

All-Way Stop Control - Brooklawn Avenue and Barkdene Hills

Date: June 14, 2022

To: Scarborough Community Council

From: Director, Traffic Management, Transportation Services

Wards: Ward 20, Scarborough Southwest

SUMMARY

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

Transportation Services has reviewed the need for all-way stop control at the intersection of Brooklawn Avenue and Barkdene Hills. Based on the assessment undertaken, Transportation Services does not recommend the installation of all-way stop control at this intersection as the warrant criteria was not met.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council not authorize all-way compulsory stop control at the intersection of Brooklawn Avenue and Barkdene Hills.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendation in this report.

If Scarborough Community Council amends the recommendation in this report and authorizes the installation of all-way stop control, the estimated cost associated with the amendment is \$800.00. Funding would be subject to availability and competing priorities within the Transportation Services 2022 Operating and Capital Budgets.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

At the request of the Ward Councillor on behalf of a resident, Transportation Services investigated the feasibility of installing all-way stop control at the intersection of Brooklawn Avenue and Barkdene Hills.

Existing Conditions

Brooklawn Avenue is characterized by the following conditions:

- It is a two-lane, north-south, local roadway south of Barkdene Hills, and collector road north of Barkdene Hills
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume, south of Barkdene Hills, is approximately 300 vehicles
- The speed limit is 40 km/h, however the speed limit south of Barkdene Hills will be lowered to 30 km/h tentatively late 2022/2023 as part of Ward 20 Vision Zero Road Safety Plan
- Heavy trucks are prohibited at all times
- There is TTC service provided by the 12C bus
- There are sidewalks located on the west side of Brooklawn Avenue, north of Barkdene Hills, and none south thereof

Barkdene Hills is characterized by the following conditions:

- It is a two-lane, east-west collector roadway
- It operates two-way traffic on a pavement width of approximately 9 metres
- The daily two-way traffic volume is approximately 800 vehicles
- The speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- There is TTC service provided by the 12C bus
- There are sidewalks located on the north side of Barkdene Hills, between Brooklawn Avenue and Thatcher Avenue

These two streets intersect to form a T-type intersection, with right-of-way controlled by a stop sign for eastbound traffic on Barkdene Hills.

The surrounding land use mainly consists of single-family residential homes. There are near-side transit stops provided on the southbound and eastbound intersection approaches

A map of the area is included in Attachment 1.

Study Results

In order for all-way stop control to be warranted at an intersection, established criteria must be satisfied. The warrants consist of four components, including, collision history, total vehicle volume, combined vehicle and pedestrian volumes crossing the major road and the percentage of traffic on the major road.

Collision history provided by the Toronto Police Service for the three-year period ending March 31, 2022, disclosed that there were no reported collisions at this intersection.

Transportation Services conducted an all-way stop control study on November 17, 2021 at the subject intersection. The results of the study were evaluated against the warrant criteria for all-way stop control as adopted by City Council. The evaluation is summarized in Table 1.

Table 1: All-Way Stop Control Study at Brooklawn Avenue and Barkdene Hills

No.	Warrant Type	Actual	Required	Satisfied (Yes/No)
A	Number of Potentially Preventable Collisions (March 2019 to March 2022)	0	6	No
B1	Average Vehicle Volumes	118 /hour	250 /hour	No
B2	Combined Vehicle & Pedestrian Volumes Crossing Major Road (Average)	92 /hour	100 /hour	No
B3	Percentage of Traffic on Major Street	45%	≤70%	Yes

In order for the all-way stop control to be technically warranted, either Warrant A must be met or Warrant B1 or B2 combined with Warrant B3 must be achieved. Based on the study results, the technical warrants for the installation of all-way stop control are not satisfied. Therefore, it is not recommended that all-way stop control be installed at the intersection of Brooklawn Avenue and Barkdene Hills.

The Ward Councillor has been advised of the recommendation of this staff report.

CONTACT

Dan Clement, CET, Manager Traffic Operations (Area 1), Transportation Services, 416-397-5021, Dan.Clement@toronto.ca

SIGNATURE

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

ATTACHMENTS

Attachment 1: Map - All-Way Stop Control - Brooklawn Avenue and Barkdene Hills

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