the 2009 and 2014 studies

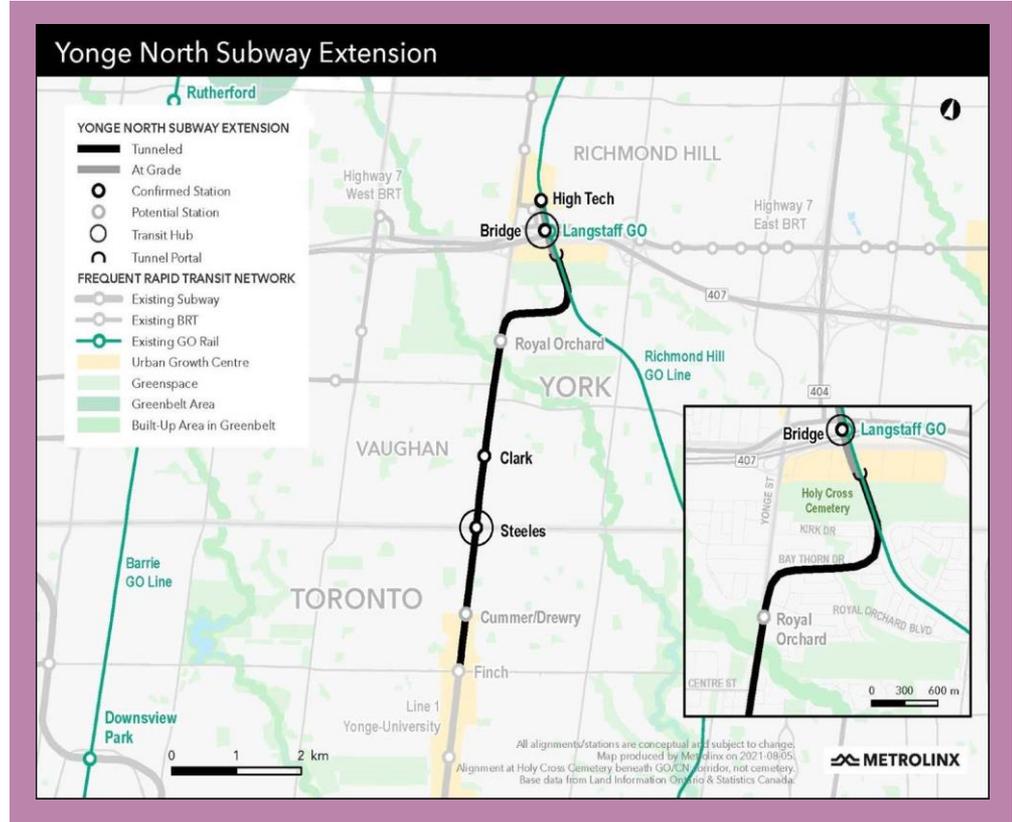


# Yonge North Subway Extension

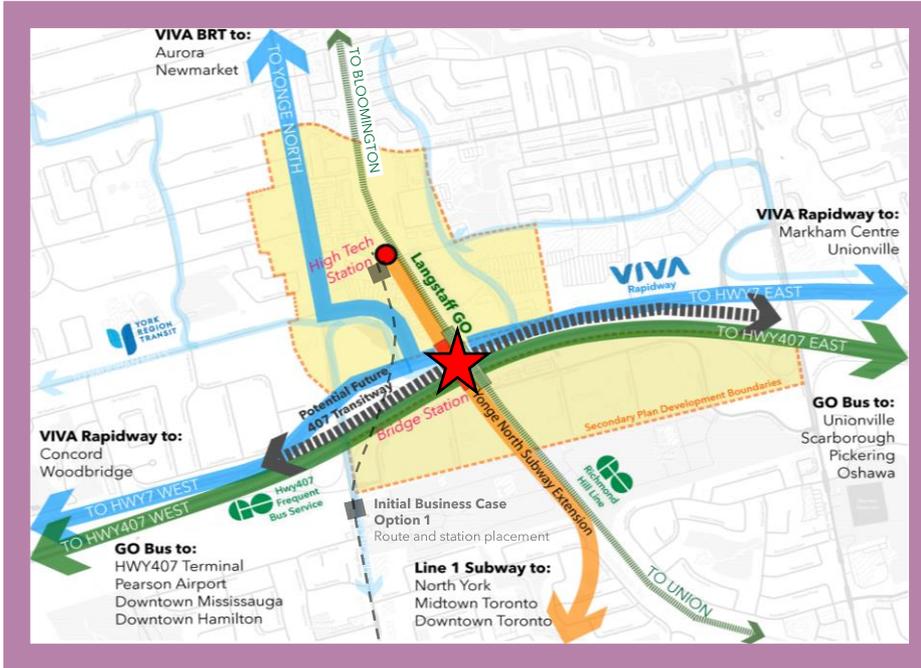
## By the Numbers

-  **~8-km route**
-  **4\* new stations**
-  **94,100 daily riders**
-  **Up to 22 minutes saved on a trip from York Region to downtown Toronto**
-  **4,800 tonnes in yearly greenhouse gas emission reductions**
-  **26,000 more people with in 10-minute walk to transit**
-  **7,700 fewer km traveled by cars during morning rush hour**

• We're continuing to explore opportunities with our project partners that could support additional stations.



## A Launchpad to Explore the Region



A new transit hub at Bridge Station will open up new travel possibilities in York Region and beyond.

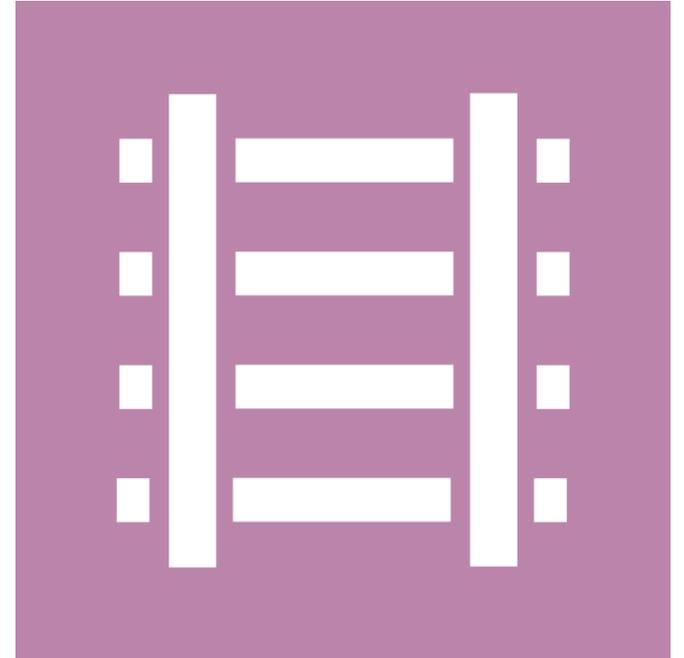
- Brings **convenient transit access** to the heart of the Richmond Hill Centre and Langstaff Gateway development areas
- Places **stations closer to where people will live and work** making walking and cycling to the stations a viable option
- Offers **fast and convenient transfers** to as many as **five** existing and future regional transit lines:



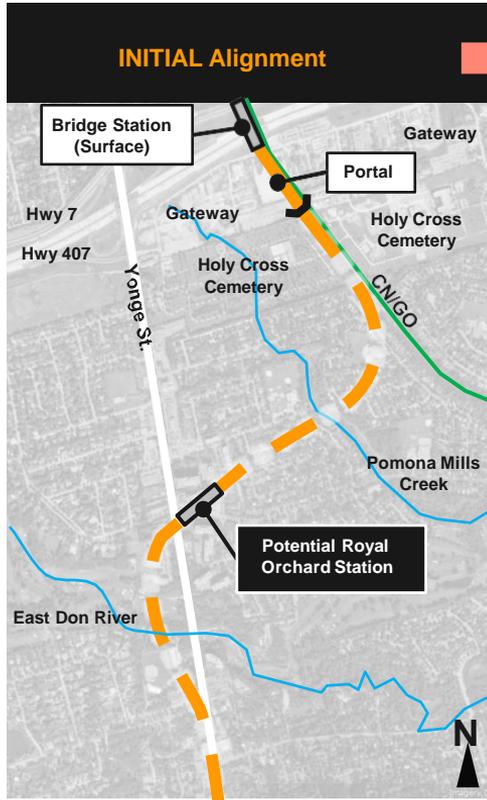
# The Final Alignment

We've adjusted the route of the Yonge North Subway Extension through the Royal Orchard community to travel deeper and under fewer single-family homes.

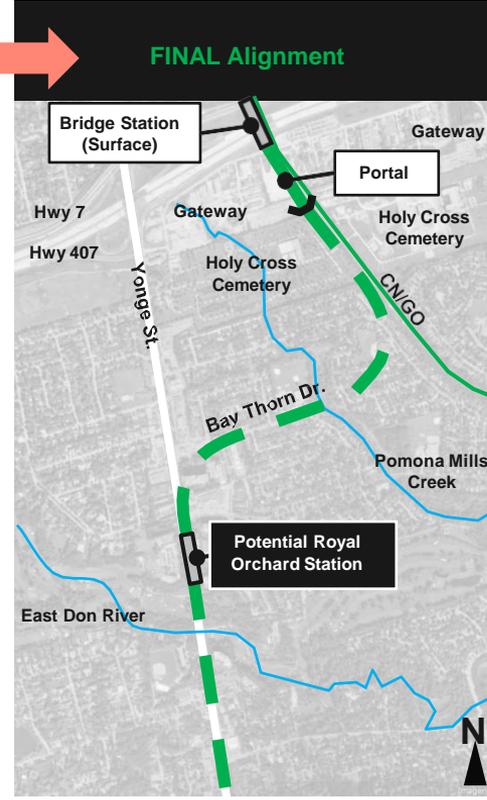
- The route will travel under Bay Thorn Drive instead of directly under single-family homes, wherever possible.
- In the shallowest section of tunnels that will run below single-family homes and a local school, our current designs have the bottoms of the tunnels at a minimum depth of 21 metres (19.5 metres to where the train wheels interact with the tracks).



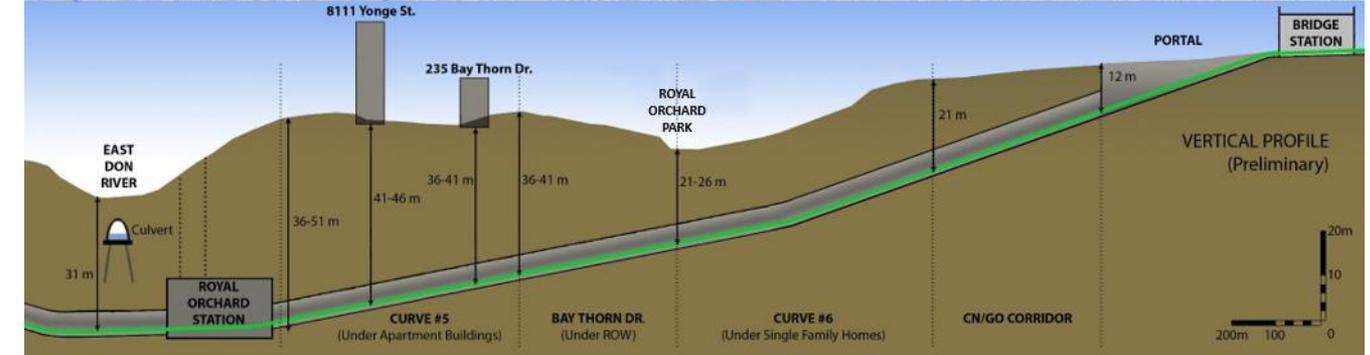
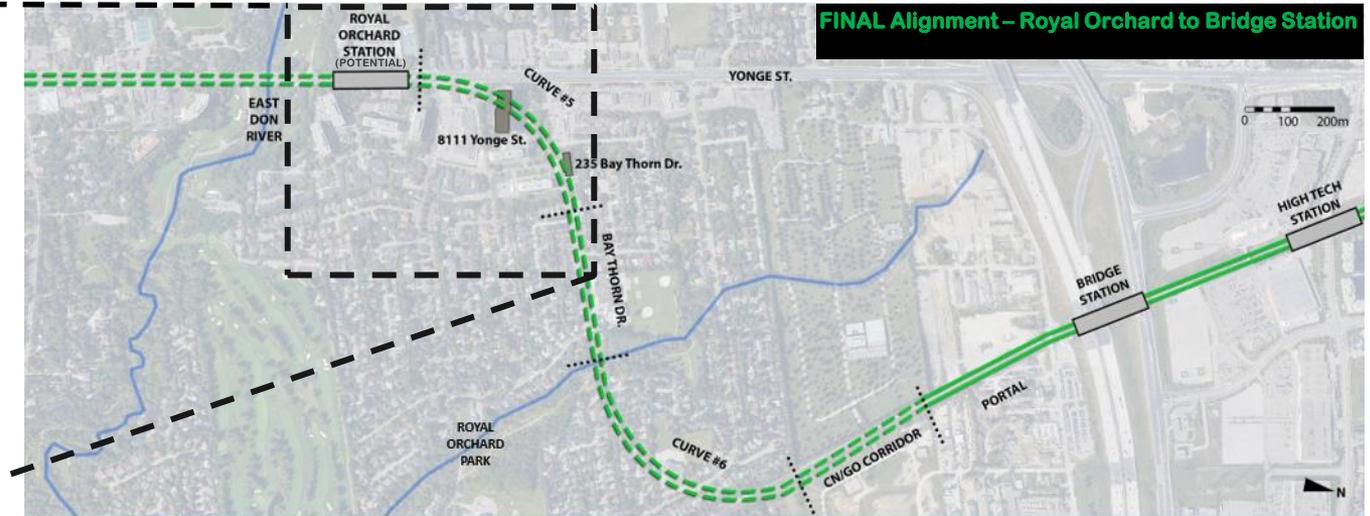
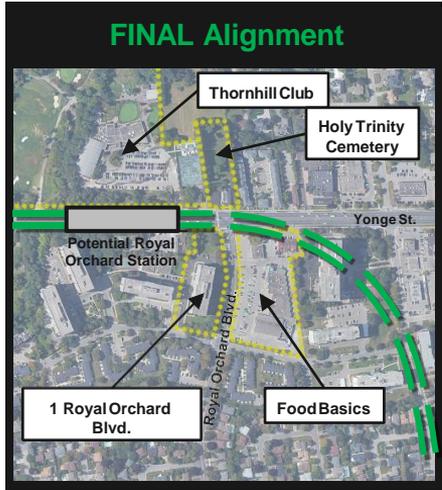
# Alignment Update - Overview



- Why did we shift from the Initial Alignment to the Final Alignment?**
- Reduce number of single-family residential properties tunnelled under
  - Placed tunnels even deeper below the community
  - Maintained project benefits within approved budget



# Yonge North Subway Extension



# Noise and Vibration Effects Will be Mitigated

We will work with communities to ensure a comprehensive array of solutions are in place to address noise or vibration concerns. These solutions can include, but are not limited, to:



### Resiliently supported rail ties

An elastic pad under the rail ties that prevents vibration caused by coming into direct contact with the crushed rock that forms the track bed



### Rubber rail dampers

Discs that tend to look a lot like oversized hockey pucks attach to the rails and help soak up the vibration energy to reduce the sound of passing trains



### Ballast mats

A continuous layer of material that reduces the vibration transmitted into the ground as trains pass over



### Noise walls

These walls can be designed with a combination of solid and transparent panels, and have been installed across many parts of the Metrolinx rail network



### High-grade rail fasteners

These fasteners keep all the track parts tightly together and compress to absorb vibration



### Floating concrete slabs

The rails would be attached to large concrete slabs that are cushioned below by thick rubber pads that soak up vibrations.

## Noise and Vibration Studies Complete

Study results indicate that noise and vibration will be at or lower than applicable thresholds at all locations near the project.

For example, in the Royal Orchard community with solutions such as floating slab track in place:

- ground-borne noise levels are predicted to be no higher than the sound of background noise in a broadcast studio;
- ground-borne vibration levels are predicted to be below the threshold of what the average person can feel.



Examples of Floating Slab Track

## Environmental Project Report Addendum Review

February 10  
Notice of EPR  
Addendum

March 14  
Public Review Closes

April 15  
Notice of Updated  
EPR Addendum

Up to 35 days  
MECP Minister  
Issues Notice



Public Review of EPR Addendum (30 days) and updates to the Addendum  
Total up to 65 Days

MECP Minister's Review of Updated EPR Addendum  
Up to 35 Days

*\*All dates are subject to change*

- Public review on YNSE Metrolinx Engage
- Virtual open houses will be hosted through February and March
- Public can also email questions to [YongeSubwayExt@metrolinx.com](mailto:YongeSubwayExt@metrolinx.com)

## Ongoing Public Engagement and Stakeholder Outreach

- 30,000 homes received project postcard. Second postcard in distribution.
- Royal Orchard Community Liaison Committee established with on the ground community presence
- Participated in Vaughan Yonge Steeles Centre Working Group, hosted by Councillor Shefman
- Keep York Moving meeting on Clark Station planning
- 7 virtual open house meetings with 2633 attendees and 1577 questions answered
- 1500 notification flyers distributed, 23 stakeholder briefings, 36 elected official briefings, 15 eNews, biweekly meetings with Communications Working Group (municipal staff), community walks and canvassing.
- 8 Council presentations
- Open letter from CEO Phil Verster to the Royal Orchard community
- Community Office for project staff to be in the community and available to share information and answer questions
- Noise and Vibration Mitigation Experiential Program with local subway tours, scale model demonstration of train and track vibration reduction, sound lab experience of existing and projected sound levels when the subway is in operation



## Community Benefits/Supports in Every Subway Project

Community Benefits Program - Ontario Line examples

### Employment Opportunities

Description: Promoting apprenticeship training and workforce development opportunities to local communities.

### Local Business Supports

Description: Building and fostering relationships with local businesses to minimize and alleviate business disruptions as a result of construction impacts.

### Public Realm Improvements

Description: Where construction as a result of the project creates a temporary disruption, we find ways to improve and leave the surroundings in an improved state.

### Supporting Community Improvements

Description: Support municipalities and communities to maximize benefits possible from new transit investment/infrastructure, outside of public realm improvements.



Proposed Future Community Parkette

### Community Support Program Eglinton Crosstown LRT

- As of December 2021, included:
- 455 placements, including professional, administrative, and technical hires and apprentices and journey persons.
  - Over \$8 million spent in support of local business and social procurement.



## Project Timeline

