

Ontario Line

Queen-Spadina Construction Liaison Committee

June 3, 2025



Agenda

Welcome (5 min)

- Introductions
- Land Acknowledgment
- Session Guidelines
- Action Item
- Safety Moment

Presentation (30 min)

- Construction Updates
- Upcoming Work

Q/A and discussion (25 min)



Aerial view of the Queen Spadina north shaft

LAND ACKNOWLEDGEMENT

Metrolinx acknowledges that we connect communities by building and operating transit within the traditional lands of the Anishinaabe, the Haudenosaunee and the Huron-Wendat peoples, for whom these lands continue to have great importance.

Treaties between First Nations and governments cover these lands, and the promises contained in these Treaties remain relevant to this day.

Metrolinx and its employees are committed to understanding the history of these lands and the continued impacts of colonization and take responsibility for actions to advance reconciliation.

Metrolinx will continue to seek the knowledge, expertise and experience of Indigenous partners and commits to doing business in a manner that is built on a foundation of trust, respect, and collaboration.

Session Guidelines

We greatly appreciate the community members who are here to take part in this public session.

To ensure that everyone can contribute to a positive and safe community experience, all participants shall adhere to the following *Code of Conduct*:

- Treat the presenters and participants with respect and understanding
- Acknowledge and appreciate the diversity of individuals and their situations
- Refrain from supporting or engaging in any form of discriminatory behaviour

Metrolinx is committed to fostering a safe and respectful environment.

We encourage respectful and constructive communication.

MAY CLC ACTION ITEMS

	ACTION ITEM	RESPONSE	STATUS
1	Metrolinx to prepare and share a table of noise mitigation measures.	Metrolinx and OTG preparing list to review.	Ongoing
2	Metrolinx to add residents of 438 Richmond directly to weekend work update emails to ensure better communication.	Metrolinx added resident contact email addresses to distribution list for direct receipt of updates.	Completed

SAFETY MOMENT - AROUND EXCAVATION ZONES

Our construction project has entered the excavation phase, which means increased heavy equipment activity and deeper work zones.

Please stay alert and follow these safety reminders when walking near the site:

- **Use designated pedestrian routes.**
Excavation zones are fenced off for your protection. Please don't cross into restricted areas.
- **Stay clear of machinery.**
Excavators, dump trucks, and drilling rigs have limited visibility. Avoid standing near site access points.
- **Watch for changes in sidewalk routes.**
As excavation progresses, pedestrian detours may shift. Follow posted signage and flag persons.
- **Keep children and pets safe.**
The open nature of excavation can look interesting. Remind little ones to stay close and never approach work zones.



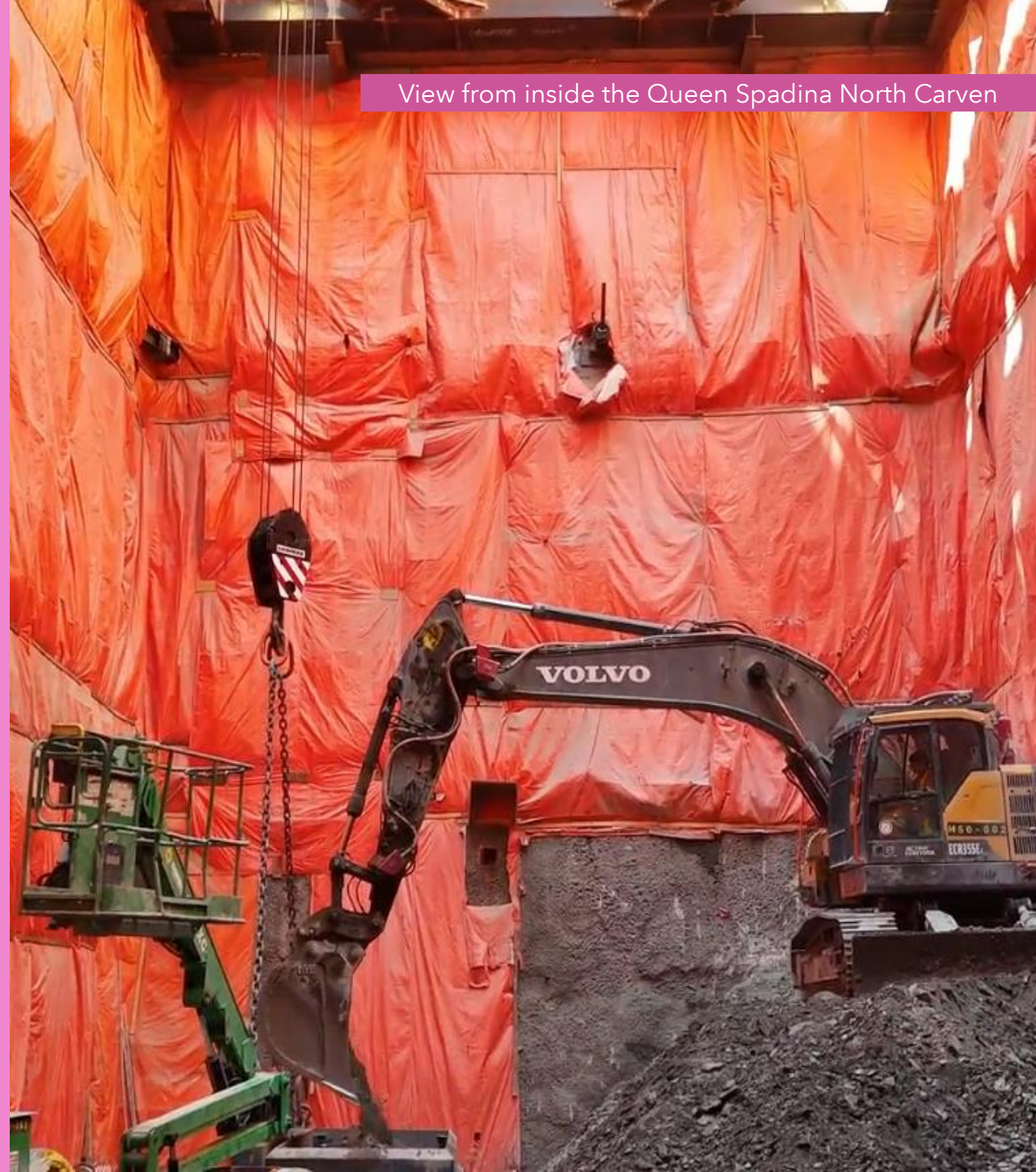
Crew delaminated the pedestrian access to ensure safety protection to the pedestrian on the future Queen Station



Safety signs to prevent public access to the work zone at the future Queen station

Queen-Spadina Construction Update

View from inside the Queen Spadina North Carven



CURRENT WORKS: FUTURE QUEEN SPADINA - NORTH SITE



Roadheader machine removing rock to create the cavern at the future Queen-Spadina station site.

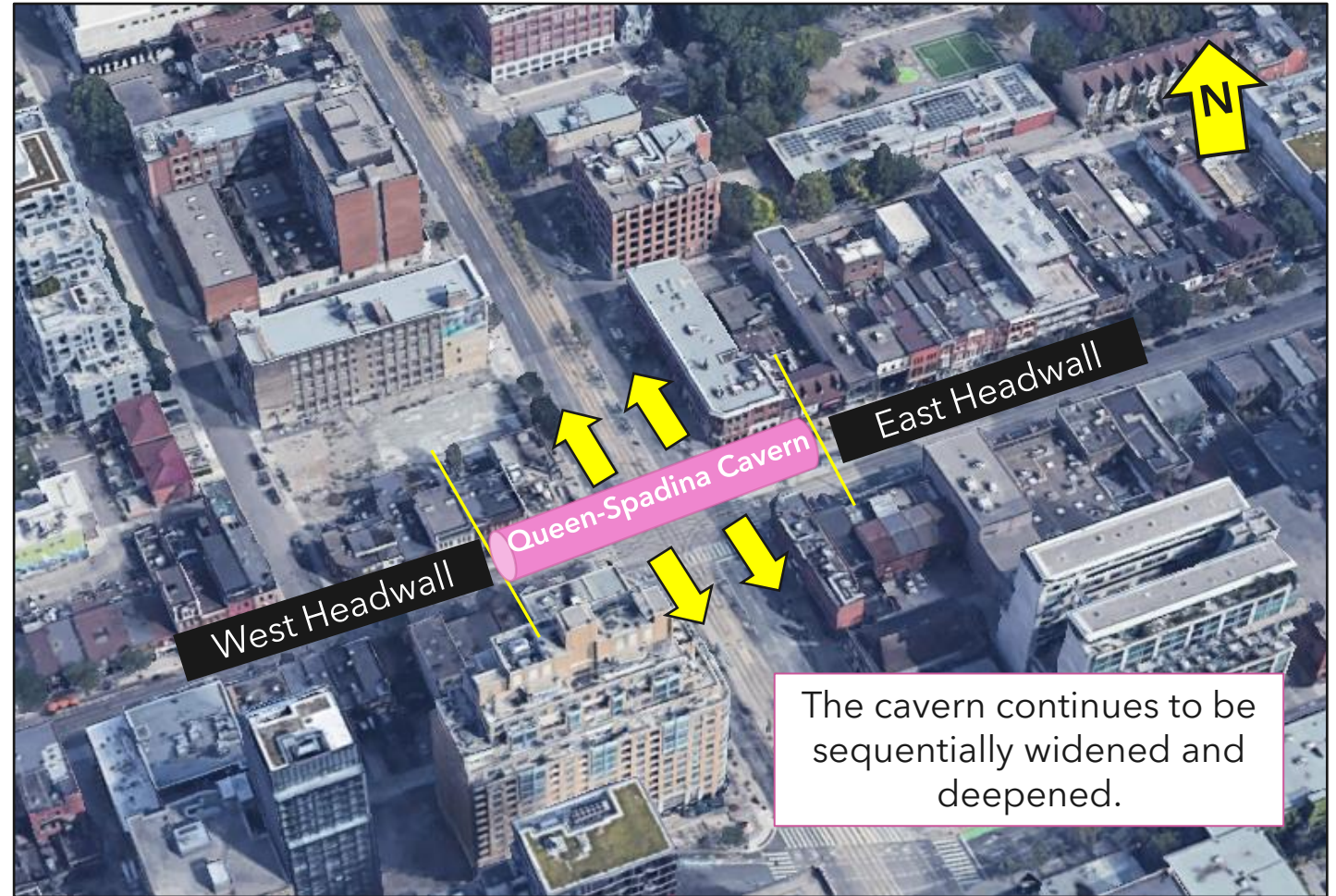
Cavern Excavation

- Crews are excavating the station cavern, where the future station platform and tunnel will be underground between the north and south station sites.
- Specialized machinery is in use as part of a sequential excavation method, removing soil, rock section by section to create this space underground.
- Crews recently completed the first end-to-end section of the cavern.
- Spoils from the cavern are removed from the future north station site.
- This work occurs on a 24-hour work shift, seven days a week. It is expected to be complete in late 2025.

CURRENT WORKS: FUTURE QUEEN-SPADINA - NORTH SITE

The headwalls represent the “bookends” of the cavern process; from west & east limits.

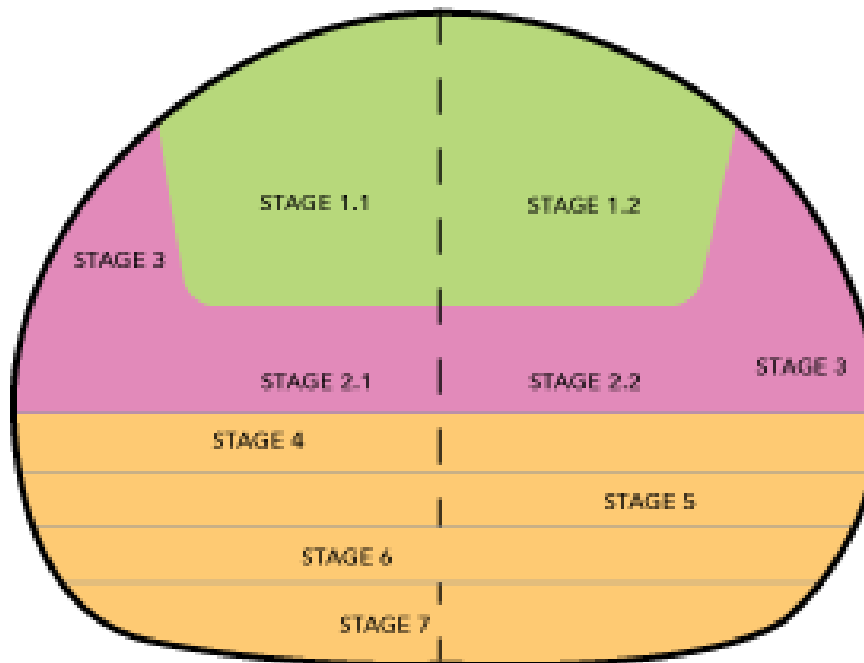
- Crews continue to **widen and deepen the cavern**, to accommodate the full width and depth needed for tunnel boring machines, as well as the future station platform and tracks.



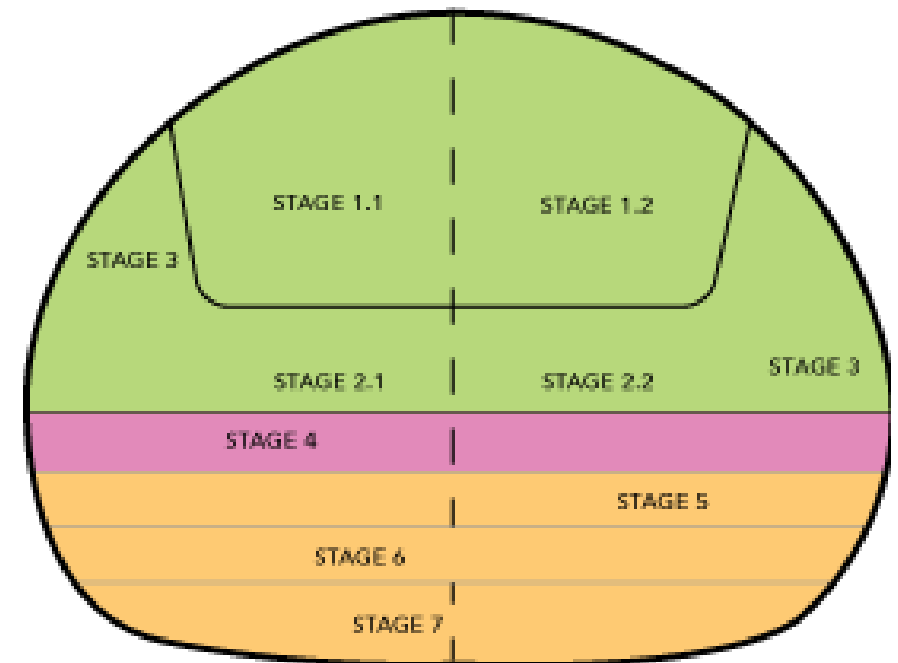
Looking from above towards the north, the arrow depicts the approximate location and progress of the Queen-Spadina cavern work to date, in relation to the neighbourhood.

QUEEN-SPADINA NORTH SITE - HEADWALLS

Illustration of the sequences widening and deepening the cavern.



As up to early May 2025



As up to early June 2025



Green = completed excavation

Pink = next stage of excavation

Orange = final stages

Looking toward the east headwall, from inside the cavern



CURRENT WORKS: FUTURE QUEEN SPADINA SOUTH SITE

Excavation is ongoing at the future south station site, using a sequential excavation method.

- Ongoing excavation is underway with crews removing soil and rock to shape the underground station space, where the future Ontario Line tunnels and station platforms will be.
- As excavation progresses, crews will install support systems to stabilize the shaft and prepare for the future station construction.
- 50 % of the Excavation work has been completed

Mitigation in place to reduce the impact of the excavation phase of work

- Use of ripper attachment on large attachment, instead of traditional hammer, where possible
- Hammer attachment wrapped by noise blanket, where use is required



Excavation in progress at the future Queen-Spadina south station site

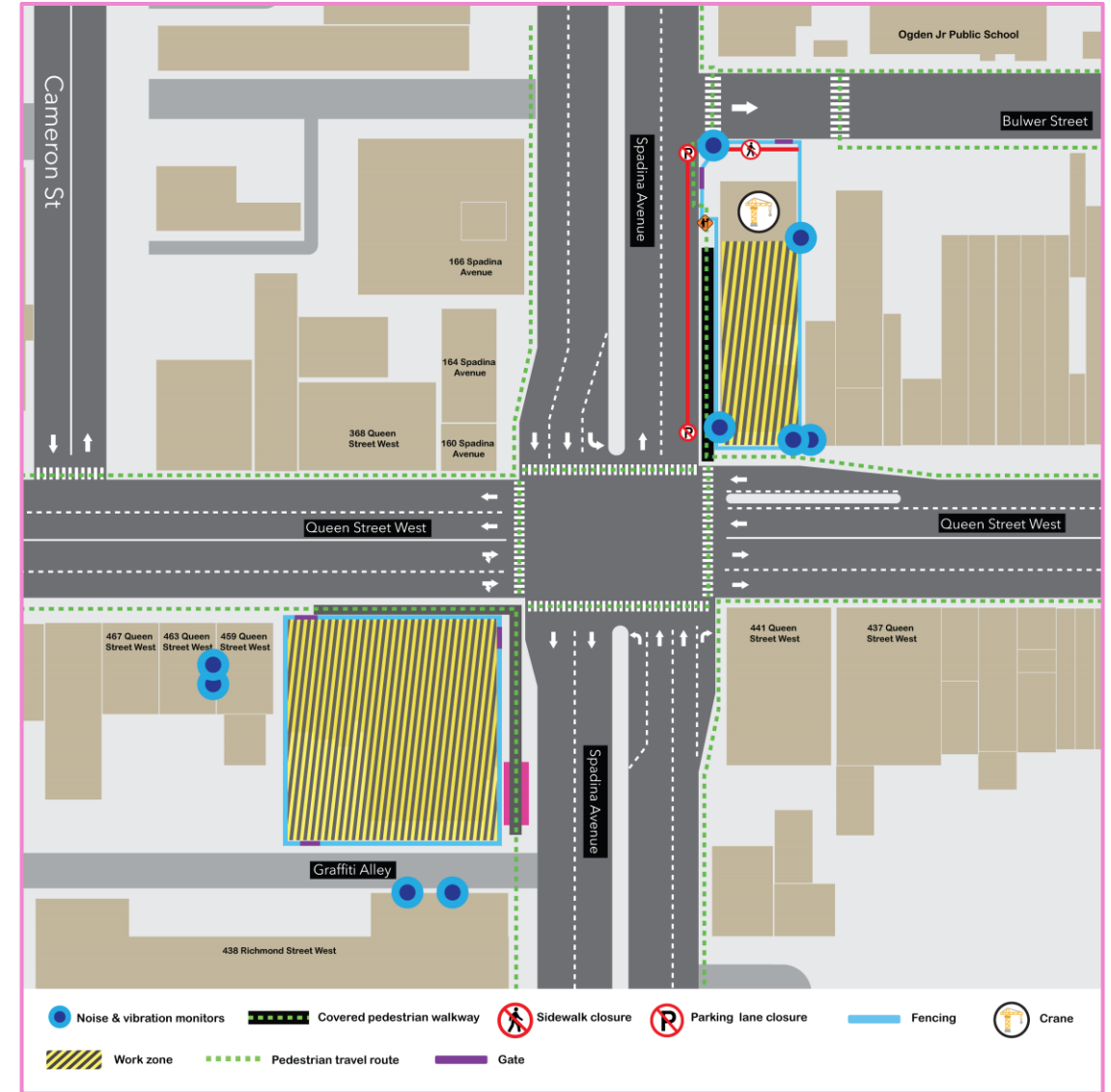
Looking toward the south site from aerial view



Noise Monitoring Update

May 2025

- Noise and vibration monitors are placed closest to locations classified as major works (station shaft work zones). See map.
- The report provides information on alerts measured over 10-minute intervals, 8h and 16h
- 6 alerts directly related to the construction activities were reported for the month between May 1-21
- Measurements were recorded inside of the site, at the hoarding perimeter; readings outside of hoarding are reduced.



No.	Date	Site Location	Work in progress	Review + applicable action (if required)
1	May 1	QS South shaft	Excavation in rock and hauling.	Measurement read inside of site hoarding/adjacent to works; when corrected work found to be within expected noise output levels. Team has applied noise blankets to machinery where hammer is used; Xcentric ripper replaced for hammer where possible.
2	May 2	QS South shaft	Excavation in rock and hauling.	Measurement read inside of site hoarding/adjacent to works; when corrected work found to be within expected noise output levels. Team has applied noise blankets to machinery where hammer is used; Xcentric ripper replaced for hammer where possible.
3	May 3	QS South shaft	Shotcrete being sprayed along the East wall of the shaft with pump and concrete truck operating at the surface. An excavator was grinding the face of the North wall.	Measurement read inside of site hoarding/adjacent to works; when corrected work found to be within expected noise output levels. Team has applied noise blankets to machinery where hammer is used; Xcentric ripper replaced for hammer where possible, and reviewed work scheduled during weekend hours.
4	May 6	QS South shaft	Excavation in rock and hauling.	Measurement read inside of site hoarding/adjacent to works; when corrected work found to be within expected noise output levels. Team has applied noise blankets to machinery where hammer is used; Xcentric ripper replaced for hammer where possible.
5	May 12	QS South shaft	Cleaning of the piles using the bucket of the excavator.	Isolated incident; team reviewed methodology utilized and will identify alternatives for this activity in the future, if required.
6	May 13	QS South shaft	Corbels' installation, drilling of rock bolts using excavator and TEI and wire mesh installation for shotcrete.	Measurement read inside of site hoarding/adjacent to works; when corrected work found to be within expected noise output levels. Team has applied noise blankets to machinery where hammer is used; Xcentric ripper replaced for hammer where possible. Mini-excavator also added to site for use where possible to minimize impacts.

QUEEN-SPADINA SOUTH - MITIGATIVE MEASURES REVIEW

Mitigation	Status	Notes
3 m noise barrier	Implemented	Plywood hoarding installed around the construction site.
Xcentric ripper tool for rock excavation	Implemented	Switched hydraulic hammer attachment on excavation equipment; used where possible considering space constraints at site.
Noise blankets for hydraulic hammer	Implemented	Hydraulic hammers fitted with noise blankets to dampen sound (applicable to larger excavator at site).
Use of broadband back up alarms on regular site equipment	Implemented	Traditional 'beeping' backup alarms replaced with broadband alarms on regularly used site equipment and trucks.
Secondary glazing (Pilot program)	In progress	Metrolinx mitigation measure; secondary glazing to be installed on windows of five units. This is a pilot program to further assess impact of this measure.
Construction of Acoustic Shelter	Infeasible	Several critical constraints – complex and time-consuming permit approvals, additional design, and significant delays to project schedule. As a result, alternative mitigation strategies are being considered to address noise concerns more efficiently.
Installation of noise barrier south of rock loading area	Infeasible	Insufficient space to install a noise barrier south of the rock loading area. Additionally, a barrier in this location would obstruct the line of sight, which could pose safety and operational concerns.

Upcoming Work

QUEEN-SPADINA EIGHT WEEK LOOKAHEAD: JUNE - JULY, 2025

#	Activity	Location	Expected Start	Expected Duration	Impact	Hours of Work	Mitigations
1	Adit Excavation (entrance passage to the horizontal cavern)	North site	On going	Entire lookahead period.	Vibration, air quality, noise	Monday to Sunday 24 hours	Hoarding as noise mitigation. Dust mitigation includes misting, sweeping. Erosion and sediment control.
2	Cavern Excavation	North site	On going	Entire lookahead period.	Vibration, noise, air quality	Monday to Sunday 24 hours	Hoarding as noise mitigation. Dust mitigation includes misting, sweeping. Erosion and sediment control.
3	Excavating rock; includes rock anchors and shotcrete	North site	June 25	July 11	Vibration, noise, air quality	Monday to Sunday 24 hours	Hoarding as noise mitigation. Dust mitigation includes misting, sweeping. Erosion and sediment control.
4	Installing of struts	South site	On going	First week of June (to June 8)	Vibration, noise, air quality	Monday to Saturday with occasional Sundays 7:00 a.m. to 7:00 p.m.	Hoarding as noise mitigation. Dust mitigation includes misting, sweeping. Erosion and sediment control. Use of broadband alarms for equipment on site, monitoring to ensure 7 a.m. start. If hammer is used, wrap with noise blanket.
5	Excavating hard soil; includes rock anchors and shotcrete	South Shaft	June 9	Early of July	Noise.	Monday to Friday occasional weekends 7:00 a.m. to 11:00 p.m.	Hoarding as noise mitigation, noise blankets around excavation attachments, use of ripper whenever possible, use of broadband alarms for equipment on site, monitoring to ensure 7 a.m. start.
6	Pentagonal beam from Shaft	South Shaft	End of June/First week July	Six weeks (to mid-August)	Vibration, noise, air quality	Monday to Friday occasional weekends 7:00 a.m. to 11:00 p.m.	Hoarding as noise mitigation, noise blankets around excavation attachments, use of ripper whenever possible, use of broadband alarms for equipment on site, monitoring to ensure 7 a.m. start.
*Note: All dates and times are subject to change as construction planning progresses							

2025 CONSTRUCTION LOOK-AHEAD

Timing	Activity	Location	Details and Purpose
Spring/Fall	Ongoing Excavation	South site - within the site and along designated haul routes	Removing large volumes material from the station shaft to build a new subway cavern and tunnel underground. Dump trucks and various excavators will be used to complete this work.
Spring/Winter	Excavation Cavern work	North site - within the site and along designated haul routes.	Removing large volumes material from the station shaft to build a new subway cavern and tunnel underground. Dump trucks and various excavators will be used to complete this work.

*Note: All dates and times are subject to change as construction planning progresses

KEEPING YOU INFORMED

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

Next CLC meeting: Our next meeting is expected to take place July 8, 2025.

Connect with us:

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