

# **Ontario Line**

**Pape, Cosburn and the  
Don Valley crossing**

## Agenda

- Land acknowledgement
- Safety moment
- Introduction to panel
- Presentation
  - About the Ontario Line project
  - Geotechnical investigations and slope stability
  - Property impacts
- Q&A

## Land acknowledgement

Metrolinx wishes to recognize that it operates on the traditional territories of the Anishnabeg, the Haudenosaunee and the Wendat Peoples.

In particular, we acknowledge that the Ontario Line project takes place on Treaty 13 territory with the Mississaugas of the Credit First Nation.

We acknowledge that Metrolinx operates on these lands and has a responsibility to work with the original keepers of this territory and the many diverse Indigenous Peoples living here today.

Metrolinx remains committed to engaging with Indigenous Peoples and Nations on the Ontario Line project.

## Introduction to panel



Richard  
Tucker

Ontario Line  
Project Director



Malcolm  
MacKay

Ontario Line  
Project Sponsor



Quang  
Pham

Manager,  
Property Team



Pam  
Foster

Director,  
Environmental  
Programs and  
Assessment

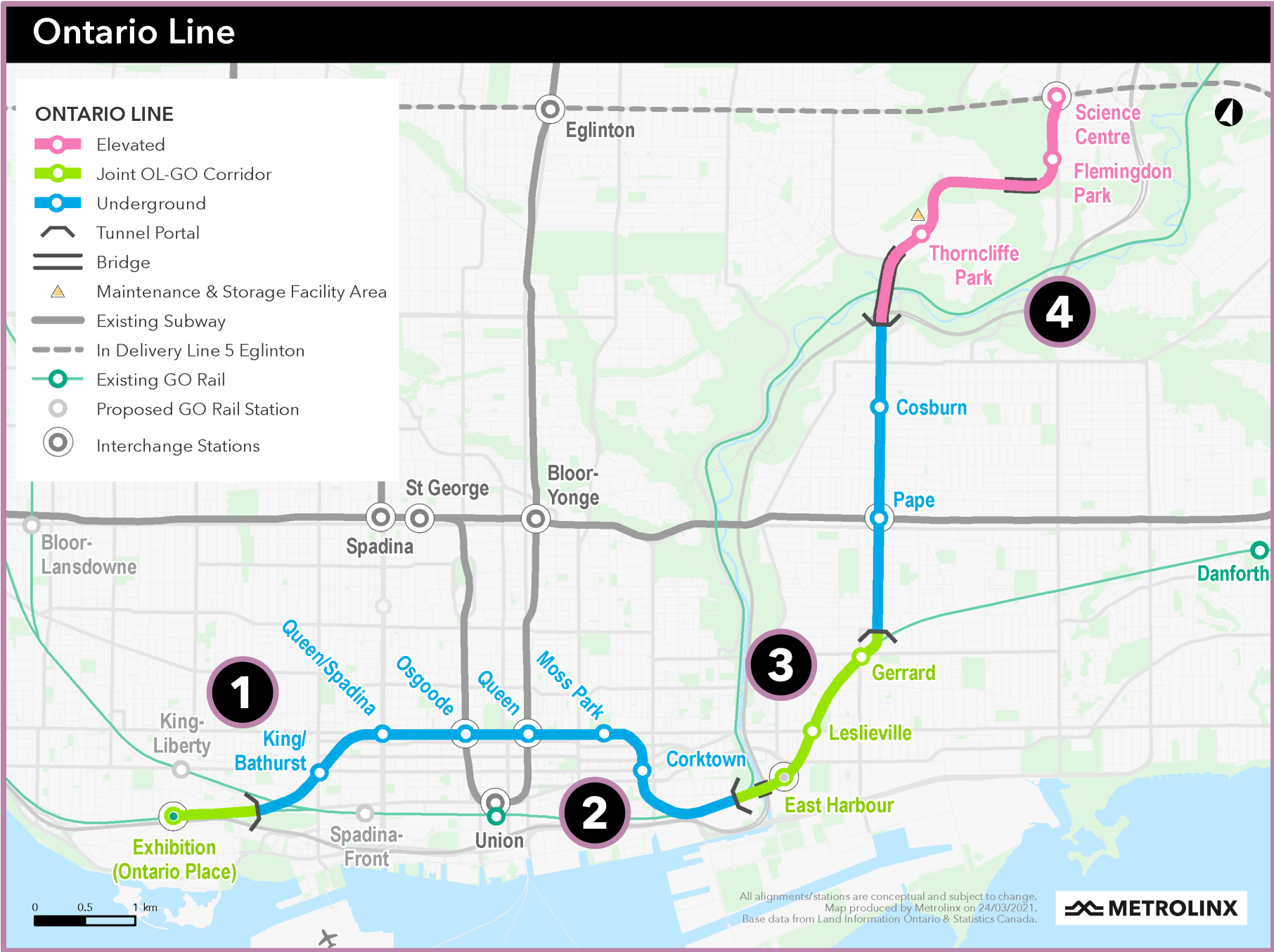
## Safety moment

Carry an extra mask so if you're caught in an April shower, you can switch your wet mask for a dry one!



Metrolinx spokesperson Anne Marie Aikins

# The Ontario Line



- 1 West**  
(Exhibition to Queen/Spadina)
- 2 Downtown**  
(Osgoode to Don Yard)
- 3 East**  
(East Harbour to Pape South)
- 4 North**  
(Pape to Science Centre)

# Environment

## Environmental Conditions Studies



Archaeological Resources



Built Heritage Resources & Cultural Landscapes



Noise & Vibration



Natural Environment



Socio-Economic & Land Use Characteristics



Air Quality



Traffic & Transportation



Soil & Groundwater

## Environmental Reports



Environmental Conditions Report



Early Works Reports



Environmental Impact Assessment Report

Impact Assessment

# What are the procurement packages?

## Rolling Stock, Systems, Operations and Maintenance (RSSOM)



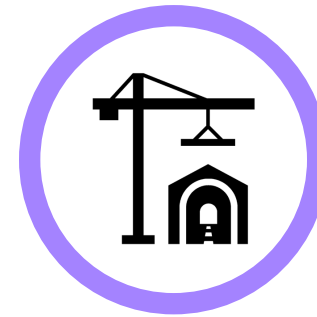
- Design, build, operate and maintain trains
- Design, build, operate and maintain track, communications, train control systems, and maintenance and storage facility
- The TTC will be responsible for day-to-day operations as they relate to customer-facing activities such as fare enforcement and network transit control

## Southern Civil, Stations and Tunnel



- One above-ground station integrated with existing GO Transit Exhibition station
- Two underground stations integrated with existing TTC Osgoode and Queen stations
- Four new underground stations (King/Bathurst, Queen/Spadina, Moss Park, Corktown)
- Two portals
- A six-kilometre tunnel

## Northern Civil Stations, and Tunnel



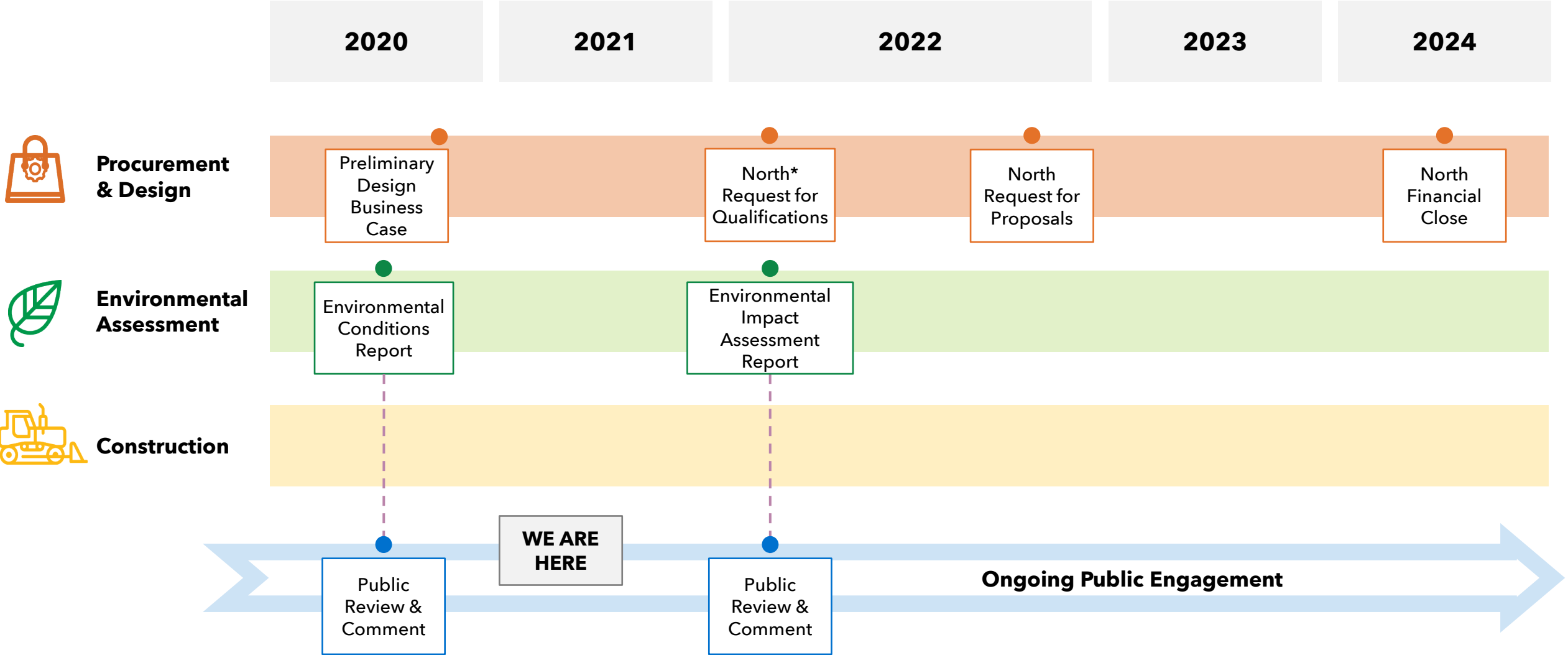
- Seven new stations
- A three-kilometre tunnel
- Two portals
- Bridges
- Elevated guideways

## Early Works Contracts



- Bridge, track and other preparatory activities along the joint rail corridor where the Ontario Line will operate next to existing GO Transit rail services, including at Exhibition station

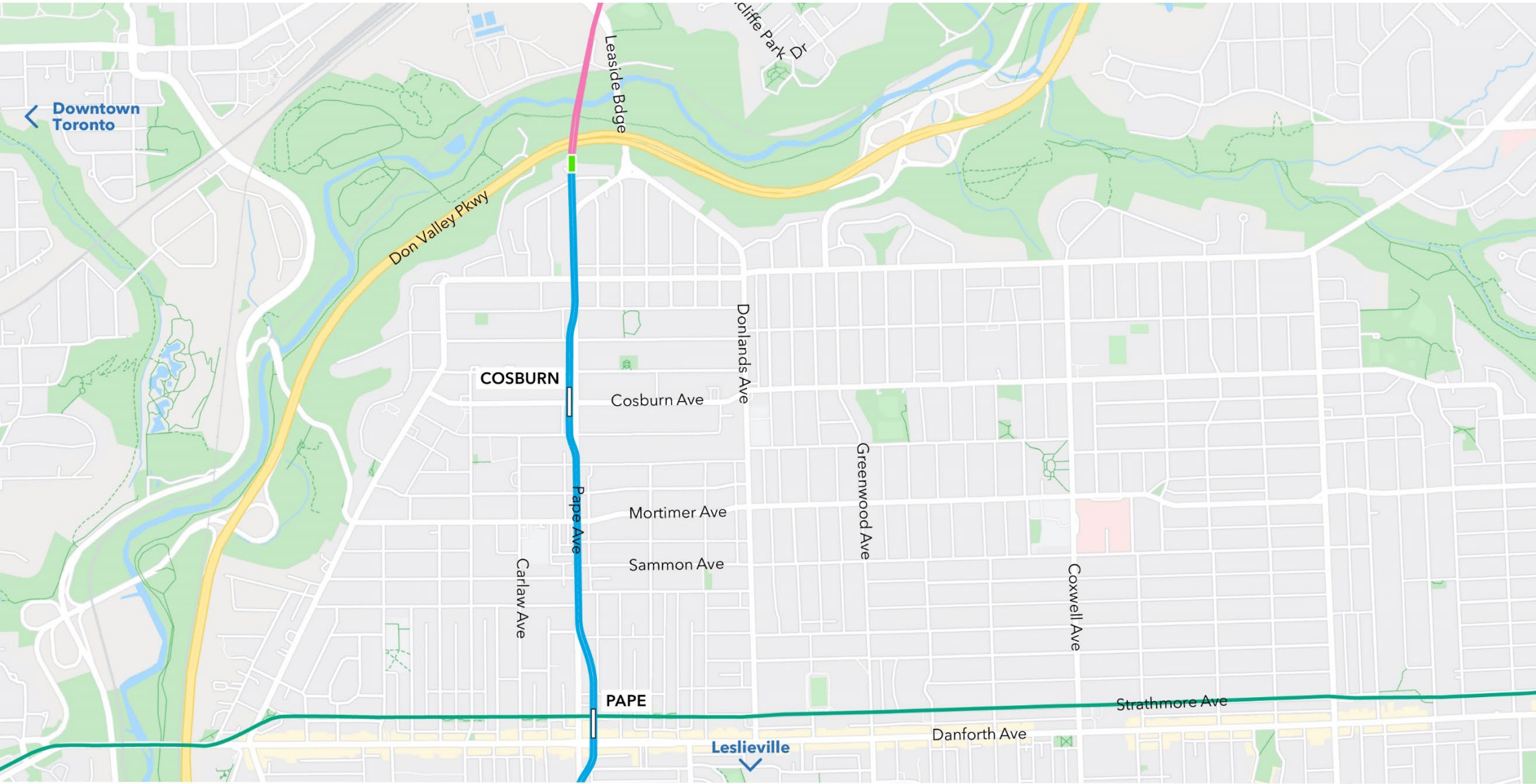
# Timeline (North segment)



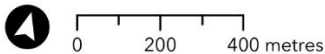
Timelines are subject to change

\*Procurement Packages:  
• North - Northern Civil, Stations and Tunnel

# North segment



- |                     |                  |                        |
|---------------------|------------------|------------------------|
| At Grade / Elevated | Station Platform | Line 2 Bloor-Danforth  |
| Tunneled            | Tunnel Portal    | Future Line 5 Eglinton |



## Ontario Line features

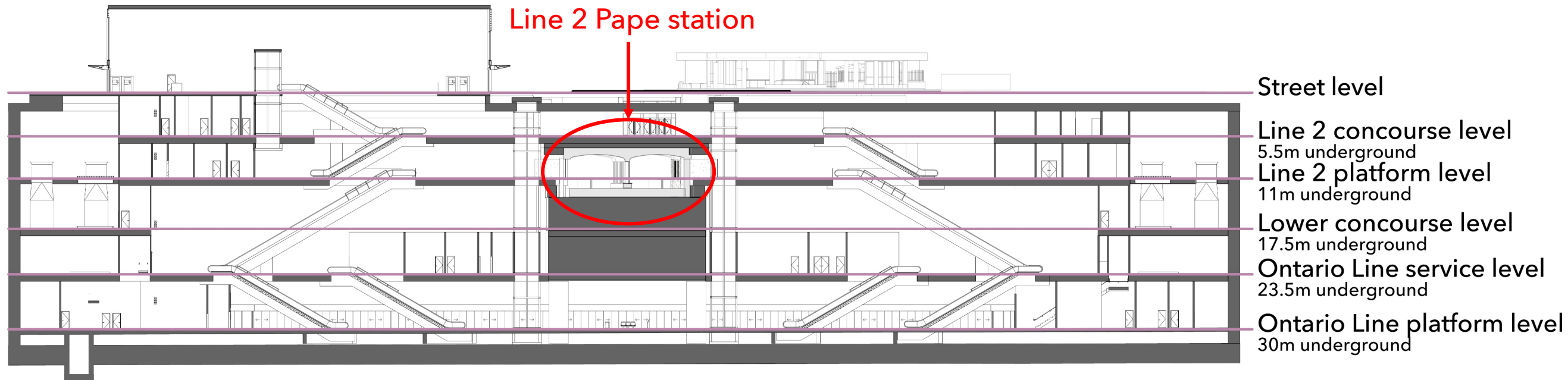
- Electric, automated (driverless) trains for a quieter, smoother ride with no additional emissions
- Train doors will automatically open and close in sync with platform edge doors



Example platform doors in Japan and Copenhagen

## Pape: interchange station

- The Ontario Line's Pape station will seamlessly connect with Line 2's Pape station
- The Line 2 platform is 11m underground
- The Ontario Line platform will be 30m underground



## Geotechnical investigations

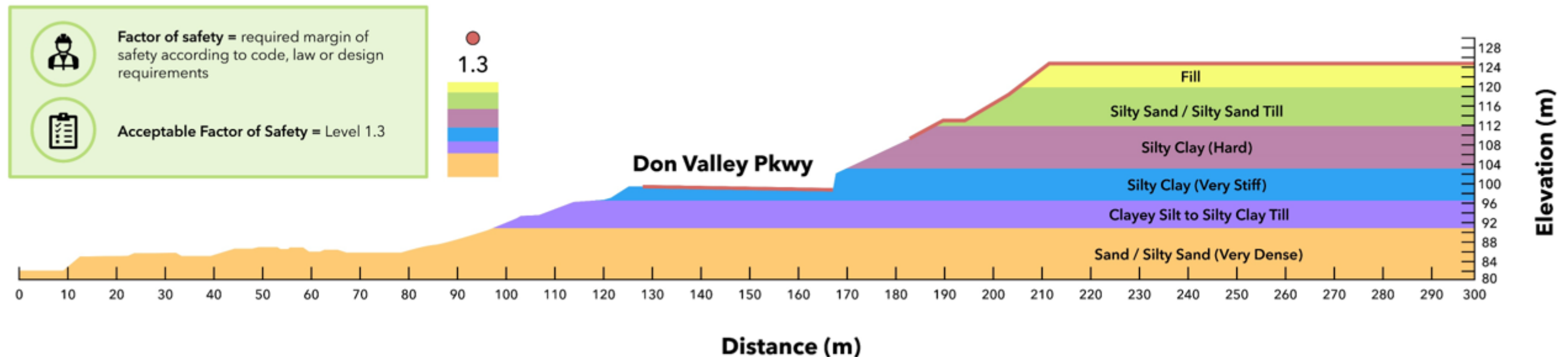
- Deep **core samples** (20 to 35 metres deep) taken from **boreholes** using mobile truck-mounted drills are used to study the strength, structure, and other characteristics of soil and rock, and the amount and location of groundwater.
- This information is used to make critical decisions like what kind of tunnel boring machine to use, and design and build considerations for concrete structures, including stations and portals.



Core sample and truck-mounted drill rig

# Don Valley geotechnical and slope stability investigation

- Technical team uses borehole samples, laboratory testing, and seismic geophysical testing to assess existing slope stability
- The current **factor of safety** (required by code/law/design requirements) for slope stability is between 1.2 and 1.3 in the portal location area
- An acceptable factor of safety for slope stability is 1.3



## Don Valley slope stabilization and portal construction

- The constructors will reinforce the slope and install a concrete and steel system that will keep the portal secured during the process of excavation
  - This system will include the following structures: support of excavation, secant pile wall, tie backs, shore wall
- These measures will increase slope stability as follows:
  - The factor of safety will double from 1.3 (current level) to **2.7** at the portal
  - The factor of safety will increase to **1.5** east and west of the portal

## When will I know if my property is impacted?



- If we confirm your property is needed, you will receive written notification from us. Metrolinx strives to communicate with property owners early and often so that there is ample time to work through solutions.
- Our preferred approach is direct, one-on-one negotiations with owners, with the goal of reaching amicable agreements.
  - Expropriation is a backstop tool. Even when expropriation is initiated, Metrolinx continues to negotiate with owners in the hopes of reaching agreements.
- Whether we have to acquire a portion of a property or the entire property, the property owner will be compensated at fair market value, and our commitment is to ensure that owners and tenants do not experience a financial loss.

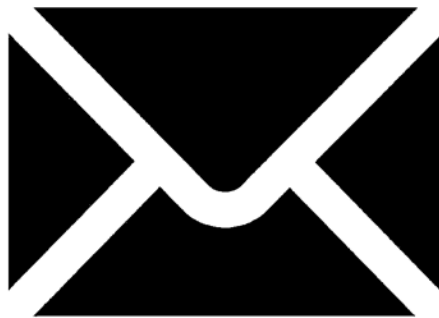
## What's next?

- Regular updates, more virtual events and opportunities to provide feedback and ask questions
- In-person meetings and events when it is possible
- Environmental Impact Assessment Report
  - January 2022: Draft report and opportunity for public feedback
  - April 2022: Final report

## Contact us

Your feedback is vital in helping us to move the Ontario Line forward in a way that strengthens the community. We are grateful for your input.

To stay up to date on upcoming virtual events and the latest Ontario Line news, sign up for our e-newsletter at [Metrolinx.com/OntarioLine](https://metrolinx.com/OntarioLine).



[OntarioLine@Metrolinx.com](mailto:OntarioLine@Metrolinx.com)



416-202-5100



[Metrolinx.com/OntarioLine](https://metrolinx.com/OntarioLine)