

Metrolinx Ontario Line - Gerrard Portal Construction

Date: June 21, 2024

To: Toronto and East York Community Council

From: Deputy General Manager, Transportation Services

Wards: Ward 14 - Toronto-Danforth

SUMMARY

In response to the Member Motion under Item EX14.2, this report provides an overview of Metrolinx's plan for construction activities at the Gerrard Portal site, including the scope, timeline, and potential transportation impact based on the planning-level information. The Project Co. for the Gerrard Portal site has recently joined the Ontario Line project and is actively developing the construction details.

RECOMMENDATIONS

The Deputy General Manager, Transportation Services recommends that:

1. Toronto and East York Community Council receive this report for information.

FINANCIAL IMPACT

There is no financial impact to the City. Metrolinx and their Project Co. are responsible for all costs, including payment of fees to the City for the right-of-way occupancy permits.

DECISION HISTORY

City Council at its meeting on May 22, 2024, adopted a member motion under Item EX14.2 entitled "Ontario Line Pape Segment Advanced Works - Temporary Road Closures and Transportation Impacts" and requested a report back on the Metrolinx Traffic Management Plan related to the construction and transportation of materials for the underground portal of the Ontario Line.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.EX14.2>

City Council at its meeting on July 19, 2023, adopted Item TM2.1 entitled "City of Toronto Recommendation for Metrolinx's Ontario Line Construction within the Toronto and East York District".

<https://secure.toronto.ca/council/agenda-item.do?item=2023.TM2.1>

COMMENTS

This report is submitted in response to the member motion for Item 2024.EX14.2 adopted by City Council, which requested a report on the Metrolinx Traffic Management Plan related to the construction and transportation of materials for the underground portal of the Ontario Line.

The underground portal referenced in the motion, hereafter referred to as the Gerrard Portal, will provide transition between the Ontario Line Lakeshore East Joint Corridor and underground Pape Avenue segments. Figure 1 below shows the location of the Gerrard Portal site, which covers the existing Riverdale Plaza and residential properties in the south-west corner of Pape Avenue and Langley Avenue.

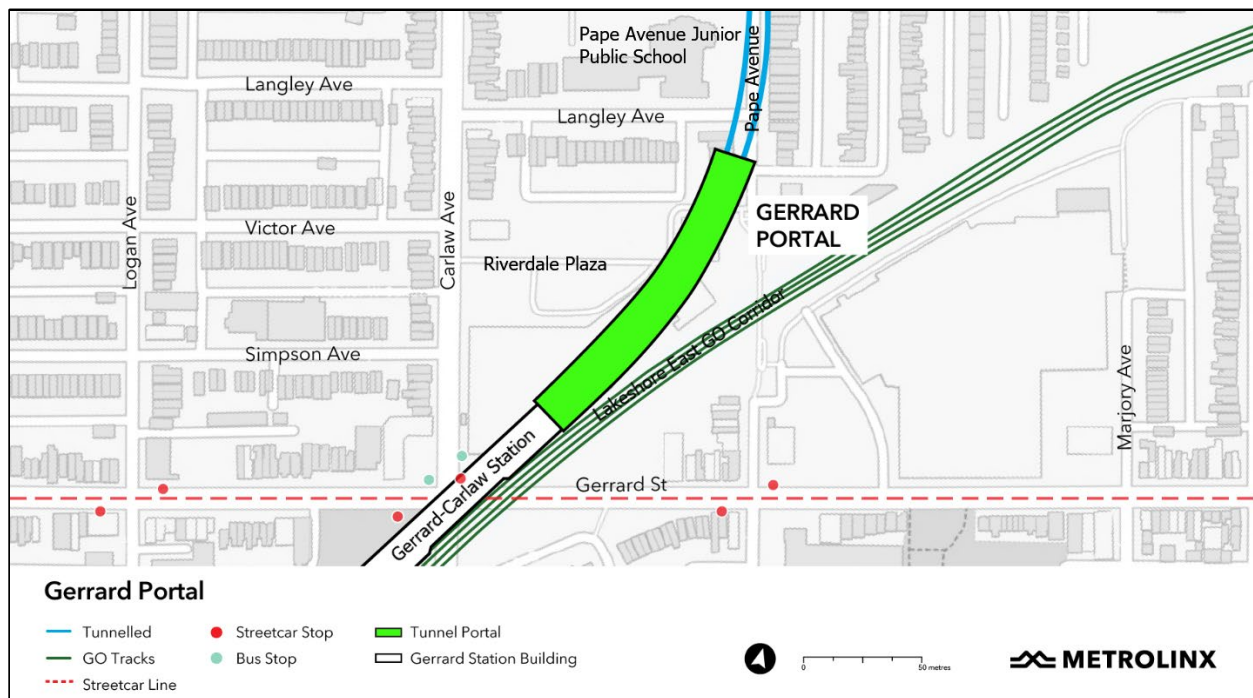


Figure 1 – Gerrard Portal Location

Source: Metrolinx

The Gerrard Portal site will be utilized to support construction activities related to the Gerrard Portal, tunnel boring machine (TBM) operations and Gerrard-Carlaw station. Site preparation work, including the demolition of the buildings on these properties, is currently in progress before the commencement of the major construction activities. Additionally, Metrolinx's contractor is currently relocating underground utilities in the vicinity of the Pape Avenue Junior Public School to make way for the Ontario Line underground tunnels.

The details of construction activities at the Gerrard Portal site are currently being developed by the Project Co., which joined the Ontario Line project in Q1 2024. Due to unavailability of construction-level details from the Project Co., this report discusses information developed by Metrolinx as part of the constructability assessment prior to hiring the Project Co. This information is subject to change as the Project Co. finalize their construction plans.

The preliminary construction phasing plan and associated schedule for the Gerrard Portal construction and tunnel boring machine operations is shown below:

Stage	Schedule	Activities
1	May 2024 – March 2025	Utility relocations near Pape Avenue Junior Public School Demolition of properties at the Gerrard Portal site Installation of temporary traffic signal at the Riverdale Plaza driveway on Carlaw Avenue
2	April 2025 – September 2025	Utility relocations near Pape Avenue Junior Public School Support of excavation installation and jet grouting for the portal Power substation setup
3	September 2025 – December 2025	Utility relocations near Pape Avenue Junior Public School Construction of the portal Site setup
4	December 2025 – March 2026	TBM delivery Installation of soil conveyor system Site setup for TBM operations
5	March 2026 – July 2026	Final setup of TBM support plant TBM launch and operations Tunnel liner handling
6	July 2026 – July 2027	Demobilize tunneling operations and power substation Build cut-and-cover guideway structures
7	August 2027 – March 2028	Site decommissioning Pape Ave restorations (where roadway was impacted for the portal construction)

The Gerrard Portal site is expected to generate significant truck trips during the TBM operations. During the peak construction period from Q1 2026 to Q2 2027, approximately 25 trucks per hour are anticipated to access/egress the site.

These trucks will be distributed between the Gerrard Portal site, the soil drying site on Dickens Street and various soil disposal sites, the locations of which are currently unknown. Most truck trips to the soil drying site on Dickens Street will be during the off-peak hours, while heavy machinery deliveries for TBM operations will be scheduled at night. Additional truck traffic associated with the construction of the Gerrard-Carlaw Station, estimated at 1 truck per hour, is also expected at the Gerrard Portal site. This traffic, along with all other construction traffic not related to TBM operations or deep excavations, will be restricted to off-peak hours.

Construction vehicles will access and egress the Gerrard Portal site from the site driveway on Carlaw Avenue. Metrolinx has requested signalization of this driveway to ensure safety of vehicular and pedestrian movements.

The anticipated trip distribution for the Gerrard Portal site is summarized below:

Inbound trips will potentially use the following two routes:

- Don Valley Parkway SB, Bayview Avenue SB, River Street SB, Gerrard Street East EB, and Carlaw Avenue NB.
- Gardiner Expressway EB, Lake Shore Boulevard EB, and Carlaw Avenue NB.

Outbound trips will potentially use the following two routes:

- Carlaw Avenue SB, Gerrard Street East WB, River Street NB, Bayview Avenue NB, and Don Valley Parkway NB.
- Carlaw Avenue SB, Lake Shore Boulevard WB, and Gardiner Expressway WB.

The anticipated truck trip distribution for the soil drying site on Dickens Street is summarized below:

Inbound trips will potentially use the following two routes:

- Don Valley Parkway SB, Bayview Avenue SB, River Street SB, Dundas Street East EB, Carlaw Avenue NB, and Dickens Street WB.
- Gardiner Expressway EB, Lake Shore Boulevard EB, Carlaw Avenue NB, and Dickens Street WB.

Outbound trips will potentially use the following two routes:

- Dickens Street WB, Carlaw Avenue SB, Dundas Street WB, River Street NB, Bayview Avenue NB, and Don Valley Parkway NB.
- Dickens Street WB, Carlaw Avenue SB, Lake Shore Boulevard WB, and Gardiner Expressway WB.

Traffic Mitigation

Recognizing the anticipated increase in traffic congestion and potential risks to pedestrians and cyclists along the haul routes, City staff will actively collaborate with Metrolinx and the Project Co. to implement traffic management strategies that prioritize

safety for all road users. Additionally, City staff will ensure Metrolinx and their Project Co. implement the traffic and construction management recommendations approved by City Council under Item TM2.1 – City of Toronto Recommendations for Metrolinx’s Ontario Line Construction within the Toronto and East York District. City staff will require Metrolinx and their Project Co. to include the following measures in their traffic and construction management plan:

- Metrolinx and their Project Co. will be required to analyze traffic impacts of construction-related traffic on the boundary road network specifically along the haul routes and recommend any modifications to the traffic signal timing plans.
- Traffic control persons will be deployed at all site accesses to ensure there are no conflicts between the construction vehicles and pedestrians.
- Clear signage indicating “Watch for Pedestrians” and “Truck Entrance” will be implemented near all site accesses to prevent potential conflicts between the construction vehicles and pedestrians.
- Construction trucks will be required to enter and exit the site in a forward direction, only, ensuring safer and more efficient operations.
- Trucks staging and idling on the City roads will not be permitted.
- Trucks will not be permitted to use residential streets as a haul route.
- Metrolinx and their Project Co. will be required to deploy paid duty officers at the critical boundary road intersections to safely direct traffic and minimize congestion during the peak hours.
- Metrolinx's Project Co. will be required to implement noise mitigation measures to minimize the impact of construction activities on nearby residents.
- Metrolinx and their project Co. will be required to establish a communication plan to inform the community and the Pape Avenue Junior Public School about construction schedules, expected disruptions and haul routes.
- Dust suppression techniques, such as water spraying and covered trucks, will be required to minimize air quality impacts.
- Metrolinx will be required to coordinate with TTC, EMS and Toronto Fire to ensure minimal disruption to transit and emergency services along the haul routes.
- Metrolinx and their Project Co. will be required to instruct the truck drivers to follow the posted speed limits and Highway Traffic Act rules to ensure safety along the haul routes.
- Metrolinx and their Project Co. will be required to enforce restrictions on truck movements during the school pick-up and drop-off period.
- A dedicated hotline number for the community members will be required to report concerns or issues related to construction traffic and receive timely responses.
- City staff will ensure coordination of planned capital works projects along the haul routes to reduce traffic congestion and minimize disruptions.

CONTACT

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SIGNATURE

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ATTACHMENTS
