



STAFF REPORT ACTION REQUIRED

Stop Control – Prince Rupert Avenue and Chelsea Avenue

Date:	August 29, 2016
To:	Toronto and East York Community Council
From:	Acting Director, Transportation Services, Toronto and East York District
Wards:	Parkdale-High Park, Ward 14
Reference Number:	Ts2016173te.top.doc

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City policy or by-laws.

Transportation Services is requesting approval to install a stop control on Prince Rupert Avenue at Chelsea Avenue to enhance operational safety and prevent right-of-way conflicts from occurring at this intersection.

RECOMMENDATIONS

Transportation Services, Toronto and East York District recommends that Toronto and East York Community Council:

1. Approve the installation of a stop control on Prince Rupert Avenue at Chelsea Avenue.

Financial Impact

All costs associated with the necessary signage installation are included within Transportation Services 2016 Operating Budget.

ISSUE BACKGROUND

Transportation Services was requested by residents to investigate the feasibility of installing an all-way stop control at the intersection of Prince Rupert Avenue and Chelsea Avenue to enhance safety for pedestrians and motorists.

COMMENTS

Existing Conditions

Chelsea Avenue and Prince Rupert Avenue intersect in a 'T'-type intersection. It is an uncontrolled intersection, as there are no traffic control devices assigning the right-of-way.

Chelsea Avenue is a local roadway operating one-way westbound between a point 33.5 metres west of Dundas Street West and Dorval Road, with a daily traffic volume of about 800 vehicles. It has a width of about 7.3 metres, a posted speed limit of 30 km/h and heavy trucks are prohibited at all times.

Prince Rupert Avenue is a local roadway, with a daily two-way traffic volume is about 70 vehicles. It generally has a width of about 7.3 metres, a posted speed limit of 30 km/h and heavy trucks are prohibited at all times.

There is no TTC service provided at this intersection. Sidewalks are located on both sides of these roads. The land use in the vicinity is generally residential.

Analysis

All-way Stop Sign Control Warrant Analysis

Collision statistics provided by the Toronto Police Service for the three-year period ending December 31, 2015, disclosed that no collisions had occurred at the intersection of Chelsea Avenue and Prince Rupert Avenue.

In order for an all-way stop control to be justified at an intersection, established warrant criteria must be satisfied. The criteria, as adopted by City Council, include factors such as collision history, total vehicle volume, combined vehicle and pedestrian volumes crossing the major road and the percentage of traffic on the major road.

Transportation Services evaluated the intersection of Chelsea Avenue and Prince Rupert Avenue and applied the results of the vehicle and pedestrian study and the collision records of the Toronto Police Service to the all-way stop control criteria. Based on the review, this intersection does not meet the minimum criteria required for an all-way stop control.

The results of the all-way stop control warrant study at the intersection of Chelsea Avenue and Prince Rupert Avenue have been summarized in the following table:

Minimum Vehicle Volume (Each of Four Peak Hours)	Combined Crossing Volume (Vehicles & Pedestrians)	Main Street/Side-Street Volume	Collision Hazard	All-Way Stop Warrants Satisfied (Yes/No)
Required: 250 Vehicles/Hour Actual: 53 Vehicles/Hour	Required: 100 Units/Hour Actual: 17 Units/Hour	Required: (< 70% / 30%) 75% / 25%	Required: (≥ 2 /yr.) 0.0	No

Based on the above review, the technical warrants for the installation of all-way stop control at the intersection of Chelsea Avenue and Prince Rupert Avenue are not satisfied and the installation of an all-way stop control at this intersection cannot be supported at this time.

Stop Sign Control Warrant Analysis

The predominant traffic flow at this intersection is the westbound straight through movement on Chelsea Avenue. Under the current right-of-way rule, the driver of the vehicle on the left must yield the right-of-way to the driver of the vehicle on the right.

As per Provincial guidelines, stop sign control may be warranted where three or more right angle or turning collisions per year have occurred over a period of three years and other methods of reducing the collision experience have considered and found to be inadequate. As noted above, Toronto Police Service records over three-year period (2013- 2015) disclosed that no collisions have been reported at this intersection. Accordingly, the "Stop" sign control is not warranted at this intersection.

Notwithstanding, the provincial guidelines state that "the use of stop signs should be considered at intersections where the application of the normal right hand rule or yield control would be unduly hazardous". Based on the current operational environment, the installation of a southbound stop sign on Prince Rupert Avenue at Chelsea Avenue is recommended to resolve any potential right-of-way confusion that may occur. The installation of stop sign control on Prince Rupert Avenue can be supported to enhance operational safety and prevent right-of-way conflicts from occurring.

Councillor Gord Perks has been advised of the recommendations of this staff report.

CONTACT

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SIGNATURE

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

LIST OF ATTACHMENTS

1. Drawing No. 421G-2241, dated August 2016

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