

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.



Ontario Line
CLC Meeting #19
Pape-Riverdale

January 28, 2025

AGENDA

1. Contracts Overview

2. Construction Updates – Sewer Microtunnelling

- Shaft construction
- Microtunnel boring operations
- PUDO relocation

3. Construction Updates – Lower Pape Demolitions

- Abatement and disconnects
- DSHM surveys overview
- Abatement procedures & protections
- Air quality monitoring

4. Construction Updates – 449 Carlaw and Bain Emergency Exit Building (EEB)

- Gerrard Portal timeline
- Gerrard Portal tree removals
- Gerrard Portal demolitions
- Bain EEB tree removals
- Bain EEB demolitions

5. Action Items

- Quarterly site walk

6. Discussion

Contracts Overview

Lower Pape Demolitions

Due to conflicts with upcoming portal and tunnelling work, the buildings from 388 - 402 Pape Avenue and 247 Langley Avenue will be demolished. Work will start with sensitive material abatement and utility disconnections before moving onto structural demolitions.

Constructor: Clearway Construction

Timeline: Winter-Spring 2025



Sewer Relocations

The largest utility relocation in the area will involve constructing a new combined sewer & water main, and removing the old infrastructure from underneath Pape south of Riverdale. Work will involve micro-tunnelling a new sewer on the eastern edge of the Pape Avenue Junior Public School yard.

Constructor: Clearway Construction

Timeline: 2025



Example: Micro-tunnel under Lakeshore GO rail line.

Pape Tunnels and Underground Stations

The PTUS contract will involve the construction of the tunnels, stations, and other final infrastructure in the Pape Segment of the Ontario Line. In the Pape-Riverdale neighbourhood, the constructor will bore the tunnels and build the Gerrard Tunnel Portal.

Constructor: Pape North Connect

Timeline: 2025-2031

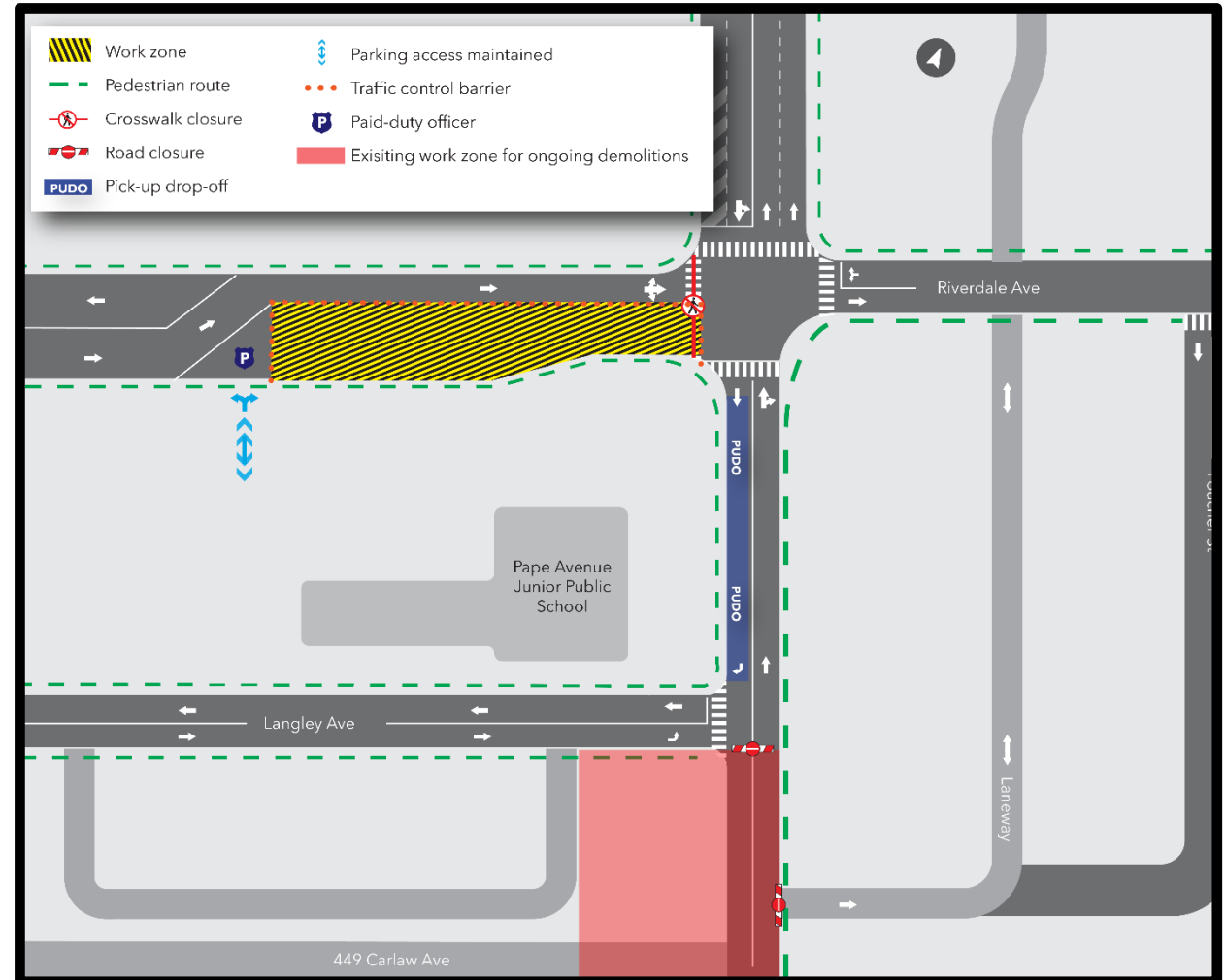


Example: Toronto-York Spadina Subway Extension (TYSSE) Tunnel.

Construction Updates – Sewer Microtunnelling

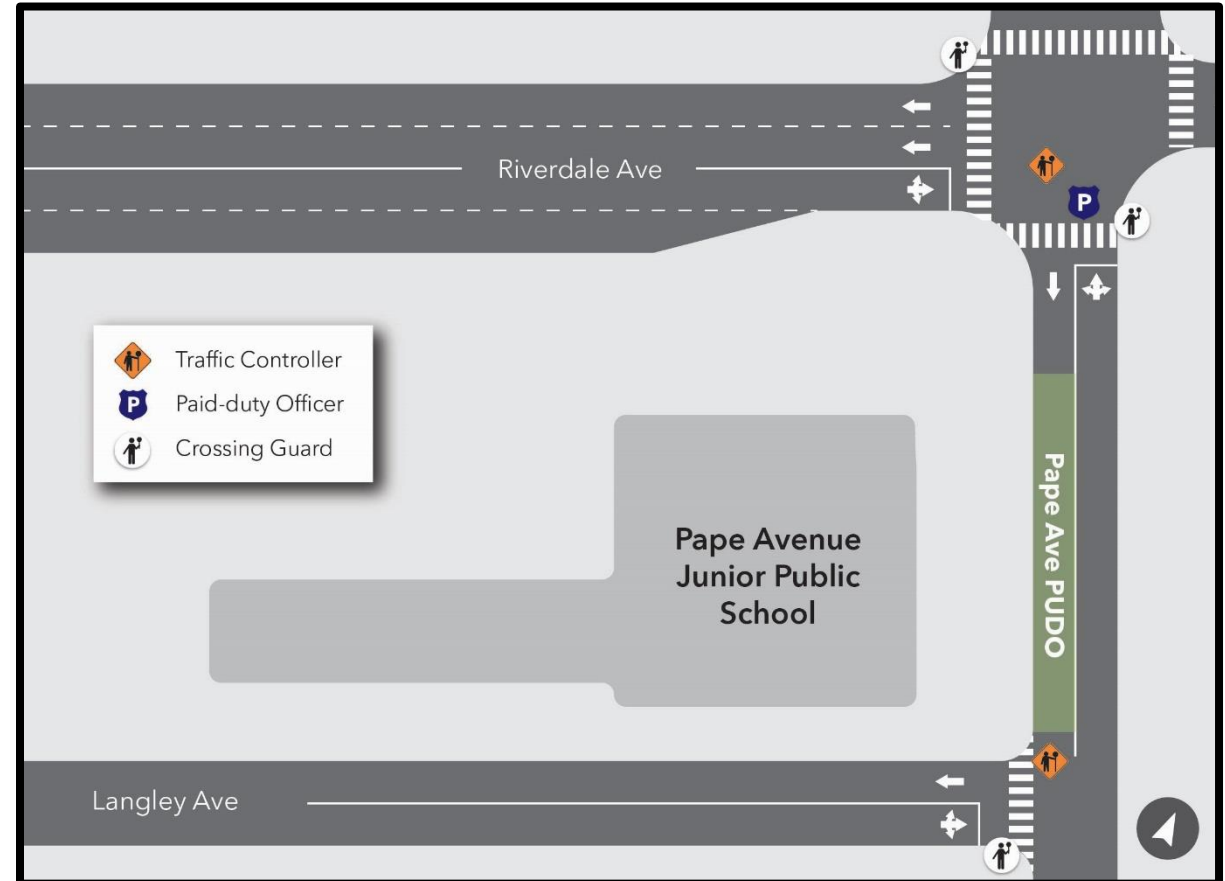
Microtunnelling – Launch Shaft Construction

- Clearway will excavate a shaft approximately eight (8) metres deep on the south side of Riverdale Avenue abutting the TDSB property. This shaft will be the site from which the micro-tunnel machine is launched southward.
- Work is currently scheduled to begin on February 18.
- Key Impacts:
 - Riverdale Avenue west of Pape Avenue will be reduced to one lane eastbound. No westbound traffic will be permitted.
 - The west crosswalk at Pape-Riverdale will be closed.
- Crews will use a piling rig to install excavation supports, as well as hydrovac and excavators to excavate the shaft.
- The shaft site will be fully enclosed by fencing, and either staff or security will be on site 24-7. A diesel generator will be located on site to power equipment, and air quality monitoring will be in effect during works.
- The school's noise wall support system will be modified on Riverdale Avenue to allow additional space for site operations.
- In addition to the existing noise wall, an additional 8-foot-long noise blanket will be installed onto the fencing that will be in place as part of the launch shaft construction.
- A separate notice will be issued prior to the start of microtunnelling.
- TTC route 72 southbound will be detoured. The TTC will be leading service-related communications.



Pick-up Drop-off Relocation

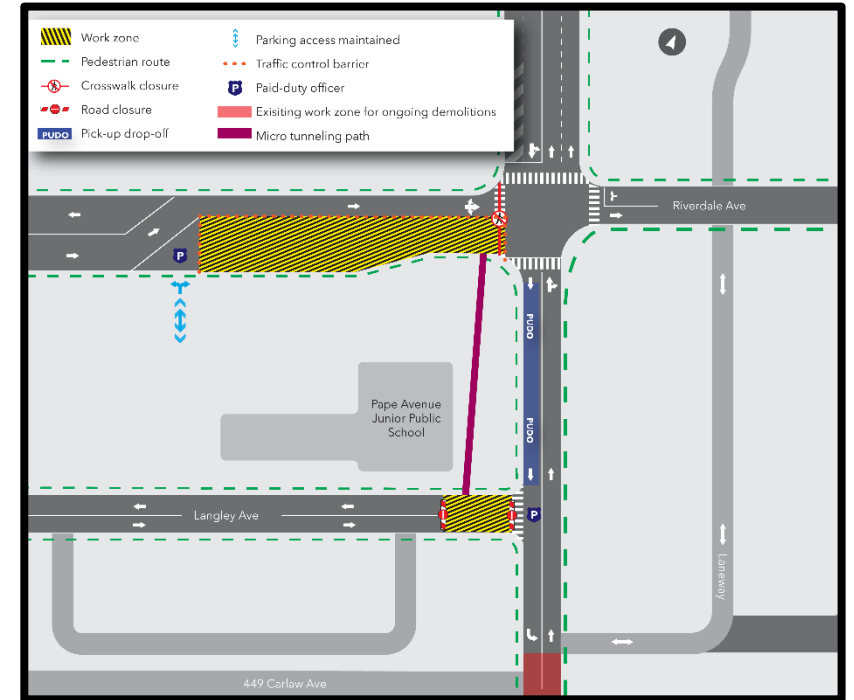
- Due to traffic restrictions on Riverdale Avenue from launch shaft work, the PUDO will relocate back to Pape Avenue prior to the start of shaft construction.
- Metrolinx is working with Pape Avenue Junior Public School to communicate this change in advance. A notice will be sent out to parents via the school's newsletter.
- The relocation will take place on February 18 to coincide with the start of microtunnel launch shaft works.
- The PUDO will remain on Pape Avenue until microtunnelling work is completed and utility work resumes on Pape Avenue.



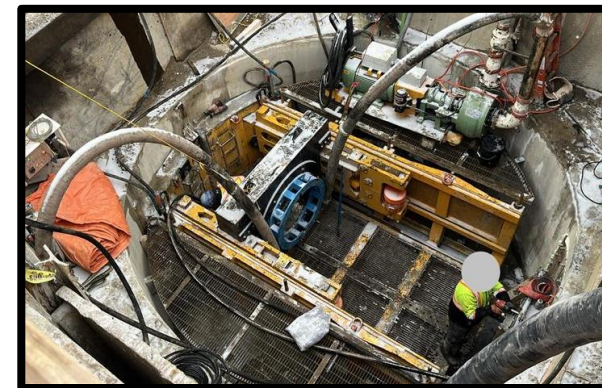
Pape Avenue PUDO shown – construction sites not pictured.

Microtunnelling – Boring Operations

- Microtunnelling will take place from the Riverdale shaft site south towards Langley Avenue.
- During microtunnelling, crews will excavate a receiving shaft on Langley Avenue. This will require a full closure of Langley just west of Pape. To maintain traffic circulation, the laneway to Poucher Street will be open, allowing vehicles to exit Pape Avenue.
- This work will take approximately 1-2 months.
- Moderate levels of noise and vibration are expected from micro-tunnel operations. Noise and vibration monitoring are discussed on an upcoming slide.
- The playground will remain fully open during microtunnelling.
- **Note:** On January 20, Clearway began microtunnelling a sewer between Gowan Avenue and Cosburn Avenue. This operation is comparable to work that will take place at Pape-Riverdale.



Traffic control plan for microtunnelling work.



Microtunnelling launch shaft for sewer relocations at Gowan Avenue near Pape Avenue.

Noise and Vibration Monitoring - Launch Shaft Works

Monitoring approach

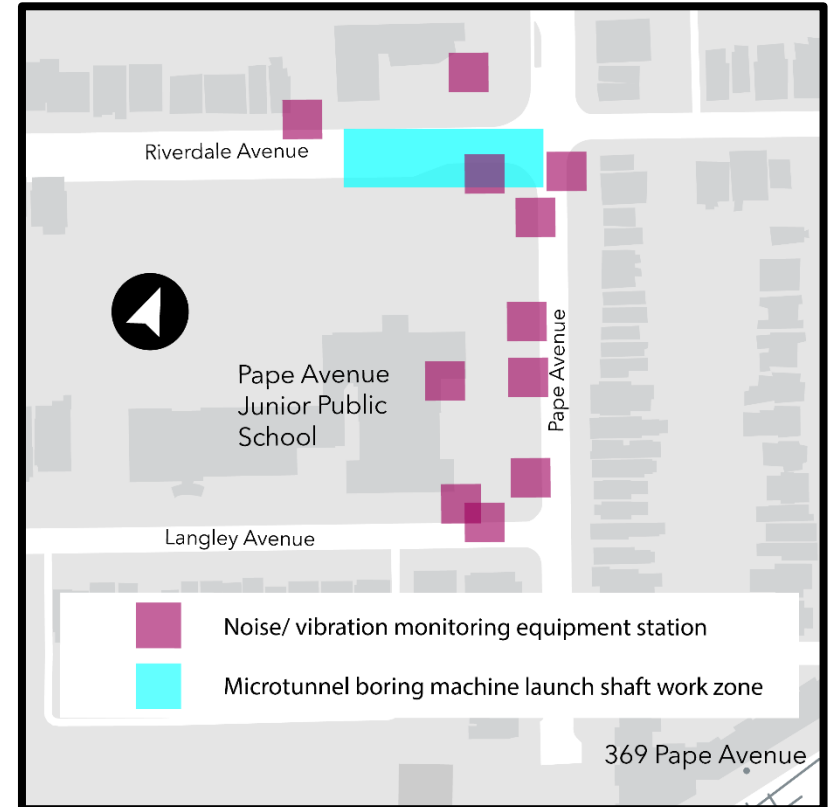
- Continuous noise and vibration monitoring will be in place during launch shaft activities with monitors installed at noise sensitive receptors and within the Zone of Influence for vibration.
- The noise and vibration monitoring program will consist of six (6) noise and two (2) vibration monitors at Pape Avenue Junior Public School. Additional noise and vibration monitors are proposed at nearby sensitive receptors, location to be confirmed pending PTE.

Protocol for exceedances

- Noise controls will be implemented by the contractor to limit the impacts from the launch shaft activities at sensitive receptors and in the event of a valid exceedance, an exceedance protocol will be implemented by the contractor, including:
 - Application of corrective actions to reduce noise impacts.
 - Temporary suspension of operations and stop work procedure until additional mitigations applied (if required).

Mitigation options

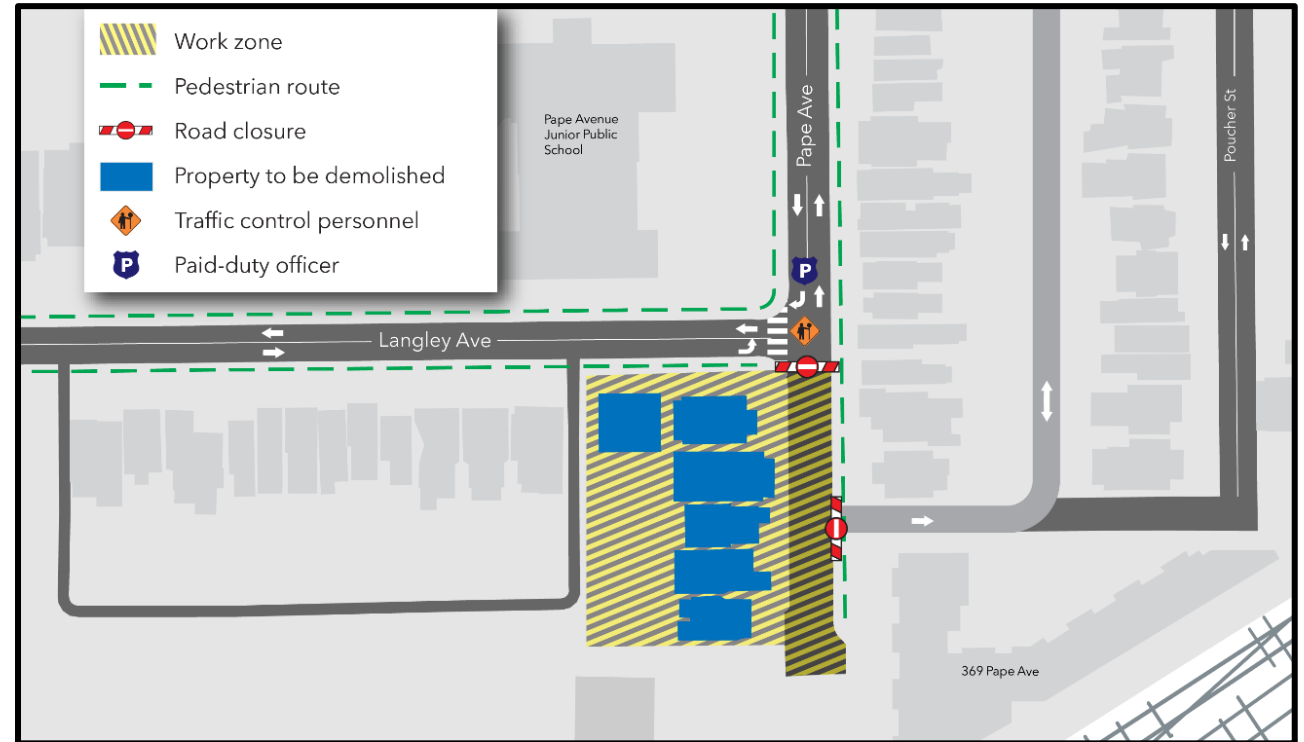
- Long-term noise barrier at the Pape School Playground area provides 10dB noise attenuation from adjacent works.
- Temporary noise barrier installation around noise-generating equipment.
- Sequencing use of equipment to avoid multiple noise-generating activities occurring concurrently.
- Use of vibratory equipment in a manner to minimize vibration.



Construction Updates – Lower Pape Demolitions

Lower Pape Demolitions – Abatement and Disconnections

- On January 20, Clearway began mobilizing for abatement and utility disconnections at 388-402 Pape Ave and 247 Langley Ave.
- As part of this work, Pape Avenue south of Langley Avenue has been closed.
- Abatement and utility disconnections are happening in parallel. It will take approximately 2 weeks to complete abatement, and 4-6 weeks to complete utility disconnections. Following that, structural demolitions will take place for approximately one month.
- Field services are present daily on site and work is inspected for compliance with environmental regulations.
- The sidewalk on the west side of Pape is being closed to accommodate fencing during abatement and demolition works. The sidewalk on the east side will remain open.



Designated Substances and Hazardous Materials Surveys

In preparation for demolition works, qualified specialists conducted surveys to identify designated substances and hazardous materials (DSHMs) at the properties to be demolished (388-402 Pape Ave and 247 Langley Ave).

Purpose of Survey:

- Ensure worker and public safety by identifying DSHMs that require careful handling when disturbed during demolition. Materials include:
 - Designated Substances (O. Reg. 490/09) including asbestos, arsenic, lead, mercury, silica
 - Hazardous Materials including mould, pest infestation, urea formaldehyde foam insulation (UFFI), ozone depleting and global warming substances
- Facilitate planning and safe management of materials before demolition by eliminating risks of potential exposure.
- Meet all regulatory requirements, including Ontario Regulation 278/05, to prioritize environmental and public safety.

Key Findings:

- **Asbestos:** Found in some HVAC duct wrap, plaster, ceiling tiles, roof membranes, roof mastic, duct insulation, beneath some flooring, window glazing/putty, and caulking.
- **Lead:** Present in some paints.
- **Silica:** Present in some plaster, drywall, concrete, and mortar.
- **Mercury:** Present in some fluorescent lamps (vapour), and thermostats (liquid)
- **Ozone Depleting and Global Warming Substances:** AC unit

Note: DSHMs are sometimes found in buildings due to historical construction practices. These findings are not unusual for building structures of this age.

Abatement Procedures Overview

- Abatement involves removal of DSHMs to ensure the safety of the public during structural demolition. Abatement works are informed by a designated substance survey and associated work plan.
- Abatement safety measures include fully sealing the area, water application, negative air pressurization, and waste handling procedures.
- All abatement works are being conducted in accordance with [OHSA regulation 278/05](#) and City of Toronto bylaws.

1. Preparation:

- Construct airtight containment zones (sealed with poly sheeting, spray glue, and industrial tape).
 - Maintain negative air pressure with HEPA-filtered systems.
 - Set up three-chamber decontamination facilities.
- Post hazard warning signs and ensure pre-work inspections by consultants.

2. Abatement

- Asbestos: Remove ACM (e.g., vinyl flooring, caulking, duct insulation) using wet methods. Maintain negative air pressure and inspect HEPA systems.
- Lead: Apply lead stripper to walls/ceilings and scrape lead-containing paint. Place debris in labeled bags.
- Mercury: Safely remove and seal fluorescent lamps and thermostats in labeled containers.
- Silica: Use water sprays and ventilation for dust control.

3. Decontamination

- HEPA vacuum PPE before entering the decontamination facility.
- Remove PPE in the dirty room, shower in the shower room, and change in the clean room.

4. Waste Management

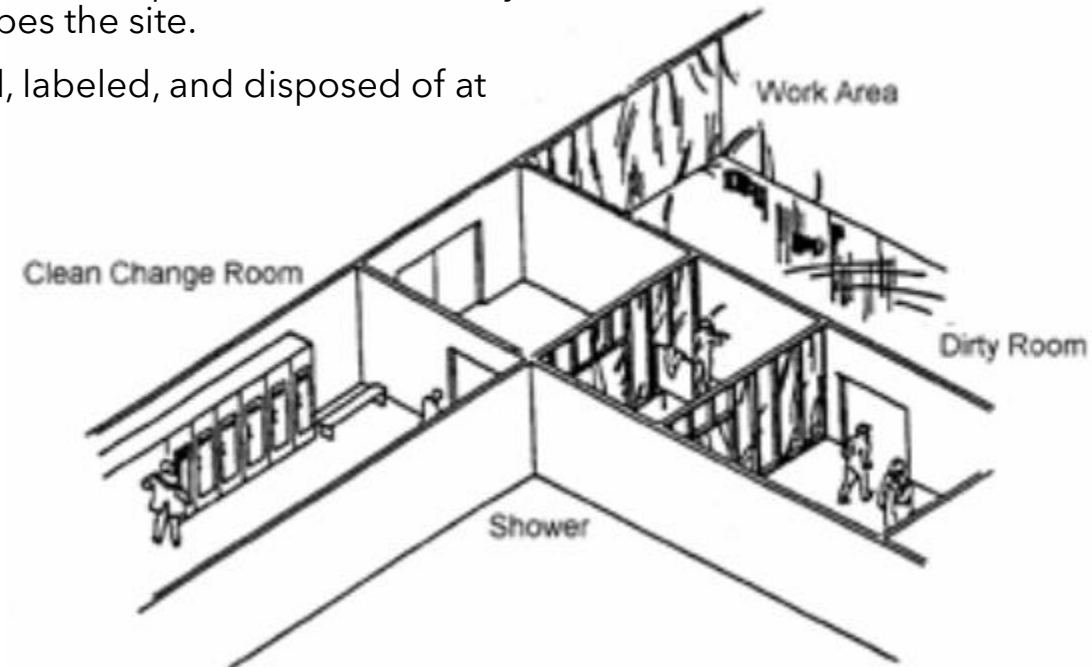
- Double-bag all hazardous waste (asbestos, lead, mercury) in 6-millimeter-thick poly bags.
- Decontaminate bags before staging for transport to licensed disposal facilities.

5. Final Cleaning and Testing

- Clean all surfaces and mist areas with fiber-locking glue.
- Environmental consultants perform visual inspections and air clearance testing to confirm safety.

Protective Measures of the Abatement Process

- **Sealed Work Areas:** All work will take place in fully enclosed, airtight areas to prevent the release of dust or lead materials. Openings and voids will be sealed, and the enclosure will meet strict safety standards.
- **Certified Professionals:** The work is being performed by certified and experienced workers trained in abatement. Supervisors and workers hold provincially mandated certifications and adhere to approved safety protocols.
- **Dust Control Through Wetting:** To mitigate dust and ensure the safety of workers and the surrounding environment, all materials will be wetted down during removal. This wetting method suppresses dust and minimizes airborne fibers, especially in areas where hazardous materials like asbestos are present.
- **Air Quality Measures:** Specialized negative air pressure systems equipped with HEPA filters maintain safe air quality. Air pressure is monitored, and systems inspected daily.
- **Decontamination Zones:** Workers will use dedicated decontamination facilities with separate areas for safely removing protective clothing and equipment, ensuring no contamination escapes the site.
- **Safe Disposal of DSHM Waste:** DSHM debris will be securely double-bagged, labeled, and disposed of at approved facilities, following all provincial and federal regulations.



Air Quality Monitoring – Structural Demolitions

Monitoring approach

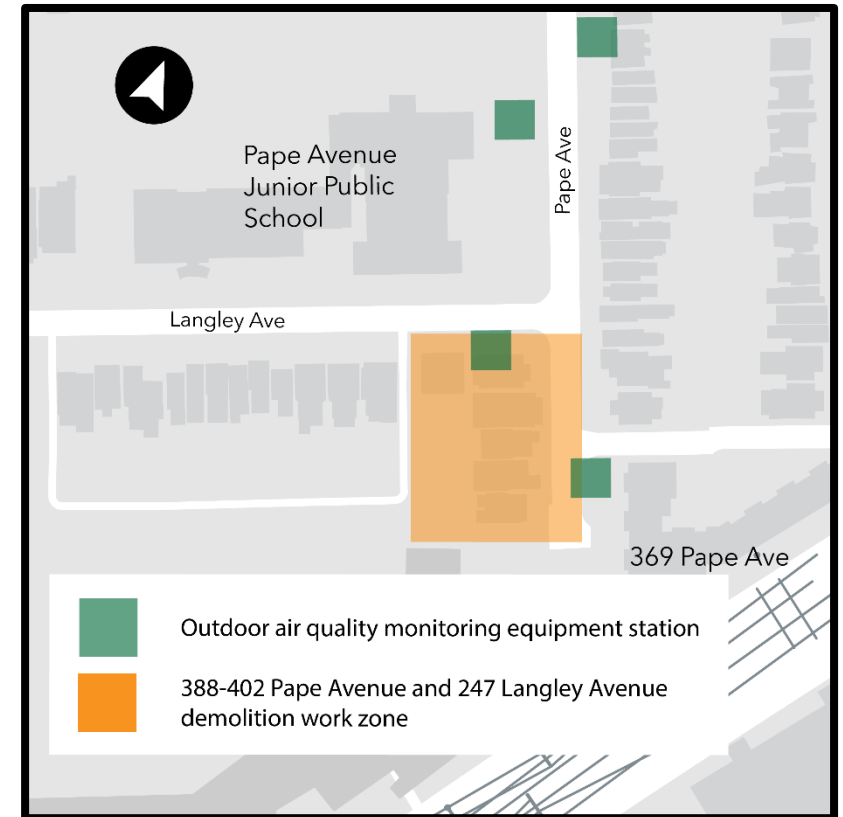
- Air quality monitoring will be conducted continuously during the demolition activities to ensure compliance with federal and provincial air quality limits as well as the Pape Avenue Junior Public School Health and Safety Plan.
- The air quality monitoring program for demolition works will consist of four (4) outdoor air quality monitors and three (3) indoor air quality monitors inside the school.

Protocol for exceedances

- Dust level precautionary warnings will be in place before any exceedance occurs. Additionally, the contractor will implement best practices and mitigation measures to prevent exceedances during demolition activities.
- In the event of exceedances attributed to construction activities are confirmed, additional mitigation measures will be implemented until the issues or conditions are adequately addressed.

Mitigation options

- Active air quality monitoring is in place during abatement and demolition works in the school playground area. General dust suppression (e.g., wetting of soft and hard surfaces with water spray/misters), truck traffic control, tarping of truck loads with soil, and inspections will be enhanced during the demolition works until conditions are adequately addressed.

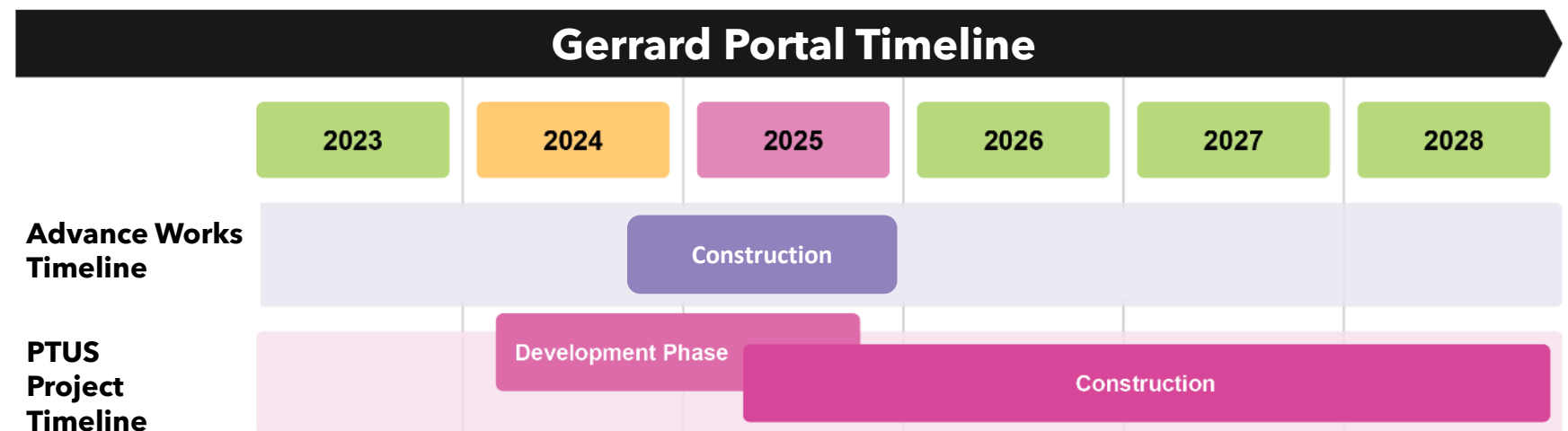


Construction Updates – 449 Carlaw & Bain EEB

Gerrard Portal Timeline

- In the coming months, teams will begin advanced utilities relocations, install temporary fencing and remove vegetation to clear the way for major station construction activities handled by the PTUS project.
- Prior to major station construction, the PTUS project is in the *development phase*, which involves advancing design and determining methodology for construction. During this phase, the PTUS contractor is undertaking the following preparatory activities:
 - Progressing engineering design
 - Environmental surveys and sampling

Construction of the PTUS project has begun at the Gerrard Portal with demolitions beginning as early as March 2025.



Portal Construction



1 Demolition (449 Carlaw, 388-402 Pape Avenue)



Waterloo LRT underground utility replacement.

2 Underground utilities relocated (hydro, Rogers/ Bell, water, storm and sanitary sewer)



Scarborough Subway Extension Piling Work.

3 Drilling piles to support excavation



Concrete slab on Toronto-York Spadina Subway Extension (TYSSE).

4 Excavation of the portal footprint and installation of a concrete slab to act as a cradle for the TBM



Auxiliary installations YYSSE

5 Construction of auxiliary facilities to support the installation of the TBM

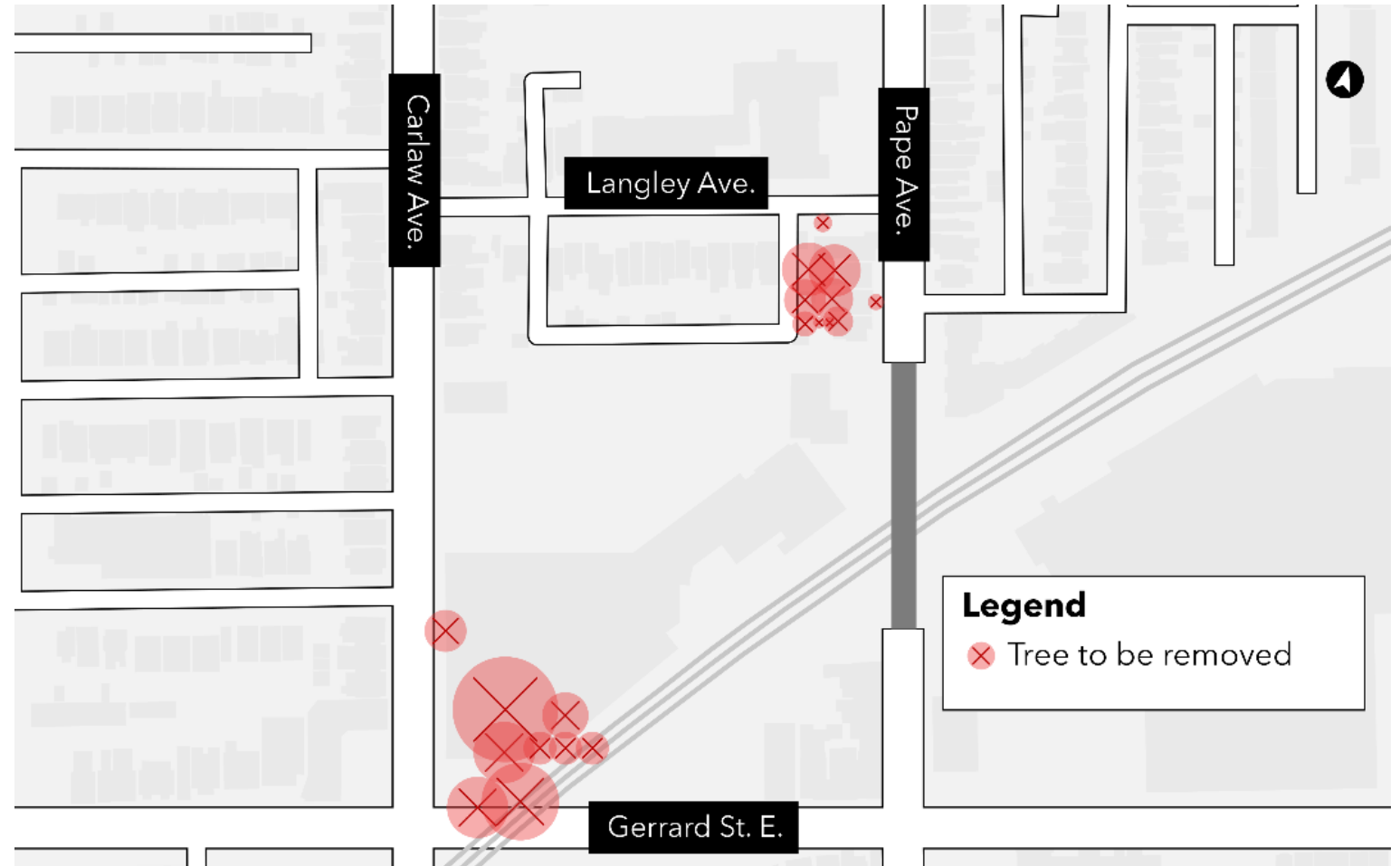


Lowering TBM cutterhead at YYSSE.

6 TBM installation and launch

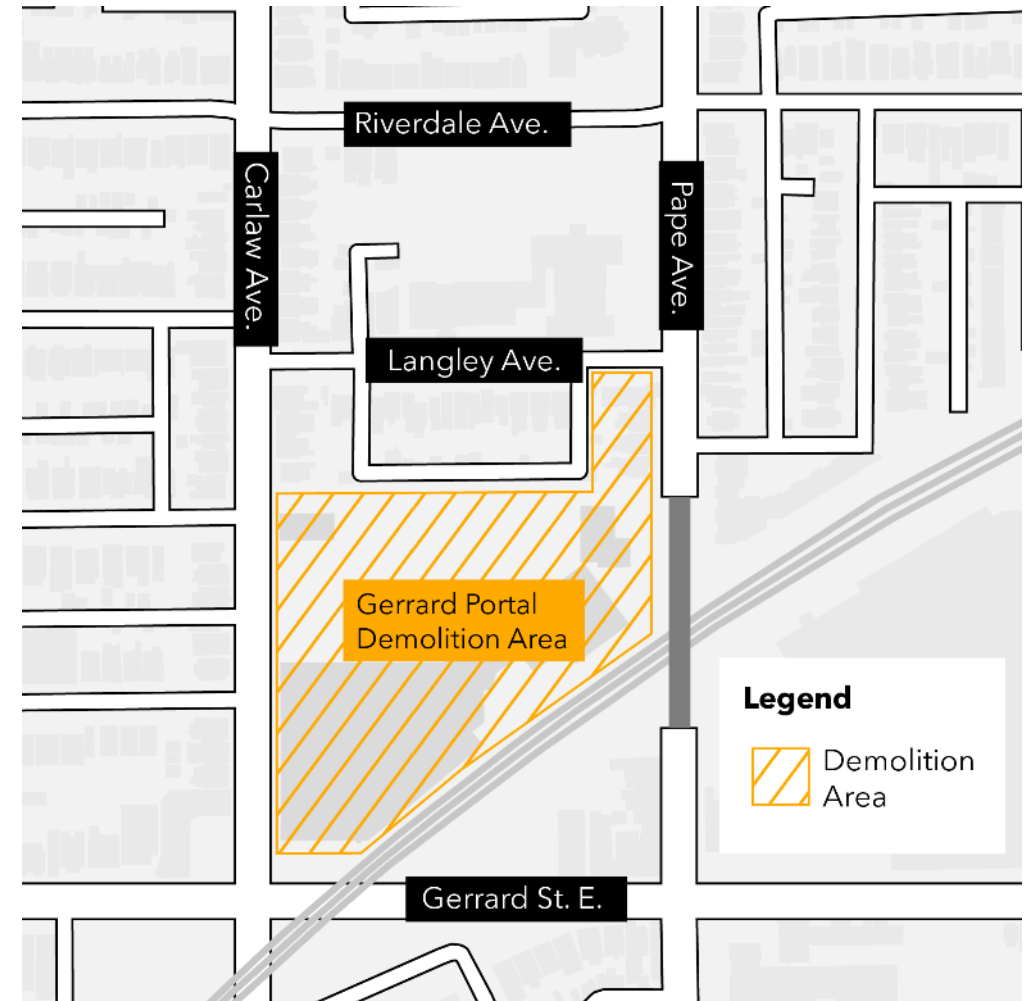
Tree Removals in 449 Carlaw Avenue Plaza and Nearby Area

- 18 trees will be removed from the 449 Carlaw Avenue site and surrounding area.
- Tree removal work is anticipated to take approximately one week.
- To remove the large tree in front of the former Dollarama store, sidewalk closures are expected on the east side of Carlaw Avenue north of Gerrard Street East. One northbound lane of Carlaw Avenue will be closed, with traffic direction provided by a paid duty officer. This removal will take approximately one day.



Upcoming Demolitions 449 Carlaw Avenue

- 449 Carlaw Avenue, the site of the former Riverdale Shopping Centre is the future site of the Gerrard tunnel portal.
- To accommodate construction activities for the Gerrard Portal, crews are demolishing Metrolinx-owned properties at 449 Carlaw Avenue.
- Utility disconnections, abatement work (removal of sensitive materials) and interior demolitions will take place in advance of the demolition of the full structures.
- Abatement and utility disconnections followed by structural demolitions will take approximately 4 to 5 months.
- Work is anticipated to start in March/April 2025.



Properties to be demolished are highlighted in yellow.

Upcoming Demolitions

- TTC bus service will be maintained throughout the work.
- Signage and safety barriers will be in place to delineate work zones.
- Work will take place during the day, from 7 a.m. to 7 p.m.
- Timing of construction is subject to weather conditions and unforeseen circumstances.

What's Next?

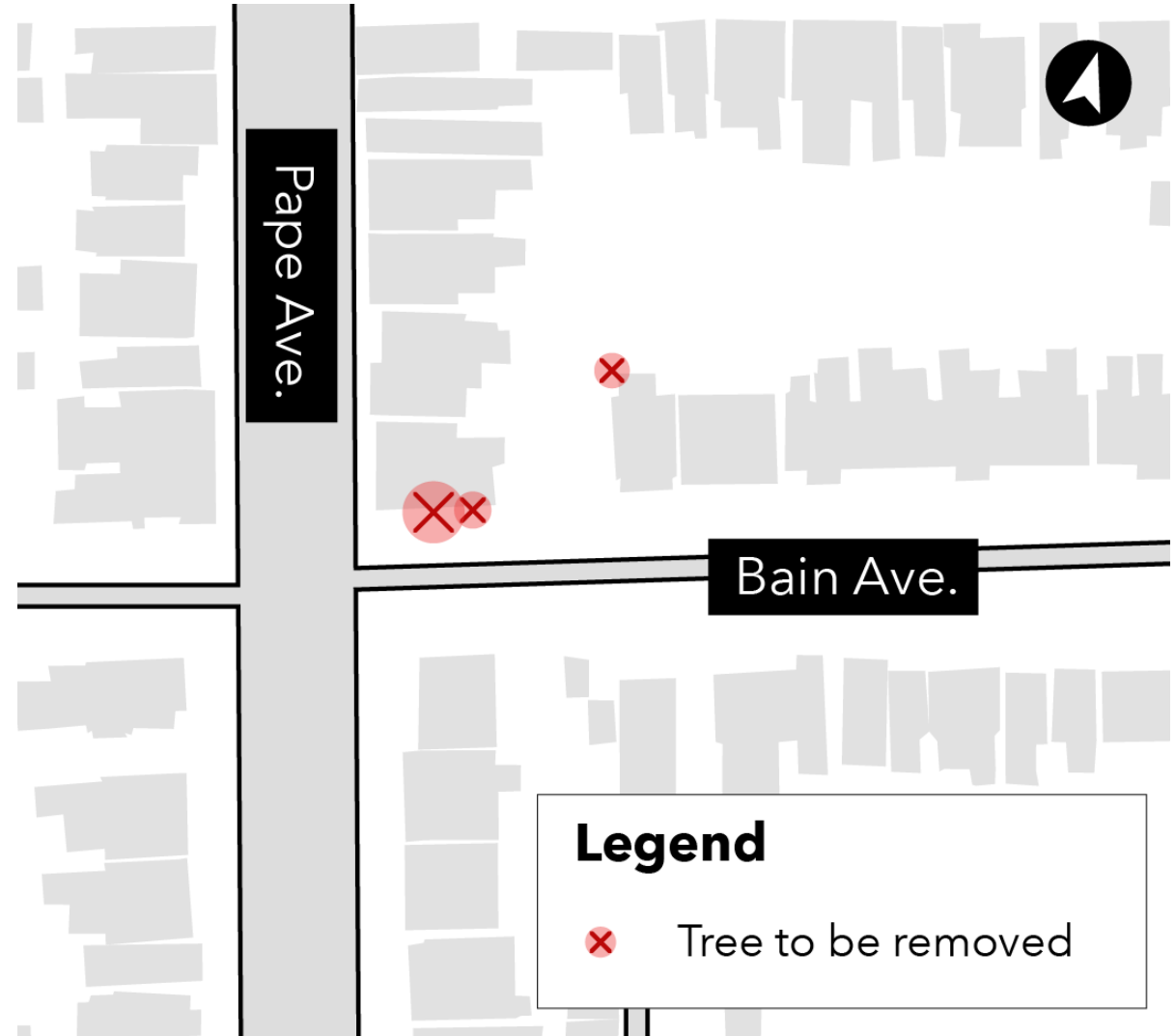
- In the coming years, the 449 Carlaw site will be excavated, and a launch shaft will be built to prepare for the delivery of the Tunnel Boring Machines (TBMs). The TBMs will be lowered into the launch shaft and begin boring from the Gerrard Portal going north along Pape Avenue to the Don Valley Parkway.



Artist's rendering - subject to change. Future Ontario Line Gerrard station entrance on the northeast corner of Gerrard Street and Carlaw Avenue.

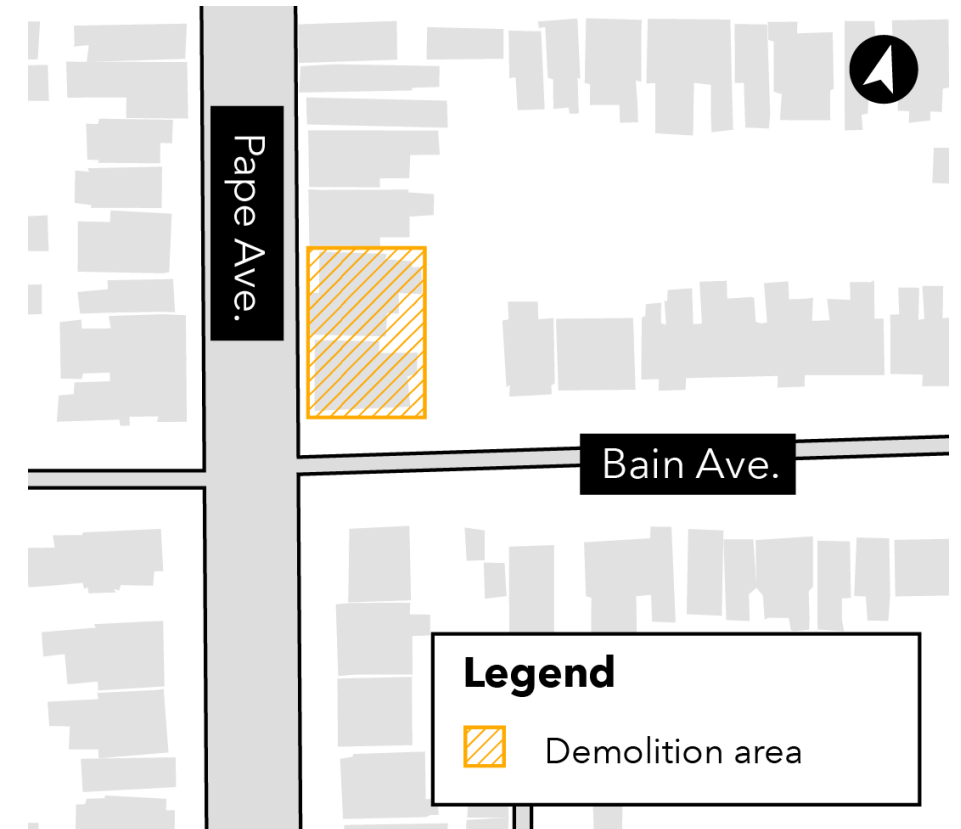
Tree Removals at Bain Avenue and Pape Avenue

- Three trees will be removed from the northeast corner of Pape Avenue and Bain Avenue
- Tree removal work is anticipated to take approximately two to three days.
- A section of sidewalk on the north side of Bain Ave needs to be closed during working hours. The closure will be day-to-day: the sidewalk will be closed at the beginning of the workday, cleaned, and reopened at the end of the shift.



Upcoming Demolitions of 497 and 495 Pape Avenue

- The northeast corner of Pape Avenue and Bain Avenue is the future site of an emergency exit building (EEB) for the Ontario Line.
- To accommodate construction activities for the Bain EEB, crews will demolish Metrolinx-owned properties at 495 and 497 Pape Avenue.
- Utility disconnections, abatement work (removal of sensitive materials) and interior demolition is taking place in advance of the demolition of the full structures.
- Abatement and utility disconnections followed by structural demolitions will take approximately 2 to 3 months.
- Work will begin in March/April 2025.



Properties to be demolished are highlighted in yellow.



Eight-week Lookahead

Eight Week Look-Ahead (Advanced Works)

#	Activity	Location	Expected Start	Expected Duration	Impacts	Hours of Work	Mitigations
1	388 - 402 Pape abatement and utility disconnects	388-402 Pape Ave & 247 Langley Ave	Jan 20, 2025	4-6 Weeks	<ul style="list-style-type: none"> Closure of Pape Avenue south of Langley Avenue 	Weekdays 7 a.m. - 7 p.m.	<ul style="list-style-type: none"> TCPs & PDO Air quality monitoring
2	388 - 402 Pape Demolitions	388-402 Pape Ave & 247 Langley Ave	Mid-late February 2025	One (1) month	<ul style="list-style-type: none"> Road closure south of Langley Noise, vibration, dust 	Weekdays 7 a.m. - 7 p.m.	<ul style="list-style-type: none"> TCPs & PDO Noise and vibration monitoring Water application
3	Sewer microtunnel launch shaft construction	Riverdale Avenue west of Pape Avenue	February 18, 2025	Three (3) months	<ul style="list-style-type: none"> PUDO shift to Pape Noise, vibration 	Weekdays 7 a.m. - 7 p.m.	<ul style="list-style-type: none"> Wheel washing Noise and vibration monitoring Air quality monitoring Additional noise barriers around noise-generating equipment
4	Rogers connections	Foot of Pape Avenue	February 10, 2025	1-2 weeks	<ul style="list-style-type: none"> Closure of Pape Avenue 	7 a.m. - 7 p.m.	<ul style="list-style-type: none"> TCPs & PDO

Note: all dates are subject to change as construction planning progresses

Eight Week Look-Ahead (Gerrard Portal)

#	Activity	Location	Expected Start	Expected Duration	Impacts	Hours of Work	Mitigations
1	Short term fencing and mesh dust screen installation	449 Carlaw; Bain Avenue	January/ February 2025	3 to 4 months	Minor Noise	7 a.m. - 7 p.m.	N/A
2	Borehole and subsurface investigations	449 Carlaw; Pape Avenue	Started/ Ongoing	4 to 5 months	Noise and vibration		Dust mitigation includes misting, sweeping and hydrovac trucks. Erosion and sediment control.
3	Utility disconnections	449 Carlaw	Started/ Ongoing	3 to 4 months	Vibration, noise, air quality, lane and sidewalk closures		N/A
4	Abatement	449 Carlaw; Bain Avenue	Started/ Ongoing	2 months	Work to take place within buildings		N/A
5	Tree/ vegetation removal	449 Carlaw	Late February/ Early March 2025	1 week	Noise and sidewalk closures		N/A

Note: all dates are subject to change as construction planning progresses

Eight Week Look-Ahead (Gerrard Portal & Bain EEB)

#	Activity	Location	Expected Start	Expected Duration	Impacts	Hours of Work	Mitigations
6	Demolition	449 Carlaw	March/ April 2025	4 to 5 months	Vibration, noise, air quality, traffic, lane and sidewalk closures	7 a.m. – 7 p.m.	Noise, vibration and air quality monitoring. Temporary fencing with mesh dust screens. Dust mitigation includes mud mats, street spraying and sweeping, work stoppage during high winds
7	Tree/ vegetation removal	Bain EEB	Mid-February 2025	1 week	Noise and sidewalk closures		N/A
8	Demolition	Bain EEB	March/ April 2025	4 to 5 months	Vibration, noise, air quality, traffic, lane and sidewalk closures		Noise, vibration and air quality monitoring. Temporary fencing with mesh dust screens. Dust mitigation includes mud mats, street spraying and sweeping, work stoppage during high winds

Note: all dates are subject to change as construction planning progresses

Action Items

Action items

#	Questions Asked / Action Item	Response/Resolution	Due Date / Status
1.	Metrolinx to follow-up about the content of the October 28 - Nov 1 noise and vibration report.	<ul style="list-style-type: none"> Metrolinx will reach out to the resident on this concern. 	Ongoing
2.	Metrolinx to follow-up on the presence of traffic safety personnel at Pape and Langley	<ul style="list-style-type: none"> PDO and Traffic Control Personnel presence at the PUDO, Pape-Riverdale intersection, and Pape-Langley intersection will be maintained throughout upcoming stages of work. Metrolinx will adhere to requirements outlined by the City as per permit conditions. 	Closed
3.	Metrolinx to provide additional details about the air quality monitoring for the playground area.	<ul style="list-style-type: none"> Air quality monitoring details are shown on slide 9. 	Closed
4.	Metrolinx was requested to host a site meeting and walkthrough with the construction team.	<ul style="list-style-type: none"> Quarterly site walks, to be discussed in following slide. 	Closed
5.	Metrolinx was asked whether there can be a site walk at other sites performing microtunneling work.	<ul style="list-style-type: none"> Due to space and operational constraints, an organized group site walk cannot be conducted at Gowan Avenue. Microtunnelling is ongoing on Gowan Avenue through to the end of this week. 	Closed

Action items

#	Questions Asked / Action Item	Response/Resolution	Due Date / Status
6.	Metrolinx to provide more than a weeks' notice for the change to the PUDO.	<ul style="list-style-type: none">Construction notice sent to TDSB on January 24, 2025, for PUDO shift beginning on February 18, 2025	Closed
7.	Metrolinx to confirm if the generator can be substituted by electrical power by connecting to Toronto Hydro.	<ul style="list-style-type: none">Microtunnel launch shaft is a short-term, temporary operation, therefore connecting to electrical equipment is not possible.	Closed

Quarterly Site Walk

- Each quarter, in place of a virtual CLC, Metrolinx will host a site walk reviewing each location of ongoing work.
- Site walks will give the CLC members an opportunity to discuss observations in real-time with the construction team, and will cover the following topics:
 - Work progress
 - Noise and vibration monitoring
 - Air quality monitoring
 - Safety measures
- High-level progress update materials will still be circulated in advance of the site walks.



Discussion

