Traffic Control Signals - Spadina Avenue and Driveway of 371 Bloor Street West

Date: June 14, 2018
To: Toronto and East York Community Council
From: Acting Director, Transportation Services, Toronto and East York District
Wards: Ward 20, Trinity-Spadina

SUMMARY

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

Transportation Services is requesting approval to install traffic control signals on Spadina Avenue, approximately 85 metres south of Bloor Street West, at the private driveway that services 371 Bloor Street West. The installation is recommended based on the need for adequate access to the site (371 Bloor Street West) while limiting traffic impacts on the local neighbourhood. Traffic control signals will enhance safety for pedestrians, cyclists and motorists accessing the site.

Additionally, approval is requested to implement roadway alterations at this location by modifying the existing traffic median in order to accommodate the traffic control signal.

RECOMMENDATIONS

The Acting Director, Transportation Services, Toronto and East York District, recommends that:

1. City Council authorize the installation of traffic control signals on Spadina Avenue, approximately 85 metres south of Bloor Street West.

2. City Council approve the roadway alteration on Spadina Avenue, approximately 85 metres south of Bloor Street West, generally as shown on Drawing No. 421G-3083 dated June 2018, attached to the report entitled "Traffic Control Signals - Spadina Avenue and Driveway of 371 Bloor Street West", from the Acting Director, Transportation Services, Toronto and East York District.
FINANCIAL IMPACT

All costs associated with the modification of the existing centre median on Spadina Avenue, any necessary relocation of city services or public utilities, any necessary road reconstruction, traffic control signals installation, pavement markings and signage installation are to be the responsibility of the local stakeholders (University of Toronto and University of Toronto Schools).

DECISION HISTORY

Toronto and East York Community Council, at its meeting on November 14, 2017, adopted Item TE28.96, requested Transportation Services to investigate the feasibility of installing a traffic control signal at the private driveway on the east side of Spadina Avenue approximately 85 metres south of Bloor Street West. The Council decision can be found at:


COMMENTS

Transportation Services, Toronto and East York District, was requested by Councillor Joe Cressy to report on the feasibility of installing traffic control signals at the driveway that services 371 Bloor Street West located on the east side of Spadina Avenue, approximately 85 metres south of Bloor Street West, to provide adequate access to this site while limiting traffic impacts on the local neighbourhood.

Background
University of Toronto Schools (UTS) is a private school which occupies a portion of an existing building located at 371 Bloor Street West. The building/site is located on the south side of Bloor Street West, between Spadina Avenue and Huron Street, and is owned and also occupied by the University of Toronto (U of T). Founded in 1910, UTS has been in operation for over a century in its current location and enrolls students from Grade 7 to Grade 12.

UTS is now planning to renovate and expand their portion of the existing building to modernize and to accommodate a new gymnasium and fitness centre, auditorium and three storeys of classroom space. The expansion represents an increase of approximately 3,400 m2 in gross floor area (GFA) on this site, as per the definition of GFA in the prevailing City of Toronto Zoning By-law 438-86, and will include building on a portion of the existing public laneway connecting to Washington Avenue. The acquisition of the public lane is being pursued by the University of Toronto.
Vehicular access to the site is currently from the T-shaped public lane and via the right-in/right-out driveway connection at the southwest corner of the surface parking lot to Spadina Avenue. Given that the portion of the public lane will be built on, thus precluding access from Washington Avenue, a number of access locations were considered as part of the pre-consultation stage of this project, and based on discussions with Councillor Joe Cressy, a fully signalized access on Spadina Avenue, at the location of the existing site access, was considered as the optimum option.

It is noted that the proposed signalized access on Spadina Avenue will require the existing building at 713 Spadina Avenue to be demolished. Heritage staff have reviewed the potential heritage value of 713 Spadina Avenue and have agreed with ERA Architects' assessment of the building's integrity and condition and the many modifications that have been made to the exterior, and have determined that the building does not have the same potential heritage value as the five properties to the immediate south of 713 Spadina Avenue. As a result, the proposed signalized access driveway location will not be impeded by the building.

Existing Conditions
Spadina Avenue, between Bloor Street West and Washington Avenue, is a major arterial road that operates with two lanes in each direction. There is a centre median which divides Spadina Avenue approximately 50 metres south of Bloor Street West. This section of Spadina Avenue has a daily traffic volume of about 18,250 vehicles and a posted speed limit of 40 km/h. Transit service on Spadina Avenue is provided by the "510 Spadina" streetcar.

Traffic control signals on this section of Spadina Avenue are located about 85 metres to the north at Bloor Street West and about 148 metres to the south at Sussex Avenue, from the proposed traffic control signal.

Collision Review
Collision statistics provided by Toronto Police Service for the three-year period ending December 31, 2017 disclosed that four collisions had occurred mid-block on Spadina Avenue, between Bloor Street West and Washington Avenue. Of these four collisions, none were preventable by the installation of traffic control signals.

Analysis
On January 18, 2018, traffic studies were undertaken by Spectrum Traffic Data Inc. on behalf of BA Group. The 8-hour vehicular traffic utilized in the analysis was based on existing peak 8-hour survey data collected at the adjacent intersection of Bloor Street West and Spadina Avenue. Forecasts of 8-hour site traffic have been estimated based on applying the observed hourly variation of residential traffic from comparable developments located within a similar transportation context in the City of Toronto. Based on the 8-hour vehicular and pedestrian traffic counts projected for this intersection, and the collision history, the technical justifications for the installation of traffic control signals are satisfied to the following extent:
To meet the technical requirements for the installation of traffic control signals, one of the Minimum Vehicular Volume or Delay to Cross Traffic justifications must be 100 percent satisfied, or any two of the three justifications must be at least 80 percent satisfied. Based on the above results, the installation of traffic controls signals is not justified.

However, despite the fact that signalization of this intersection is not technically warranted, in view of the numerous pedestrian generators in the area, Transportation Services further considered the installation of traffic control signals located on Spadina Avenue, approximately 85 metres south of Bloor Street West (at the driveway that services 371 Bloor Street West) for the following reasons:

- There are generators in the immediate area, including schools, community centre (Miles Nadal Jewish Community Centre), playgrounds and seniors' homes, that will also attract vulnerable pedestrian types to cross Spadina Avenue. This community centre offers a wide range of programs and summer camps; and

- The proposed traffic control signal on Spadina Avenue will provide direct access to/from the site at 371 Bloor Street West, and limit traffic impacts/infiltration on the local neighbourhood. This installation will also allow for safe and efficient vehicular access to the site by permitting all movements from all directions.

Considering the above, Transportation Services is recommending the installation of traffic control signals on Spadina Avenue, approximately 85 metres south of Bloor Street West (at the driveway that services 371 Bloor Street West) to enhance safety for pedestrians, motorists and cyclists under existing and future conditions.
Councillor Joe Cressy has been advised of the recommendations of this staff report.

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SIGNATURE

Dave Twaddle, C.E.T.  
Acting Director, Transportation Services  
Toronto and East York District

ATTACHMENTS

1. Drawing No. 421G-2924, dated April 2018  
2. Drawing No. 421G-3083, dated June 2018

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SPADINA AVE: BLOOR ST W TO WASHINGTON AVE
PROPOSED TRAFFIC CONTROL SIGNAL

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DWG. NO. 421G-3083 JUNE 2018 TRANSPORTATION SERVICES TORONTO & EAST YORK DISTRICT