

Traffic Control Signals - Lawrence Avenue East and Danielle Moore Circle/Private Driveway

Date: May 27, 2024

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 21, Scarborough Centre

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Lawrence Avenue East, City Council approval of this report is required.

As per the conditions of approval for the development at 2740 Lawrence Avenue East, the existing midblock traffic control signals on Lawrence Avenue East, approximately 55 metres west of Marcos Boulevard, are to be removed and new traffic control signals are to be installed approximately 45 metres further west at the new intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway.

Transportation Services is in support of the new traffic control signal installation at Lawrence Avenue East and Danielle Moore Circle/Private Driveway.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway.
2. City Council authorize the removal of the existing traffic control signals at Lawrence Avenue East and a point 55 metres west of Marcos Boulevard, in conjunction with the installation of traffic control signals as set out in Recommendation 1 above.

FINANCIAL IMPACT

There are no financial implications associated with the adoption of this report as funding for the new signal and other road improvements along Lawrence Avenue East have been secured from the proponent of the development at 2740 Lawrence Avenue East. These funds were secured through the approved Zoning By-law Amendment Application No. 19 242173 ESC 21 OZ and Draft Plan of Subdivision Application No. 19 242185 ESC 21 SB.

DECISION HISTORY

Through Zoning By-law Amendment Application No. 19 242173 ESC 21 OZ and Draft Plan of Subdivision Application No. 19 242185 ESC 21 SB, the installation of a new traffic control signal was secured for the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway. In its July 14, 2021 decisions, City Council approved the development by adopting Item No's. SC25.2. City Council's decision can be found at:

<https://secure.toronto.ca/council/agenda-item.do?item=2021.SC25.2>,

COMMENTS

A townhouse complex containing 65 units is being constructed at 2740 Lawrence Avenue East. The development site is located on the north side of Lawrence Avenue East and includes a new public road, Danielle Moore Circle, not yet assumed. The new public road, Danielle Moore Circle runs in a P-loop configuration and provides site access from Lawrence Avenue East. The new development will add 107 and 120 new two-way vehicular trips to Lawrence Avenue East during the morning and the afternoon peak hours, respectively.

Danielle Moore Circle will align opposite an existing private driveway on the south side of the street that provides access to 2715 Lawrence Avenue East. Danielle Moore Circle is intended to operate with the following conditions:

- Two-lane local roadway running north-south and east-west given the "P" configuration
- Two-way traffic on a pavement width of approximately 8.5 metres
- The speed limit will be 30 km/h
- There will be no TTC service provided
- There are sidewalks located on both sides of the street

The by-laws for the parking and traffic regulations for the proposed new street are to be addressed via a subsequent report to Scarborough Community Council.

Existing Conditions

The subject segment of Lawrence Avenue is characterized by the following conditions:

- It is a seven-lane, east-west major arterial roadway
- It operates two-way traffic on a pavement width of approximately 23.5 metres
- The daily two-way traffic volume is approximately 40,000 vehicles
- The speed limit is 50 km/h
- Heavy trucks are permitted at all times
- TTC service is provided by the 54 Lawrence East Bus, 354 Lawrence East night Bus and 954 Lawrence East Express Bus
- There are sidewalks located on both sides of the street

Mid-block traffic control signal in this section of Lawrence Avenue East are located approximately 55 metres west of Marcos Boulevard. Eastbound and westbound transit stops are provided at this crossing. These mid-block signals previously aligned with the entrance to the David and Mary Thomson Collegiate Institute, which moved from Lawrence Avenue East to its current location on Brockley Drive in 2019.

The closest adjacent traffic control signals are located approximately 310 metres to the east, at Brimley Road and approximately 260 metres to the west, at Brockley Drive.

A map of the area is included in Attachment 1.

Traffic Control Signals

As part of the conditions of approval at the development review stage, new traffic control signals are to be installed at the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway.

Typically, a traffic impact study is undertaken to justify the installation of new traffic control signals. At this subject location, it was identified that the new trips generated by the proposed development on the north side located at 2740 Lawrence Avenue East in addition to the existing traffic from 2715 Lawrence Avenue East located on the south side of the street would cause significant delay for northbound and southbound motorists turning left at the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway.

The justification for the new traffic control signals is based on the following criteria:

- The new four-leg signalized intersection at Lawrence Avenue East and Danielle Moore Circle/Private Driveway will enhance an existing mid-block pedestrian signalized crossing
- The signal timings at this intersection will be coordinated with existing traffic signals along Lawrence Avenue East
- The new traffic control signals will mitigate traffic delay for northbound and southbound motorists

- The new development as well as the presence of the transit stop on the south side of Lawrence Avenue West at this intersection will generate pedestrian crossings
- Safety concerns for pedestrians who may intend to cross a seven-lane cross-section with the high traffic volume on Lawrence Avenue East

All civil work required as part of the installation of the new traffic control signals will be borne by the developer.

The TTC has been consulted and concurs with these findings. However, the TTC recommends relocating the existing eastbound shelter located approximately 74 metres east of Brockley Drive, to the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway.

Based on the aforementioned, Transportation Services is recommending the installation of new traffic control signals at the intersection of Lawrence Avenue East and Danielle Moore Circle/Private Driveway, concurrent with the removal of the existing mid-block traffic control signals located 55 metres west of Marcos Boulevard.

Other Considerations

It should be noted that the installation of the new traffic control signals will have the following additional impacts:

- There is a potential for an increase in delays to transit service on Lawrence Avenue East
- The existing midblock pedestrian crossing on Lawrence Avenue East will be removed
- The existing driveway entrance at 2715 Lawrence Avenue East will be relocated approximately 10 metres to the east and will be included as the south leg of the new intersection with Danielle Moore Circle

The Ward Councillor has been advised of the recommendations in this report.

CONTACT

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SIGNATURE

Roger Browne, M.A.Sc., P. Eng.
Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - Lawrence Avenue East and Danielle Moore Circle

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