

Turn Prohibitions - Avenue Road at Briar Hill Avenue

Date: October 23, 2017

To: North York Community Council

From: Acting Director, Transportation Services, North York District

Wards: Ward 16 - Eglinton-Lawrence

SUMMARY

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

In response to concerns raised by area residents, Transportation Services reviewed the safety of the intersection of Avenue Road and Briar Hill Avenue. Although traffic control signals would not be appropriate due to the close proximity of adjacent signals located to the north and south on Avenue Road, a pattern of collisions has been identified involving eastbound and westbound vehicles exiting or crossing Avenue Road. Therefore, approval is requested to prohibit eastbound and westbound through and left-turn movements at the intersection of Avenue Road and Briar Hill Avenue at all times.

The proposed prohibitions will address the safety concerns for eastbound and westbound through and left-turning movements at the intersection of Avenue Road and Briar Hill Avenue but may result in increased traffic volumes on the adjacent residential streets.

RECOMMENDATIONS

The Acting Director, Transportation Services, North York District recommends that:

1. City Council prohibit eastbound through movements at all times at Avenue Road and Briar Hill Avenue.
2. City Council prohibit eastbound left turns at all times at Avenue Road and Briar Hill Avenue.
3. City Council prohibit westbound through movements at all times at Avenue Road and Briar Hill Avenue.

4. City Council prohibit westbound left turns at all times at Avenue Road and Briar Hill Avenue.

FINANCIAL IMPACT

All costs associated with the installation of the proposed turn prohibitions are included within the Transportation Services 2017 Operating Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by Councillor Christin Carmichael Greb, on behalf of area residents, to conduct a safety review at the intersection of Avenue Road and Briar Hill Avenue. This request was based on the residents' concerns with collision patterns involving eastbound and westbound through and left-turning motorists attempting to cross/enter Avenue Road.

Avenue Road is a four-lane major arterial street with a daily two-way traffic volume of approximately 42,000 vehicles. City Council, at its meeting on October 2, 2017, designated Avenue Road, between Lawrence Avenue West and Eglinton Avenue West, as a "Pedestrian Safety Corridor", which includes a posted speed limit of 40 km/h (Item NY24.19). TTC service in this section of Avenue Road is provided by the 6 Avenue and 142 Downtown/Avenue Rd bus routes; however, no transit stops are located at the intersection with Briar Hill Avenue.

Briar Hill Avenue is a two-lane local street that intersects Avenue Road in a stop controlled intersection. Traffic control signals are located on Avenue Road approximately 90 metres to the north, at Hillhurst Boulevard, and approximately 90 metres to the south, at St. Clements Avenue. Briar Hill Avenue, west of Avenue Road, has a posted speed limit of 40 km/h. Briar Hill Avenue, east of Avenue Road, has a posted speed limit of 30 km/h, as traffic calming measures (speed humps) have been installed.

A review of the sight lines at this intersection has revealed that motorist and pedestrian visibility is clear for the eastbound approach. However, sight lines are obstructed for motorists travelling westbound on Briar Hill Avenue, due to a fence obstruction on the southwest corner. Previous mitigating measures have been undertaken at this property; however, the reports of poor sight lines have persisted. The eastbound and westbound stop signs are clearly visible and crosswalks are provided for pedestrians crossing Briar Hill Avenue at Avenue Road.

Transportation Services review of the Toronto Police Service collision records revealed that over a five-year period ending August 31, 2017, there were a total of 31 collisions reported at the intersection of Avenue Road and Briar Hill Avenue. Further review of these 31 collisions disclosed the following collision types:

Table 1: Avenue Road at Briar Hill Collision Data

Direction		Type of Collision			
Vehicle 1	Vehicle 2	Angle	Rear-end	Sideswipe	Turning Movement
Westbound	Southbound	6			
Eastbound	Southbound	5			
Eastbound	Northbound	4			
Westbound	Northbound	3			
Northbound (right-turn)	Southbound (through)				1
Southbound (left-turn)	Northbound (through)				1
Eastbound (right-turn)	Southbound (through)				1
Southbound	Southbound		2		
Southbound	Southbound			2	
Northbound	Northbound		3		
Northbound	Northbound			2	
Eastbound	Eastbound		1		
Total		18	6	4	3

There were no collisions involving pedestrians or cyclists at the intersection of Avenue Road and Briar Hill Avenue. Further review of the 18 angle collisions between motorists on Briar Hill Avenue and Avenue Road disclosed that these collisions occurred at all times of day/days of week, although many occurred during the weekday peak periods.

Transportation Services investigated the feasibility of introducing eastbound and westbound turn prohibitions at the intersection of Avenue Road and Briar Hill Avenue.

A review of the turning movement count, dated October 18, 2016, has indicated that the eastbound and westbound left-turn and through movements are relatively low, as illustrated in the following table:

Table 2: Avenue Road at Briar Hill Avenue Turning Movement Counts

Time period	Direction	Left-turn movements	Through movements	Right-turn movements
A. M. Peak (two hours)	Eastbound	7	56	211
	Westbound	22	33	79
P.M. Peak (two hours)	Eastbound	10	29	62
	Westbound	12	56	68
Eight-hour Total	Eastbound	45	137	402
	Westbound	66	158	260

If the eastbound and westbound left-turn and through movements are prohibited, it should be expected that these 182 and 224 vehicles, respectively, over the busiest eight-hour period would be displaced to adjacent intersections. Given the network of the roadways in this area, it is anticipated that this traffic will utilize either St. Clements Avenue or Hillhurst Boulevard at Avenue Road, which are currently controlled by traffic control signals. Given the relatively low volumes, there should be minimal impact on these streets. Both of these intersections are part of the adaptive control system along Avenue Road. As such the signal operation at each of the intersections will be adjusted automatically to reflect any increased demand from traffic diverted from the intersection of Avenue Road and Briar Hill Avenue.

The installation of eastbound and westbound through and left-turn prohibitions, at all times at the intersection of Avenue Road and Briar Hill Avenue will reduce the number of vehicle conflicts and thus reduce the collision hazard.

The Ward Councillor is aware of the recommendations in this staff report.

CONTACT

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SIGNATURE

Peter K. Hillier
Acting Director

ATTACHMENTS

Attachment 1: Map - Turn Prohibitions - Avenue Road at Briar Hill Avenue