

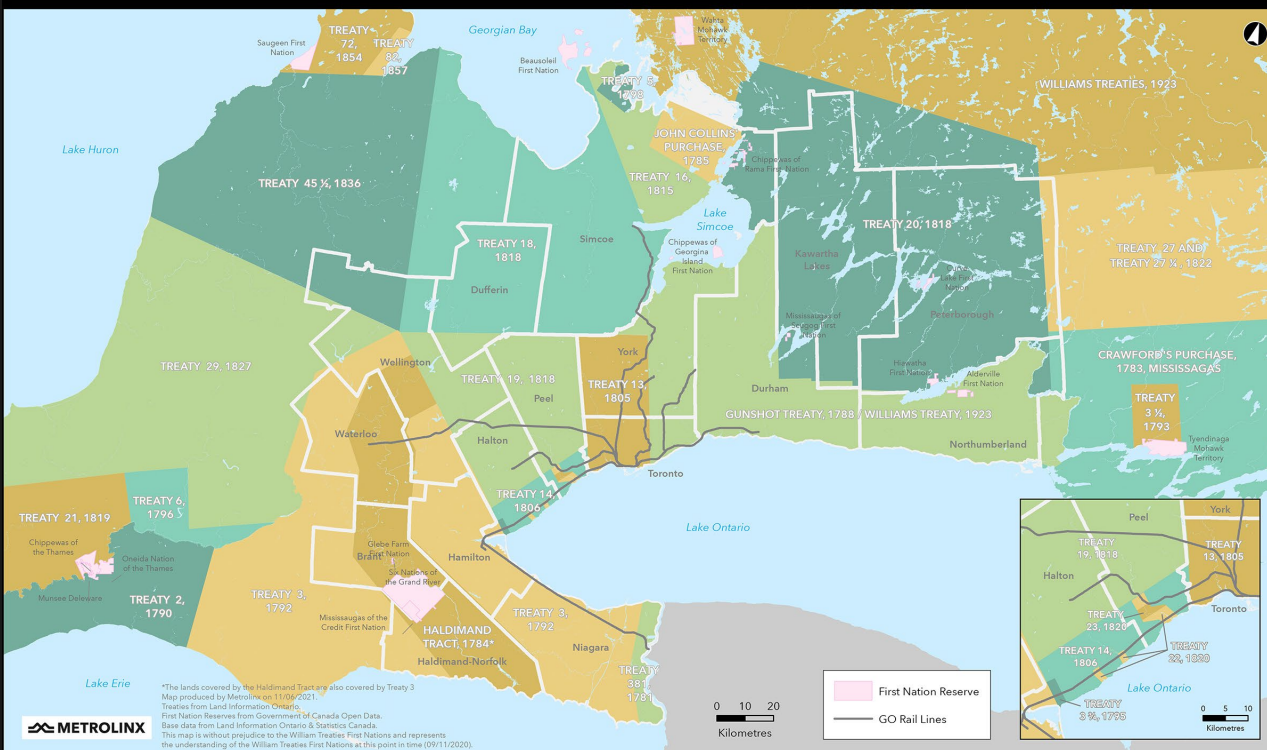
# Queen-Spadina Virtual Information Session

January 17, 2024



# LAND ACKNOWLEDGEMENT

Treaties and Reserves in the Greater Golden Horseshoe



Let us take a moment to acknowledge we are on lands that have been, and continue to be, home to many Indigenous Peoples including the Anishnabeg, the Haudenosaunee and the Huron-Wendat peoples.

We are all Treaty people. Many of us have come here as settlers, as immigrants or involuntarily as part of the trans-Atlantic slave trade, in this generation, or generations past.

We acknowledge the historic and continued impacts of colonization and the need to work towards meaningful reconciliation with the original caretakers of this land.

We acknowledge that Metrolinx operates on territories and lands covered by many treaties that affirm and value the rights of Indigenous communities, Nations and Peoples.

We understand the importance of working towards reconciliation with the original caretakers of this land. At Metrolinx, we will conduct business in a manner that is built on a foundation of trust, respect and collaboration.

# Agenda

## Welcome

- Introductions
- Housekeeping

## Presentation

- Ontario Line overview
- About piling construction
- Construction at Queen-Spadina: What's next

## Q/A and Discussion

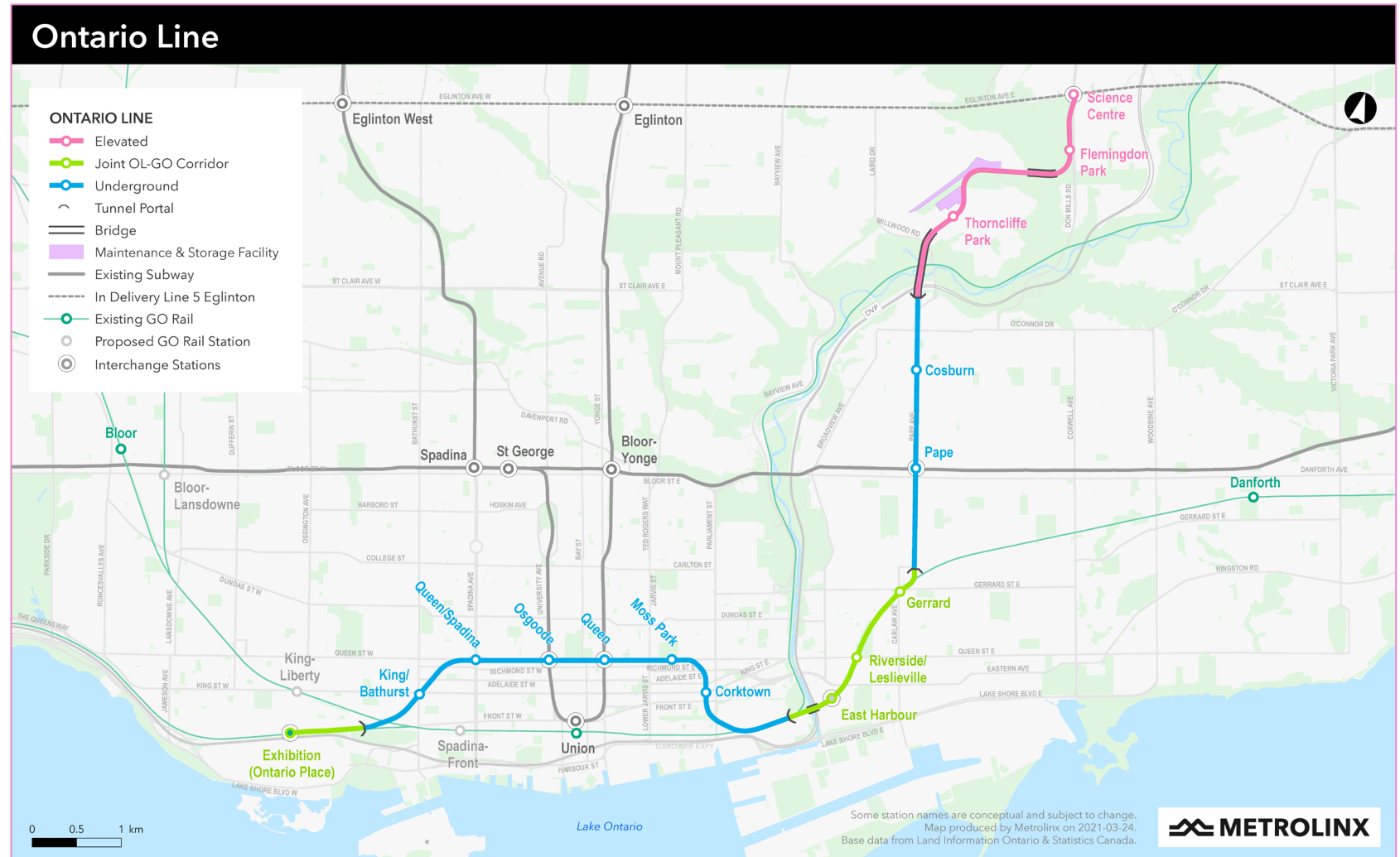


# Ontario Line

Daniel Cicero, Sponsor, Ontario Line, Metrolinx

# 1 ONTARIO LINE: NEW RAPID TRANSIT FOR TORONTO

- The Ontario Line will be a **15.6-kilometre subway line** that will make it faster and easier to travel within Toronto and beyond.
- **15 new stations** within the City of Toronto. It will run from Exhibition Place, through the heart of downtown, all the way to Eglinton Avenue and Don Mills Road.
- A trip from one end to the other will take less than **30 minutes end-to-end**, compared to the 70 minutes it takes on transit today.
- The line connects to more than 40 other transit options, including the TTC's **Line 1** and **Line 2**, three **GO Transit rail lines**, and the **Eglinton Crosstown LRT (TTC Line 5)**.



## 2 AN ACCESSIBLE, UPGRADED TRANSIT HUB SERVING QUEEN-SPADINA

- The station at Queen and Spadina will relieve crowding on the popular 501 Queen and 510 Spadina streetcar routes.
- Two new station buildings will be constructed - one on the northeast corner and one on the southwest corner of the intersection.
- Current plans envision maintaining streetcar service in these areas throughout the duration of the project, though there might be times when service is re-routed or reduced to accommodate construction work.





*Future Ontario Line station building at southwest corner of Queen Street West and Spadina Avenue*



*Future Ontario Line station buildings on southwest and northeast corners of Queen Street West and Spadina Avenue showing the incorporation of the historic façade of the building at 378 Queen St. West*



# Construction Activities

Lois Rouveyrol, Ontario Transit Group  
Francisco Metcalf, Ontario Transit Group

# 3

## 2024 CONSTRUCTION LOOK-AHEAD

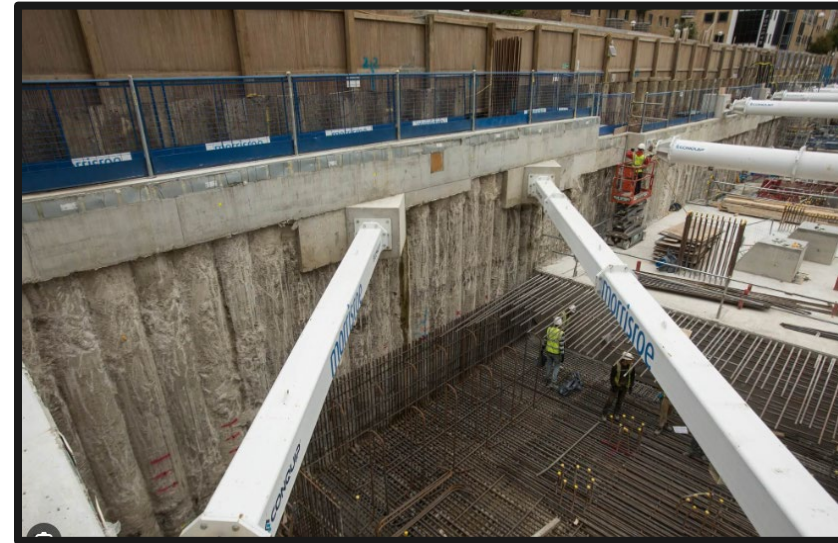
Time	Activity	Location	Details & Purpose
January	Demolition	North station site	Demolish interior building structure to prepare the site for the future station build
January	Heritage Retention Towers	North station site	Install heritage retention towers to secure heritage facades, in preparation for the future station construction.
January - June	Piling	North and South station sites	Piling to ensure structural support for the future station shafts.
April - June	Hoarding and Signage installed	North and South station sites	Hoarding to assist with site safety, noise mitigation installed.
April - October	Excavation	North and South station sties	Excavation of shafts from the street level up to the station level, to provide connection with station platforms.
October - early 2025	Station Site Entry Preparation	North and South station sties	Excavation of station cavern, that provides connection between the vertical entrances and the tunnels.

*Estimated station substantial completion date: 2030*

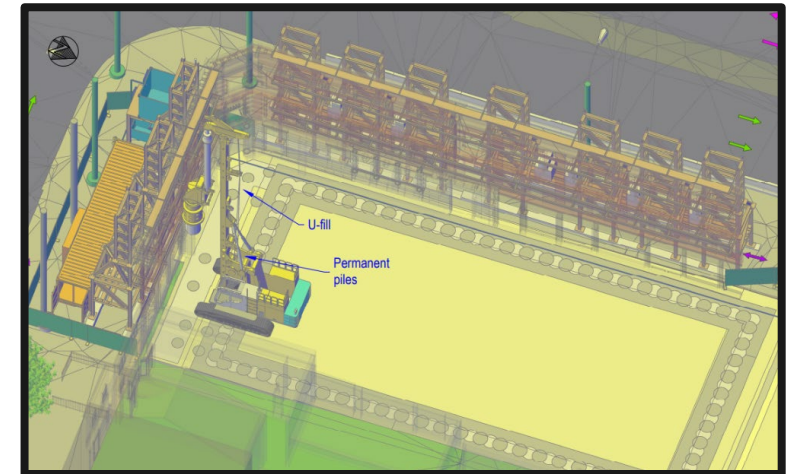
# 4

## PILING WORKS TO SUPPORT THE CONSTRUCTION OF THE FUTURE STATION

- Crews will be drilling to install structural walls to support the ground excavation of the Ontario Line station.
- Piling or pile drilling is a foundational technique used in constructing temporary underground structural support systems.
- It ensures stability and support for nearby infrastructure and buildings until the permanent concrete structure of the station and other subway structures is completed.
- The process consists of drilling a series of overlapping (secant) piles and filling them with concrete to form continuous watertight structural walls.
- Some of the piles are reinforced with steel beams.



Example of pile wall



Example of a piling site plan

### Pile drilling for the Ontario Line subway

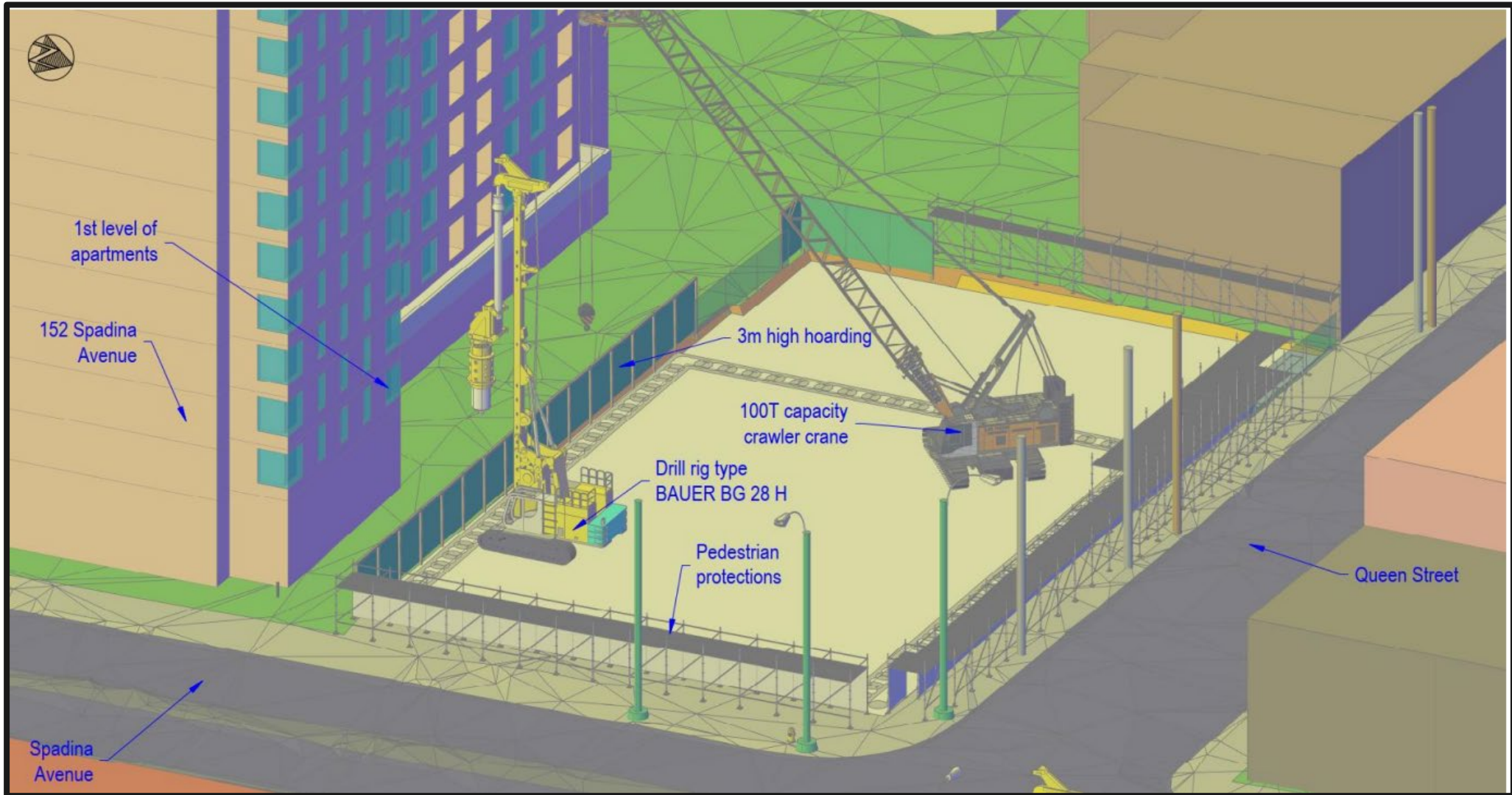
- Crews install pile walls to construct the access shafts of the station. This work is performed before excavation of the station shaft.
- Several pile walls will be installed around the perimeter of the future station footprint.
- To install the pile walls, a drilling machine will create a 17 to 20m deep hole (1m diameter) around the perimeter of the site - this is equivalent to about a 7-story building.
- Several methods of installing piles for excavation support are possible or preferred depending on soil and water conditions. Secant piles are often used in urban settings with confined footprints for construction.



*Example of a drilling machine used in piling construction*

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## EXAMPLE OF PILING SITE SET UP



## 7 PILE DRILLING AT QUEEN STREET WEST AND SPADINA AVENUE

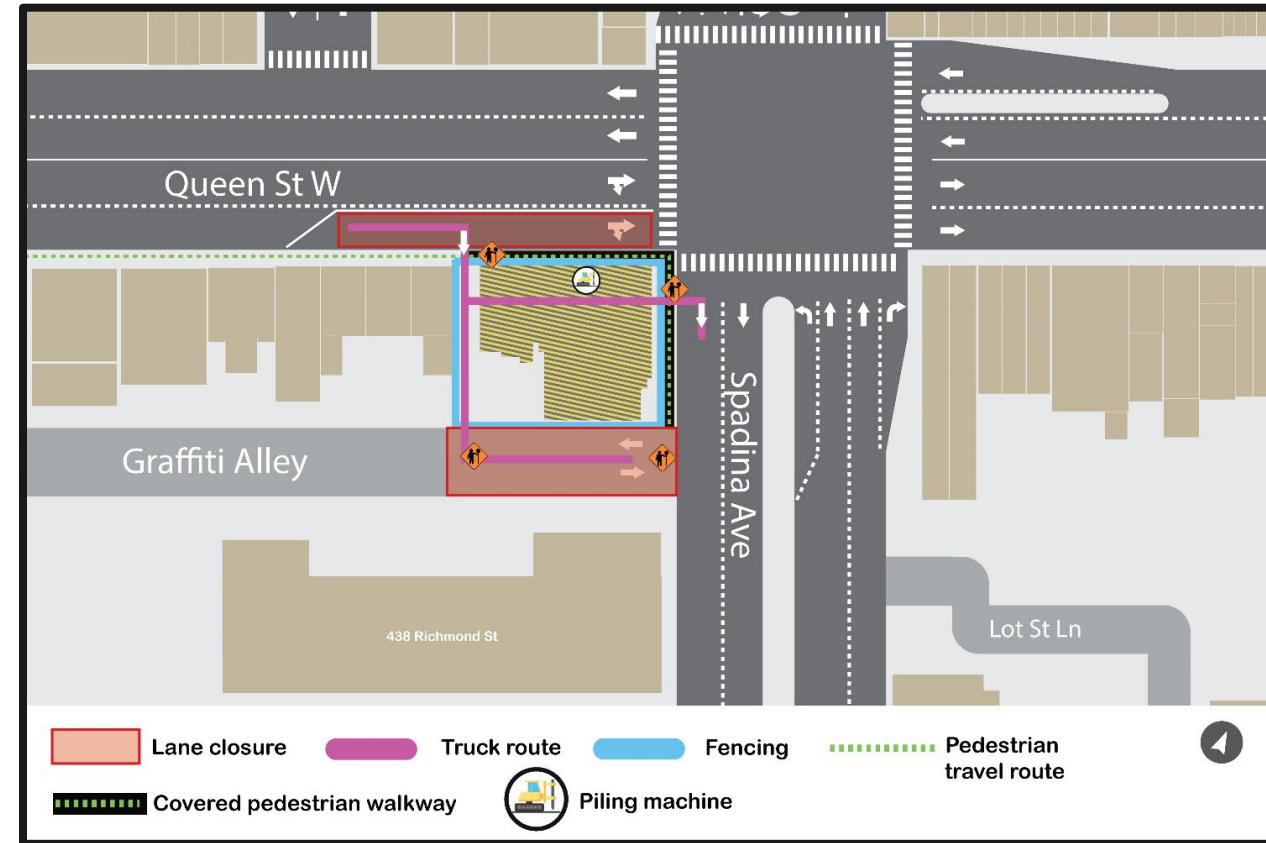
- Crews are starting piling works for the future Ontario Line stations to be located at Queen Street West and Spadina Avenue intersection.
- Work will be phased, beginning first at the future south site, followed by the north site.
  - **Future south station site:** Work estimated mid-January to end of May 2024
  - **Future north station site:** Work estimate March 2024 – June 2024
- Expected hours of work are weekdays and Saturdays from 7 a.m. to 7 p.m.
  - Crew required to park inside of the project limits or in allowed public parking spots.

**During piling work, community members can expect:**

- Noise from equipment drilling piles, loading of excavated material, deliveries of steel beams and concrete.
  - Minimal vibration or dust are expected during this phase of work.
  - Noise and vibration monitoring devices have been installed to ensure safety and monitor noise levels during operations.
- Equipment used during this operation includes drilling machines, cranes, excavators, concrete pumps, and concrete trucks on-site.
- Several trucks entering and leaving worksites daily, following a specified route.
- Lane closures and certified flagpersons in place to ensure safety for the community and workers on-site.

**Estimated timing: Mid-January 2024 to end of May 2024**

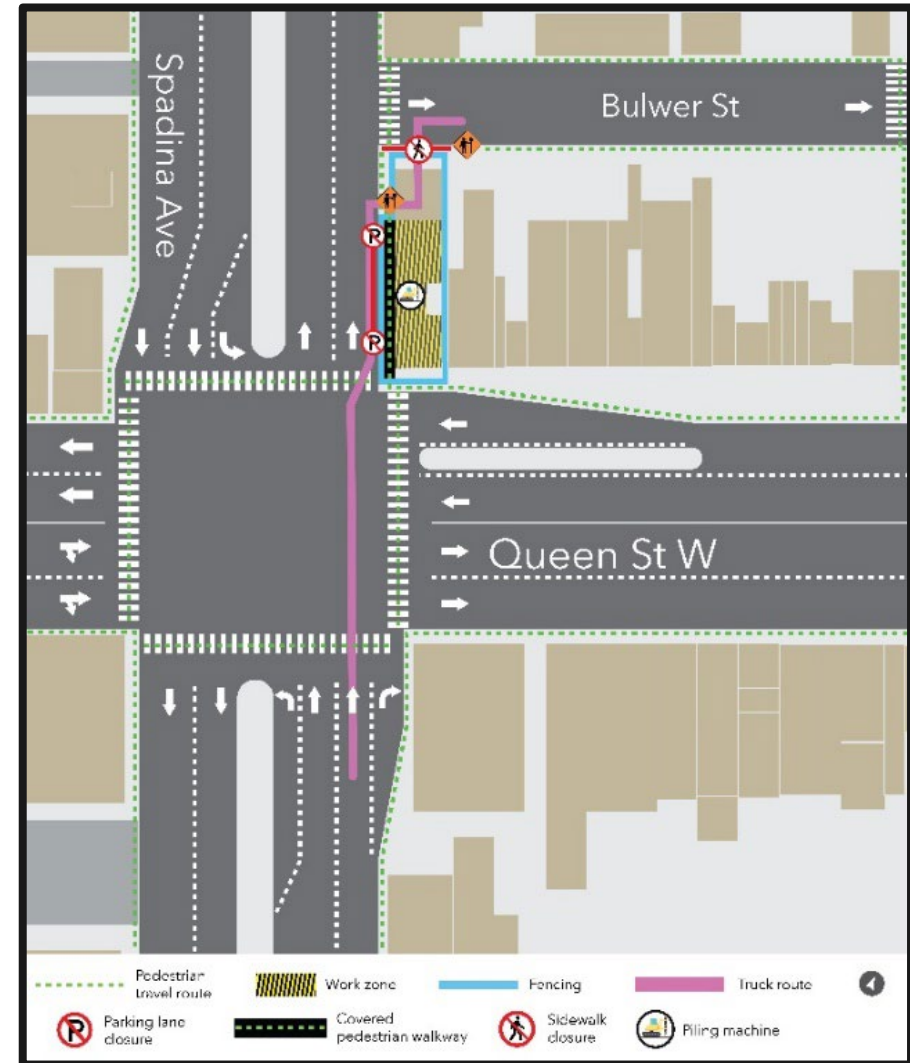
- The eastbound curb lane at Queen St West will be closed for truck access and staging.
- Graffiti Alley will be closed when piles for the south shaft wall are installed. Access will be maintained for local traffic as required, such as access for garbage trucks.
- Trucks will enter from Queen St West (eastbound) and exit to Spadina Avenue (southbound).
- Flag persons will be present to ensure pedestrian safety and direct truck traffic.





### Estimated timing: March 2024 to June 2024

- The parking lane on the east side of Spadina Avenue (northbound) will remain closed.
- Trucks will enter the site from Spadina Avenue (northbound) and will exit to Bulwer Street.
- Pedestrian access north on Spadina Avenue will be maintained at all times under the building retention towers.
- The sidewalk on the south side of Bulwer Street will continue to be partially closed.
- Flag persons will be present to ensure pedestrian safety and direct truck traffic.

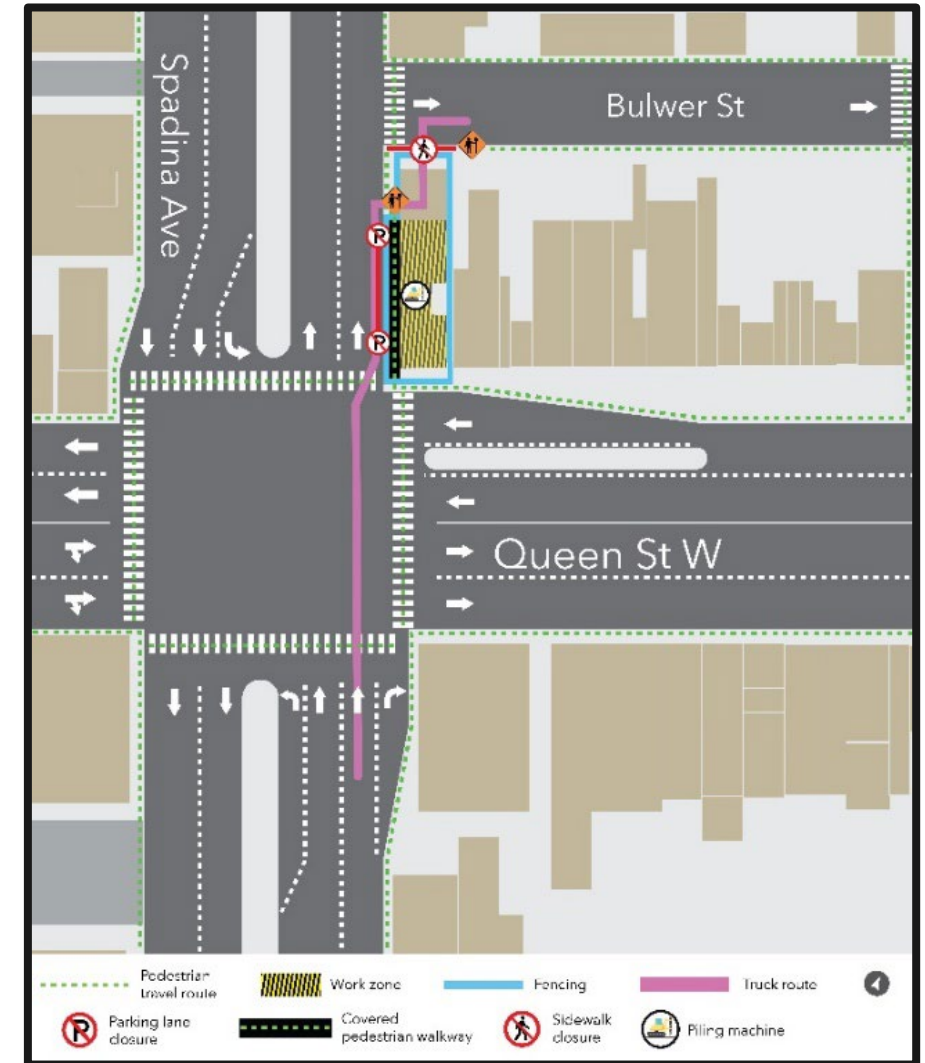


# Construction Mitigation

## 11 REDUCING IMPACTS

To reduce impacts to residents and businesses in the area, mitigations will be in place including:

- Noise and vibration monitoring sites placed on site and in the neighborhood for active tracking of impact to ambient noise levels
- Trucks and equipment will drive on top of a granular platform to minimize dust. In warmer and dry months, water will be spread to help with dust. Adjacent roads will also be cleaned once excavated material is starting to be hauled off.
- Daytime work hours for current phase of work (7 a.m. to 7 p.m.)
- Continuous loop truck routes, reducing need for trucks to reverse using backup alarms
- Site hoarding where possible to help reduce noise



# Question and Answer

# WE ARE HERE FOR YOU

**Metrolinx will keep the community, residents and businesses informed by providing project updates, seeking input and feedback and addressing questions and concerns effectively and quickly.**

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## **Connect with us:**

- Email: [OntarioLine@metrolinx.com](mailto:OntarioLine@metrolinx.com)
- Telephone 24/7: 416-202-5100
- Ontario Line e-newsletter: [Metrolinx.com/OntarioLine](https://metrolinx.com/OntarioLine)

## **Follow us on social media:**

X / Facebook / Instagram @OntarioLine

## **Join our Community Liaison Committee:**

Monthly meetings to share construction updates

