

Ontario Line Joint Corridor - Early Works Construction and Right-of-Way Permits

Date: April 1, 2022

To: Toronto and East York Community Council

From: Director, Planning and Capital Program, Transportation Services

Wards: Ward 14 - Toronto Danforth

SUMMARY

As part of the approval for Item MM41.16, City Council requested a report on Metrolinx's Ontario Line construction work, access routes, traffic mitigation measures, permit conditions, and a mechanism to review right-of-way permits for the Ontario Line project in Ward 14.

This report provides an overview of Metrolinx's construction proposal for Early Works in the Lakeshore East Joint Corridor and discusses its construction impacts and mitigation measures. Additionally, the report discusses the City's permit process and requirements.

RECOMMENDATIONS

The Director, Planning and Capital Program, Transportation Services recommends that:

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

FINANCIAL IMPACT

There is no financial impact to the City. Metrolinx and its contractors are responsible for all costs, including payment of fees to the City for occupancy of the road right-of-way.

DECISION HISTORY

City Council at its meeting on March 9, 2022 approved the member motion MM41.16 "Transportation Impacts of Ontario Line Construction" and requested a report on Metrolinx's construction proposal including access routes, traffic mitigation measures for

the construction of the Ontario Line, conditions of permits required by Metrolinx, and a mechanism to review right-of-way permits for the Ontario Line project in Ward 14.

COMMENTS

City Council, at its meeting on March 9, 2022, adopted Councillor Paula Fletcher's member motion MM 41.16 "Transportation Impacts of Ontario Line Construction" and requested the General Manager, Transportation Services, to report on the proposals for access routes, traffic mitigation measures for the construction of the Ontario Line, a list of conditions for any permits needed by Metrolinx for the Ontario Line work, and a mechanism to review right-of-way permits for lane or sidewalk occupations.

This report provides an overview of the Ontario Line Early Works in the Lakeshore East Joint Corridor by discussing Metrolinx's construction proposal, its impacts and mitigation measures. Additionally, the report provides an overview of the City's right-of-way permit process, permit requirements, and a list of permit conditions to ensure road users' safety in the work zones.

The Lakeshore East Joint Corridor will include the dedicated Ontario Line train tracks alongside the realigned and expanded tracks for the GO and VIA trains. The Ontario Line Gerrard, Leslieville and East Harbour Stations will be located on the Lakeshore East Joint Corridor. Figure 1 below shows the overall Ontario Line alignment and with the Joint OL-GO Corridor.



Figure 1 – Ontario Line Alignment

Source: Metrolinx

To accommodate the Ontario Line tracks, Metrolinx will undertake Early Works to realign and widen the existing Lakeshore East rail corridor between Gerrard Street East and Eastern Avenue. The significant elements of the Early Works construction will include the following:

- Reconstruction of existing GO Bridges at Logan Avenue, Dundas Street East, Queen Street East and Eastern Avenue;
- Construction of new Ontario Line Bridges at Logan Avenue, Dundas Street East and Eastern Avenue;
- Grading and drainage on the GO and Ontario Line corridor;
- Track realignment and construction between Logan Avenue and Eastern Avenue;
- Construction of retaining walls and noise barrier walls along the rail corridor; and
- Utility relocation

Based on the information provided by Metrolinx, the Early Works construction will be undertaken in the following four phases between October, 2022 and December, 2025:

Phase 1 - utility relocation, construction of access ramps, reinforcement of existing structural elements;

Phase 2 - bridge work, track construction, and retaining walls on the south side of the rail corridor;

Phase 3 - bridge work, track construction and retaining walls on the north side of the rail corridor; and

Phase 4 - removal of temporary tracks and access ramps and restoration of sites to pre-construction conditions.

Most of the construction impacts on the City road network will be associated with the bridge works at Logan Avenue, Dundas Street East, Queen Street East and Eastern Avenue. Metrolinx requires temporary road closures at each of these bridge locations to complete the bridge works. In addition, Metrolinx requires temporary access points from the City roads adjacent to the bridges to complete the Early Works in the rail corridor.

Figure 2 below shows the bridge works along the rail corridor, and Figures 3 and 4 show the location of rail corridor access points on the south and north sides of the rail corridor, respectively.

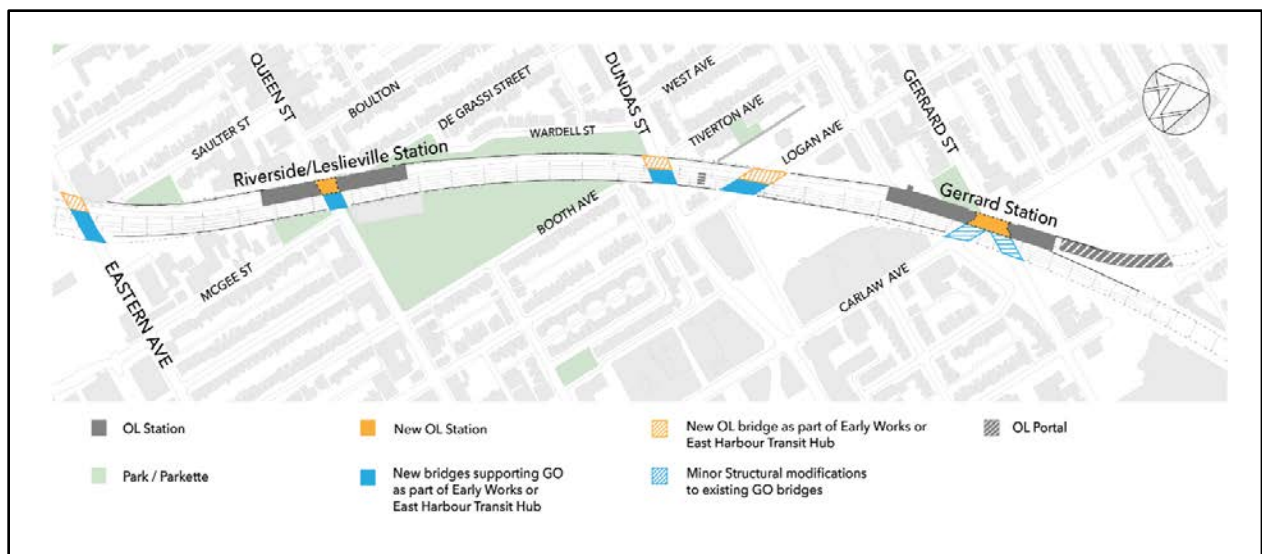


Figure 2 – Bridge Works Locations

Source: Metrolinx

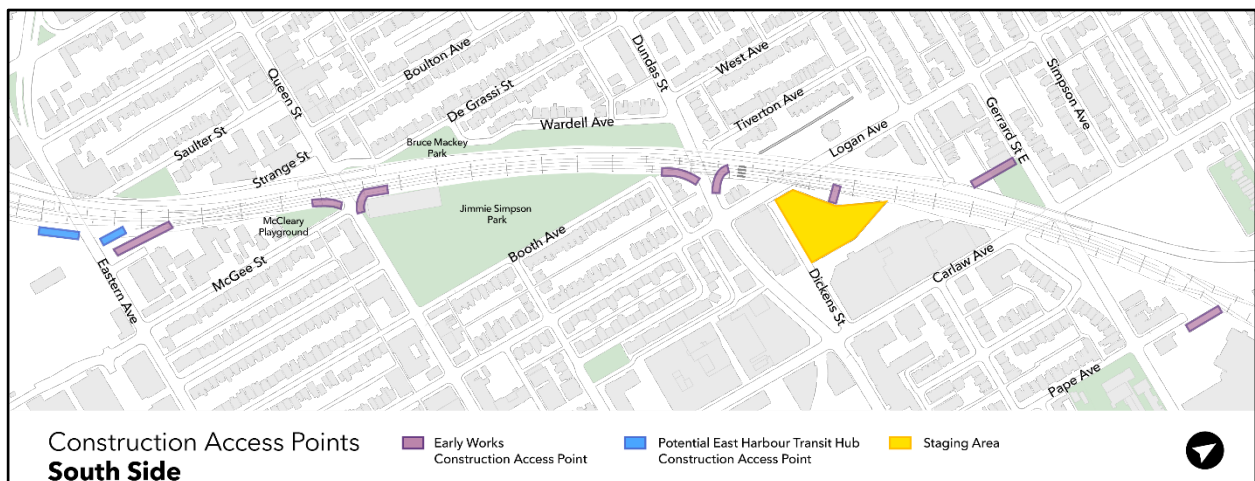


Figure 3 – Rail Corridor Access Points (South Side)

Source: Metrolinx

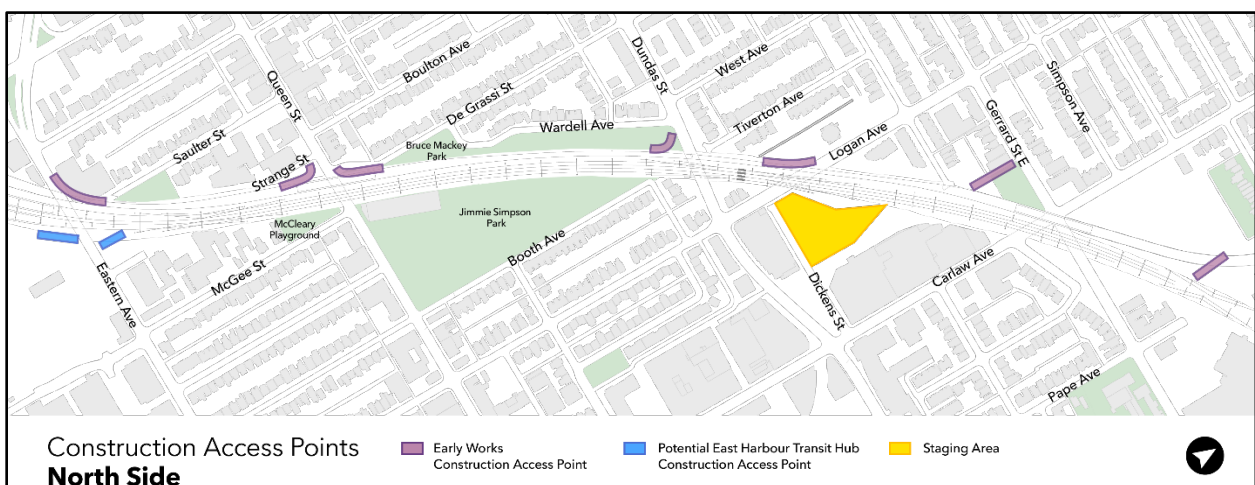


Figure 4 – Rail Corridor Access Points (North Side)

Source: Metrolinx

Figures 3 and 4 show that Metrolinx will require 14 access points (7 on the south side and 7 on the north side) along the rail corridor. As per the information provided by Metrolinx, only 8 access points will be utilized at any given time as the work will take place in phases. The access points on the south side will be in operation during Phases 1 and 2 of construction, which are planned to take place from November 2022 to April 2024. Additionally, the access points on the north side will be in operation during Phase 3 of construction, which is planned to take place from April 2024 to December 2025.

Construction Impacts - Bridge Works

Logan Avenue

Metrolinx plans to complete the reconstruction of the existing GO Bridge and new OL Bridge at Logan Avenue in a phased approach between January 2023 and April 2025.

Except for short-term full road closures, Metrolinx will maintain two-way vehicular traffic during the bridge works. The short-term (2-3 days) full road closures will be required for bridge deck replacement work. Vehicular traffic will be diverted to alternative parallel routes during these road closures.

Metrolinx will provide a minimum 1.8 metre wide protected and covered pedestrian walkways on both sides of Logan Avenue during the bridge works. During the short-term full road closures, pedestrians will be directed to detour around the closure via West Avenue, First Avenue and Dundas Street East. In addition, advanced advisory signage will be strategically installed to inform pedestrians of the closure.

Bicycle lanes on Logan Avenue will be periodically closed during the bridge works, and people cycling will be directed to share the available travel lanes with the general traffic. People cycling will be detoured on Carlaw Avenue via Gerrard Street East and Dundas Street East during the short-term full road closures.

Bridge Works and associated lane closures on Logan Avenue will temporarily remove up to 28 on-street 3-hour maximum parking spaces. Metrolinx is currently working with the City to accommodate up to 25 parking spaces on Dickens Street.

There is currently no transit service on the subject section of Logan Avenue. Additionally, Metrolinx will maintain all business and property accesses during the bridge works.

Dundas Street East

Metrolinx plans to complete the reconstruction of the existing GO Bridge and the construction of the new OL Bridge between January 2023 and April 2025.

During the bridge works, Metrolinx will require a temporary closure of the westbound left-turn lane and movement on Dundas Street East at Wardell Street and the eastbound left-turn lane and movement on Dundas Street East at Logan Avenue. Additionally, short-term (2-3 days) full road closures on Dundas Street East, between Ontario Line Joint Corridor - Early Works Construction and Right-of-Way Permits

Wardell Street and Logan Avenue, will be required for bridge deck works. These short-term full road closures will be scheduled to not coincide with the short-term full road closures on parallel routes of Queen Street East and Eastern Avenue.

Aside from the above-mentioned closures, Metrolinx will maintain two-way through traffic movements on Dundas Street East during the bridge works.

Metrolinx will provide a minimum 1.8 metre wide pedestrian walkways on both sides of Dundas Street East during the bridge works. During the short-term full road closures, pedestrians will be directed to detour via West Avenue, First Avenue and Logan Avenue. Metrolinx will install advanced advisory signage to inform pedestrians of the full road closure.

Bicycle lanes on Dundas Street East, between Wardell Street and Logan Avenue, will be closed during the bridge works except between February 2024 and August 2024 when bicycle lanes will be open. During bicycle lanes closure, people cycling on this section of Dundas Street will share the available lanes with the general traffic. There is currently no transit service on the subject section of Dundas Street East. Additionally, Metrolinx will maintain all business and property accesses during the bridge works.

Queen Street East

The Queen Street East bridge work will include reconstruction of the existing GO Bridge and is planned to take place between January 2023 and March 2025.

During the bridge works, Metrolinx will require a temporary closure of the westbound curb lane on Queen Street East, between De Grassi Street and a point 40 metres west of Empire Avenue, to facilitate the north side bridge work. This temporary lane closure will temporarily remove two on-street "Pay and Display" parking spaces on the north side of Queen Street East, fronting the Jimmie Simpson Community Centre. However, access to the Jimmie Simpson Community Centre loading area will be maintained. Similarly, during the south side bridge works, Metrolinx will require a temporary closure of the eastbound curb lane from Boulton Avenue to McGee Street.

Two-way vehicular traffic on Queen Street East will be maintained with these temporary lane closures in place. In addition, multiple short-term (2-3 days) full road closures are required to facilitate bridge deck work. Vehicular traffic will be diverted to alternative parallel routes during these road closures. The short-term full road closures on Queen Street East will be scheduled to not coincide with the short-term full road closures on Dundas Street East and Eastern Avenue.

Metrolinx will require alternating sidewalk closures on Queen Street East, between De Grassi Street and Empire Street, to facilitate utility relocations and bridge support demolition work. During the northside utility relocations and bridge support demolition work, pedestrians will be directed to the south sidewalk at the nearest signalized pedestrian crossings at Boulton Avenue and Empire Avenue, located approximately 70 metres to the west and 100 metres to the east of the bridge, respectively and vice versa. The utility relocations and bridge support demolition works on each side of the Ontario Line Joint Corridor - Early Works Construction and Right-of-Way Permits

bridge is expected to take approximately 4 months. After the bridge support demolition work completion, a temporary protected and covered pedestrian walkway with a minimum 1.8 metres width will be maintained on both sides of Queen Street East. During the short-term full road closures, pedestrians will be directed to detour around the closure via Broadview Avenue, Eastern Avenue, and McGee Street. Advanced advisory signage will be strategically installed to inform pedestrians of the closure. The cumulative duration of sidewalk closures is not expected to exceed six months per side.

There are currently no dedicated bicycle lanes on Queen Street East. People cycling on Queen Street East will continue to share the available travel lanes with the general traffic during the bridge works.

Except for the short-term full road closures, the TTC Queen 501 streetcar service will be maintained during the bridge works. Metrolinx and TTC will coordinate to inform the community and transit riders of detour transit service during the short-term full road closures. In addition, Metrolinx will maintain access to existing transit stops at Boulton Avenue and Empire Avenue.

Metrolinx will maintain all business and property accesses during the Queen Street East bridge works.

Eastern Avenue

The Eastern Avenue bridge works are part of the East Harbour Transit Hub project and will include reconstruction of the existing GO Bridge and construction of the new OL Bridge. Metrolinx plans to undertake this work in a phased approach between October 2022 and June 2025.

Metrolinx will require temporary curb lane closures to perform the bridge works on the north and south sides of Eastern Avenue. During the bridge works, two-way traffic on Eastern Avenue will be maintained. Multiple short-term (2-3 days) full road closures on Eastern Avenue will be required to complete the bridge deck work. These short-term full road closures will be scheduled to not coincide with the short-term full road closures on Queen Street East and Dundas Street East.

Metrolinx will install temporary covered and protected pedestrian walkways with a minimum width of 1.8 metres on both sides of Eastern Avenue to provide a safe passage to pedestrians in the work zone. Pedestrian detours will be on Queen Street East via Broadview Avenue and McGee Street during the short-term full road closures. In addition, Metrolinx will install advanced advisory signage to inform pedestrians of the short-term full road closures.

There are currently no dedicated bicycle lanes on the subject section of Eastern Avenue. People cycling will continue to share the available travel lanes with the general traffic.

There is no existing on-street parking in the vicinity of the Eastern Avenue Bridge. Additionally, there is no transit service on the subject section of Eastern Avenue. Metrolinx will maintain access to all properties and businesses during the bridge works.

Construction Impacts - Rail Corridor Works

As mentioned earlier in the report and shown in Figures 3 and 4, Metrolinx requires 14 temporary driveways from the city roads next to the rail corridor to complete the Early Works in the rail corridor. At any given phase of construction, only 8 driveways will be operational. These driveways will generally be 5 metres wide with 2 metre wide shoulders. The ramps to the rail corridor will be engineered with shoring and protected to avoid conflicts with pedestrians and other road users.

Based on the information provided by Metrolinx, driveway construction is expected to take approximately two to three weeks, during which disruptions to adjacent sidewalks may be experienced. Metrolinx will provide temporary protected pedestrian walkways during construction of the driveways.

During the operation of the driveways, Metrolinx expects up to 5 trucks per hour at each operational driveway. Metrolinx will ensure forward-in and forward-out truck movements ensuring proper sightlines along with trained traffic control persons to manage the construction vehicle movements at the construction driveways and ensure the safety of pedestrians.

Parking Impacts

Figure 5 below shows the parking impacts (number and type of parking spaces with duration of removal) of the Metrolinx proposed lane closures and driveway operations.

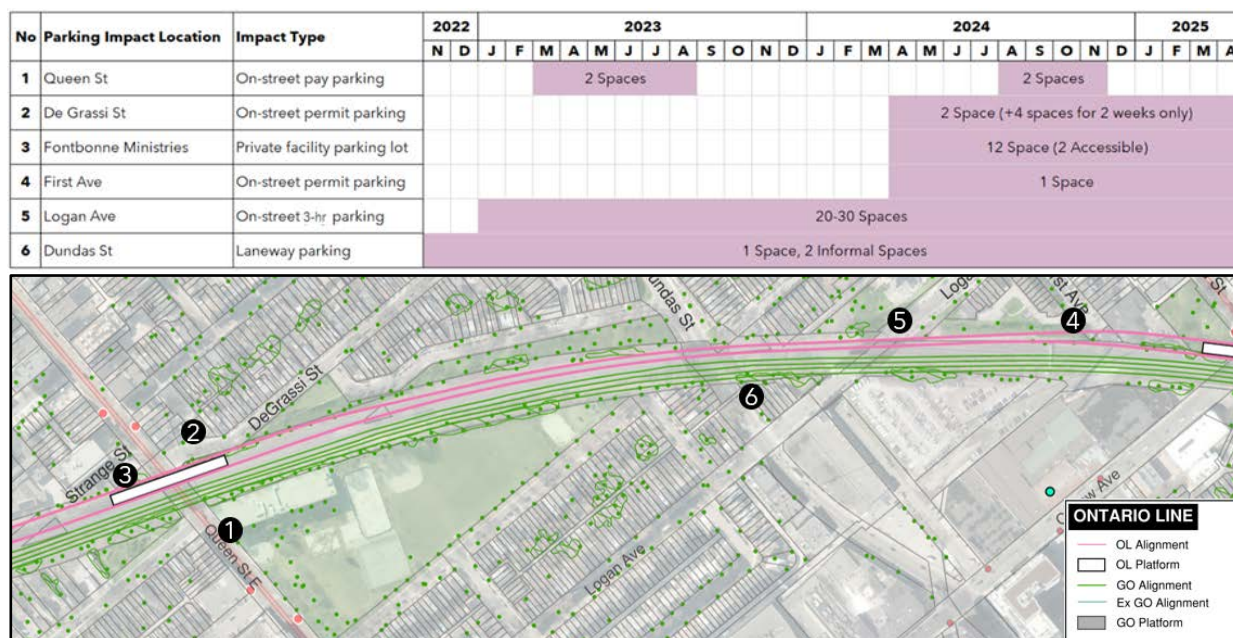


Figure 5 – Early Works Parking Impacts

Source: Metrolinx

Two on-street "Pay and Display" parking spaces, shown as Location 1 in Figure 5, on Queen Street East fronting the Jimmie Simpson Community Centre will be temporarily removed due to the curb lane closures. Additionally, the construction driveway on De Grassi Street at Queen Street East, shown as Location 2 in Figure 5, will require

temporary removal of up to six permit parking spaces on the east side of De Grassi Street.

The construction driveway on Strange Street at Queen Street East, shown as Location 3 in Figure 5, will temporarily remove 12 private parking spaces (including two accessible parking spaces) associated with the Fontbonne facility.

The driveway on First Avenue, shown as Location 4, will remove one on-street parking space. Additionally, the temporary lane closures for the bridge works on Logan Avenue, shown as Location 5 in Figure 5, will remove up to 28 on-street 3-hr maximum parking spaces. Finally, the driveway on Dundas Street at Logan Avenue, shown as Location 6 in Figure 5, will disrupt and narrow the public laneway on the west side of Logan Avenue, just north of Dundas Street East. This will result in removing one backyard parking space and two informal laneway parking spaces.

Construction Mitigation Measures

City staff will coordinate with Metrolinx to implement safe work zone accommodations ensuring the safety and mobility of all road users during the Early Works construction. The following sections of the report discuss the construction mitigation measures that City staff will request Metrolinx to include as part of their construction proposal.

Pedestrians

In keeping with the City's Vision Zero Road Safety Plan, City staff will work closely with Metrolinx and its contractors to safely accommodate vulnerable road users in work zones.

Under the current construction proposal, Metrolinx requires a pedestrian detour to alternative routes during the short-term (2-3 days) full road closures for the bridge deck works. Additionally, Metrolinx requires a pedestrian detour to an alternative opposite sidewalk during the utility relocation and bridge support demolition work (approx. four months per side) at the Queen Street Bridge. City staff will require Metrolinx to install advanced advisory signage at the nearest signalized intersection advising the pedestrians of the temporary sidewalk closure to ensure pedestrian safety.

The temporary walkways in the work zone will comply with the Accessibility for Ontarians with Disability Act (AODA) guidelines and accommodate accessible, detectable, stable and slip-resistant surfaces. Additionally, Metrolinx's contractor will provide temporary curb ramps to ensure easy access for people with mobility challenges. The temporary walkways will be well lit, protected from vehicular traffic and covered when required to protect pedestrians from falling debris or overhead hazards. The Metrolinx contractor will maintain the temporary walkways free of dust, dirt, loose material, snow, and ice.

Bicyclists

Metrolinx requires temporary periodic closures of the northbound and southbound bicycle lanes on Logan Avenue at the rail bridge for a cumulative total of six months in Ontario Line Joint Corridor - Early Works Construction and Right-of-Way Permits

three phases. Additionally, Metrolinx requires temporary closure of the eastbound and westbound bicycle lanes on Dundas Street East, between Wardell Street and Logan Avenue, from January 2023 to January 2024 and from October 2024 to April 2025 to complete the bridge works. During bicycle lane closures, Metrolinx will provide a wider travel lane (at least 3.8 metres) and install appropriate signage to direct motorists and people cycling to share the available lane.

There are currently no dedicated bicycle lanes on Queen Street East and Eastern Avenue. Therefore, people cycling will continue to share the available travel lane with the general traffic during the bridge works and detour to alternative routes during the short-term full road closures. Metrolinx will install appropriate signage for motorists and people cycling to share the road.

City staff will require Metrolinx to provide wider travel lanes in the work zone to ensure sufficient space between people cycling and the general vehicular traffic.

Metrolinx's contractor will maintain the available travel lanes and bicycle lanes free of dust, debris, ice, and construction material.

Transit Users

Currently, there is no transit service on Logan Avenue, Dundas Street East, and Eastern Avenue. Metrolinx will maintain the TTC 501 Queen streetcar service, and nearby transit stops except during the short-term full road closures. Metrolinx will work with TTC to provide information on transit detours during the short-term full road closures.

Motorists

Except for the short-term full road closures, Metrolinx will maintain at least one travel lane in each direction during construction works at the Logan Avenue, Dundas Street East, Queen Street East and Eastern Avenue Bridges. Metrolinx will install advanced advisory signage for positive guidance of motorists in the work zone. Additionally, Metrolinx will provide any traffic signal timing modifications required on the boundary road network for efficient traffic flow.

To reduce congestion on the City roads, Metrolinx and its contractor will avoid construction truck staging and idling on the city roads. Metrolinx and its contractor will develop construction truck haul routes in accordance with the Vision Zero principles including lower speed limit and forward-in and forward-out truck movements at all construction driveways with right-in and right-out manoeuvres at the construction driveways, where feasible.

Additionally, Metrolinx and its contractor will avoid construction truck haul routes near schools where feasible and restrict truck movements to outside the morning and afternoon school hours.

Rail Corridor Construction Driveways

Metrolinx and its contractor will actively manage pedestrian safety at the construction driveways by ensuring good sightlines for pedestrians and construction vehicle driveways. Additionally, Metrolinx will install temporary traffic signage warning the road users of construction vehicle ingress and egress.

Metrolinx will deploy trained traffic control persons to manage the construction vehicle movements at the construction driveways. Metrolinx will ensure forward-in and forward-out truck movements at the construction driveways.

Parking Mitigation

Metrolinx will accommodate the impacted on-street overnight permit parking and daytime parking spaces at nearby off-street facilities. Figure 6 below shows the locations of the affected parking spaces and replacement parking spaces.



Figure 6 – On-street and Private Parking Replacement

Source: Metrolinx

Metrolinx is currently exploring temporary accommodation of lost on-street permit parking spaces at 8-10 De Grassi Street. Additionally, Metrolinx is working with the City staff to temporarily accommodate up to 25 parking spaces on Dickens Street to replace impacted parking spaces on Logan Avenue.

Metrolinx will compensate Toronto Parking Authority for lost revenue of the removed daytime "Pay & Display" parking spaces. Additionally, Metrolinx will maintain two accessible parking spaces associated with Fontbonne Ministries on-site and the remaining private parking spaces at 875 Queen Street East. Metrolinx will engage with the impacted property owners regarding the loss of private parking spaces at the Logan Avenue laneway and potential mitigation.

Communication

Metrolinx will install network-level advanced advisory signage to inform road users on the road closures. In addition, Metrolinx and its contractor will provide advanced work information to the local community and businesses through the project website and information updates using traditional and digital media.

Metrolinx will organize monthly Construction Liaison Committee (CLC) meetings where project updates and advanced information on upcoming project activities, including road closures, will be provided and any stakeholder concerns will be identified and addressed. In addition, Metrolinx has established a community office for the Ontario Line project at 770 Queen Street East. This office will serve residents, businesses and other stakeholders by addressing their project-related questions or concerns in a timely manner. The community office information will be posted on the project website and at the construction sites.

Permit Requirements

Metrolinx's contractor will apply for the street occupation and access permits before undertaking any bridge works in the city road right-of-way and installation of temporary driveways at the city roads. In accordance with the Toronto Municipal Code Chapter 743, the permit application requires the contractor to pay applicable fees, provide work details (scope, location, duration, and technical drawings), traffic control plan, evidence of insurance, and any additional information required.

The City Transportation Services staff reviews the permit application, traffic control plan and supporting documents with the following guiding principles:

- Vision Zero - Safe accommodation of all road users, especially pedestrians and people cycling, in the construction zone including conformance with the Accessibility for Ontarians with Disability Act (AODA) guidelines
- Traffic signage plan in conformance with the applicable Ontario Traffic Manual Book 7 and Book 18 guidelines with clear guidance to all road users in the work zone
- Access to transit, emergency services, residences, and businesses
- Minimize impact on the on-street and permit parking spaces
- Minimize neighbourhood infiltration and implement any traffic calming measures to discourage speeding
- Minimum impact of construction operations on the road network and adjacent land uses, including construction noise impact on the nearby noise-sensitive land uses
- Minimize conflicts between pedestrians and construction vehicles specifically at the site driveways
- Haul route plan with no construction vehicles using residential streets
- Traffic signal modifications for efficient traffic flow in the area
- Coordination with other planned works in the area to minimize concurrent work on parallel routes

Upon satisfactory review of the permit application, the requested permit is issued with terms and conditions including standard permit conditions outlined in Appendix A of the Toronto Municipal Code Chapter 743 ("Use of Streets and Sidewalks") and special permit conditions specific to the site. The special permit conditions may include the following:

- Advanced construction notification to the city work zone traffic coordinator, affected residents and businesses
- Work location and specific work hours
- Road Disruption Activity Reporting System (RoDARS) notification
- Special accommodations for pedestrian and bicyclist safety including AODA requirements
- Provision of trained traffic control persons or paid duty police officers
- Enhanced traffic signage
- Time or route restrictions on construction vehicle movements
- Work zone and adjacent street network cleanliness
- Work zone lighting
- Restriction on construction crew private vehicle parking in work zones and on city roads
- Restriction on haul truck staging and idling on city roads

Before implementing the traffic control plan, City Transportation Services staff organize a site meeting with the contractor to review the plan and make any adjustments based on site conditions. Once implemented, City staff, in coordination with Metrolinx and its contractor, will monitor the installation to ensure compliance. In the event the permit holder violates the terms and conditions of the permit, the issued permit may be cancelled in accordance with authority given by Toronto Municipal Code, Chapter 743.

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SIGNATURE

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ATTACHMENTS
