TORONTO

REPORT FOR ACTION

Response to the Member Motion MM13.3 - Metrolinx Eglinton Crosstown West Extension Elevated Guideway

Date: February 12, 2024

To: Infrastructure and Environment Committee

From: General Manager, Transportation Services and Executive Director, Transit

Expansion

Wards: Ward 5 - York South - Weston

SUMMARY

In response to the Member Motion MM13.3, this report provides a comprehensive overview of the Metrolinx Eglinton Crosstown West Extension (ECWE) Elevated Guideway alignment and its setback from Eglinton Avenue West. Additionally, the report examines potential opportunities to minimize setback requirements and relocate the guideway closer to Eglinton Avenue West.

RECOMMENDATIONS

The General Manager, Transportation Services and the Executive Director, Transit Expansion recommend that:

1. Infrastructure and Environment Committee receives this report for information.

FINANCIAL IMPACT

There is no financial impact to the City. Metrolinx and the Project Co. are responsible for all costs related to the Eglinton Crosstown West Extension project, including payment of fees to the City for the occupancy of the right-of-way occupancy permits. The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council, at its meeting on December 13, 2023, adopted a member motion MM13.3 entitled "Metrolinx Eglinton Crosstown West Extension - Elevated Guideway" and requested a report on opportunities to reduce the setbacks between Eglinton Avenue

West and the Eglinton Crosstown West elevated guideway, resulting in shifting the guideway to the south, and reducing the impact to Fergy Brown Park and Pearen Park and the existing road allowance along Eglinton Avenue West.

https://secure.toronto.ca/council/agenda-item.do?item=2023.MM13.3

COMMENTS

This report responds to the motion adopted by City Council concerning the Metrolinx ECWE elevated guideway. The motion requested exploration of opportunities to reduce setbacks between Eglinton Avenue West and the elevated guideway, aiming to minimize impacts on Fergy Brown Park, Pearen Park and the existing road allowance along Eglinton Avenue West.

The proposed elevated guideway will be situated on the north side of Eglinton Avenue West, extending between the tunnel portals located east of Jane Street and west of Scarlett Road. Figure 1 below shows the alignment of the elevated guideway.

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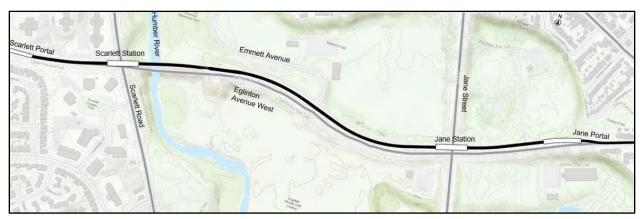


Figure 1 – ECWE Elevated Guideway

Source: Metrolinx

The alignment of the elevated guideway for the Metrolinx ECWE is a result of careful consideration and integration of numerous factors and requirements. The alignment is arranged around key anchor points of Scarlett and Jane tunnel portals, as well as the Scarlett and Jane stations. These key components provide the fixed reference points that shape the overall layout and orientation of the guideway ensuring seamless integration and connection between the future Eglinton Crosstown LRT and underground portion of the future ECWE.

The alignment is also influenced by setback requirements mandated by transportation infrastructure standards and operating practices. These specify distances between the elevated guideway and surrounding roadways, sidewalks and multi-use pathways to enhance safety, minimize disruptions and optimize the overall urban environment along Eglinton Avenue West.

Throughout the alignment optioneering process led by Metrolinx, there was a steadfast commitment to prioritize the preservation of trees and natural habitat in the Humber River Valley, Eglinton Flats, Fergy Brown Park, and Pearen Park. This guiding principle was integral in determining the placement of the elevated guideway, ensuring minimal impact on the surrounding natural area while effectively meeting transit and transportation-related requirements.

The elevated guideway structure on the west side of Jane Street undergoes a transition from a double pier configuration to a single pier configuration. The elevated guideway in a single pier configuration will be positioned 7.6 metres away from the face of the north curb on Eglinton Avenue West. This setback encompasses the following street-level elements:

- 0.4 metre wide curb buffer (reduced from the standard buffer of 1 metre)
- 2.1 metres wide softscape furnishing/planting zone between the curb and sidewalk for planting trees
- 2.1 metres wide standard sidewalk
- 3.0 metres wide clearance between sidewalk and edge of the elevated guideway structure (reduced from the standard buffer of 5 metres)

The reduction in setback requirements allows for the elevated guideway to be positioned closer to the roadway, optimizing the use of space, and reducing impacts on the trees and natural habitat. The 3.0m wide clearance between the sidewalk and edge of the elevated guideway structure is necessary to enable guideway inspections and basic maintenance to be undertaken without impacting safe pedestrian movement on the sidewalk. Furthermore, the separation ensures that during the winter months pedestrians are located outside of the envelope of any snow and ice falling from the elevated structure. The 7.6 metres setback for the single pier elevated guideway structure also satisfies the Transportation Association of Canada (TAC) specified minimum clear zone requirement of 6 metres. This clear zone serves as a roadside traversable surface space aimed at reducing the severity of collisions resulting from any errant vehicles leaving the roadway. The road right-of-way on the north side of Eglinton Avenue, west of Jane Street, extends up to 15 metres from the north curb, meaning the majority of the elevated guideway structure will sit within the existing right of way allowance. Figure 2 below shows the elevated guideway in a single-pier configuration.

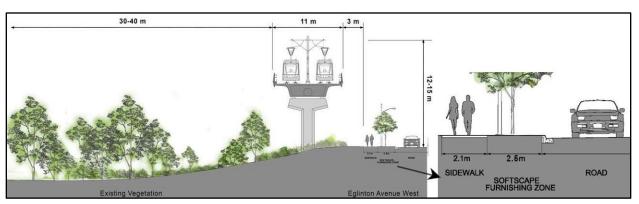


Figure 2 – Elevated Guideway Single-Pier Configuration (West of Jane Street, Near Emmett Avenue)

Source: Metrolinx

In the section of the elevated guideway stretching from west of Jane Street to approximately 170 metres east of Emmett Avenue, a double-pier configuration will be implemented to accommodate the pocket track for short turn back operations. In this segment, all setbacks prescribed for the single pier configuration will be adhered to, except for the furnishing zone, which will be widened to 4.5 metres due to the fixed alignment of the Jane Station. Figure 3 shows the elevated guideway in a double-pier configuration west of Jane Street.

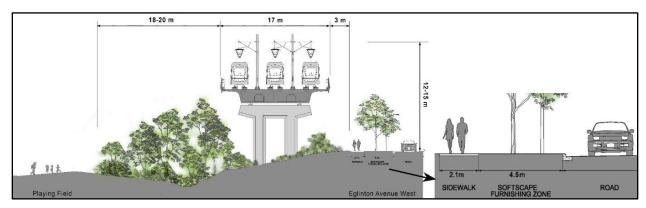


Figure 3 – Elevated Guideway Double-Pier Configuration (West of Jane Street)

Source: Metrolinx

The elevated guideway structure on the east side of Jane Street will have a double-pier configuration as shown in Figure 4 below. The guideway will be positioned 10.6 metres away from the face of the north curb on Eglinton Avenue West.

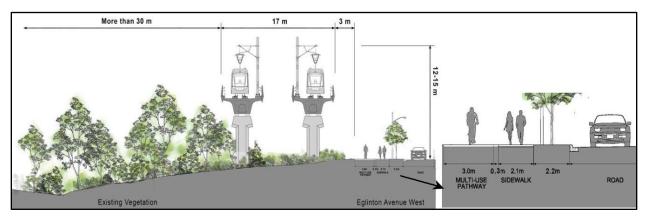


Figure 4 – Elevated Guideway Double-Pier Configuration (East of Jane Street)

Source: Metrolinx

The 10.6 metres setback encompasses the following street-level elements:

- 0.4 metre wide curb buffer (reduced from the standard buffer of 1 metre)
- 1.8 metres wide softscape furnishing/planting zone between the curb and sidewalk for planting trees
- 2.1 metres wide standard sidewalk
- 0.3 metre buffer between the sidewalk and multi-use pathway (reduced from the standard 0.6 metre) to prevent pedestrians from inadvertently crossing over to the multi-use pathway and vice versa.

- 3.0 metre wide multi-use pathway
- 3.0 metres wide clearance between multi-use pathway and edge of the elevated guideway structure (reduced from the standard buffer of 5 metres)

Consistent with the single-pier configuration, the elevated guideway is positioned as close as possible to the roadway, thereby minimizing impacts on surrounding trees and natural habitat.

Based on the comprehensive review of the setback and considerations outlined in this report, it is evident that setback reductions have already been made to optimize the placement of the guideway. The space allowances include buffer space necessary to accommodate signage, utility posts and other essential infrastructure and for separation between uses e.g., between sidewalks and multi-use pathways. Without these buffers, we risk compromising the effectiveness and safety of our roadways. Any further reduction of the setback is not feasible without compromising safety and operational efficiency.

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ATTACHMENTS