

All-Way Stop Controls: St. Charles Catholic Elementary School Community

Date:	April 7, 2016			
То:	North York Community Council			
From:	Director, Transportation Services Division, North York District			
Wards:	Ward 15 – Eglinton - Lawrence			
Reference Number:	p:/2016/ClusterB/TRA/NorthYork/ny16050			

SUMMARY

This staff report is about a matter for which 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 has reviewed the intersections of Corona Street/Cork Avenue, Corona Street/Claver Avenue, Bolingbroke Road/Cork Avenue and Bolingbroke Road/Claver Avenue. These four intersections surround the block on which St. Charles Catholic Elementary School is situated.

All-way stop controls are warranted at the intersection of Corona Street and Claver Avenue. The installation of the all-way stop control at this location should reduce the pedestrian and vehicular right-of-way conflicts. The vehicular and pedestrian volumes are insufficient to justify all-way stop control at the remaining three intersections studied.

RECOMMENDATIONS

Transportation Services recommends that North York Community Council:

1. Authorize an all-way compulsory stop control at the intersection of Corona Street and Claver Avenue.

- 2. Deny the installation of an all-way compulsory stop control at the intersection of Corona Street and Cork Avenue.
- 3. Deny the installation of an all-way compulsory stop control at the intersection of Bolingbroke Road and Cork Avenue.
- 4. Deny the installation of an all-way stop signs at the intersection of Bolingbroke Road and Claver Avenue.

Financial Impact

All costs associated with the installation of the stop control are included within the Transportation Services 2016 Operating Budget.

ISSUE BACKGROUND

Transportation Services, was requested by the Ward Councillor, on behalf of area residents, to review the feasibility of installing all-way stop controls at the following intersections:

- Corona Street at Cork Avenue
- Corona Street at Claver Avenue
- Bolingbroke Road at Cork Avenue
- Bolingbroke Road at Claver Avenue

The residents have indicated that they have had a long standing concern with regards to pedestrian safety and the lack of all-way stop controls within this community.

COMMENTS

All of the roadways surrounding St. Charles Catholic Elementary School are classified as local roadways and are posted at 40 km/h. Bolingbroke Road and Corona Street operate in a north and south direction and Cork Avenue and Claver Avenue operate in an east and west direction. The north/south roadways operate as free flow from Lawrence Avenue West to Wenderly Drive. Currently municipal sidewalks are located on all approaches to the school providing the essential infrastructure to promote walking to school.

This community is located within the southeast quadrant of Dufferin Street and Lawrence Avenue West. Direct access to the greater community can only be achieved at three locations along Dufferin Street and two along Lawrence Avenue West. In order to minimize traffic infiltration within this community turns are prohibited by time of day at the intersections of Lawrence Avenue West with Bolingbroke Road and Corona Street, and through traffic is prohibited on Wenderly Avenue at Dufferin Street. Although the above-noted traffic restrictions were introduced to discourage transient traffic through the community, residents believe existing traffic volumes remain excessive and compromise the safety of the community.

In order to assess the feasibility of installing all-way stop controls, we reviewed existing traffic conditions at the intersections of Corona Street/Cork Avenue, Corona Street/Claver Avenue, Bolingbroke Road/Cork Avenue and Bolingbroke Road/Claver Avenue.

The warrants for the installation of an all-way stop control consist of four components; collision hazard, total vehicular volume, combined vehicular and pedestrian volumes crossing the major roadway and vehicle volume split. The results of the most recent studies conducted this year are as follows:

	Corona Street at Cork Avenue (eastbound/westbound on Cork Ave is stop controlled)	Actual Value	Required	Satisfied (YES/NO)
Α	Collision History	1/3yrs	6/3yrs	NO
B1	Total Vehicle Volumes	189	250	NO
B2	Combined Veh. & Ped. Volumes crossing major road	77	100	NO
B3	Percentage of traffic on major road	60	<70	YES
_	Overall Warrant			NO
	Corona Street at Claver Avenue (eastbound/westbound on Claver Ave is stop controlled)	Actual Value	Required	Satisfied (YES/NO)
Α	Collision History	6/3 yrs	6/3yrs	YES
B1	Total Vehicle Volumes	194	250	NO
B2	Combined Veh. & Ped. Volumes crossing major road	116	100	YES
B3	Percentage of traffic on major road	42	≤70	YES
	Overall Warrant			YES
	Bolingbroke Road at Cork Avenue (eastbound/westbound on Cork Ave is stop controlled)	Actual Value	Required	Satisfied (YES/NO)
Α	Collision History	2/3yrs	6/3yrs	NO
B1	Total Vehicle Volumes	129	250	NO
B2	Combined Veh. & Ped. Volumes crossing major road	43	100	NO
B3	Percentage of traffic on major road	68	≤70	YES
	Overall Warrant			NO
	Bolingbroke Road at Claver Avenue (November 2014 Study) Eastbound/westbound on Claver Ave is stop controlled)	Actual Value	Required	Satisfied (YES/NO)
Α	Collision History	0/3yrs	6/3yrs	NO
B1	Total Vehicle Volumes	181	250	NO
B2	Combined Veh. & Ped. Volumes crossing major road	50	100	NO
B3	Percentage of traffic on major road	73	≤70	NO
	Overall Warrant		i	NO

In order for an all-way stop to be warranted either Warrant A must be met or Warrant B1 or Warrant B2 combined with Warrant B3 must be achieved.

The vehicular volumes and collision record are sufficient to satisfy the warrants for allway stop control at the intersection of Corona Street and Claver Avenue. There have been two collisions per year for the past three years at this intersection, and the volume of traffic on Claver Avenue has increased since previous studies at this location. This particular intersection is located adjacent to the main entrance to the building and it was observed that the majority of pedestrian traffic and drop-off and pick-up activities are focussed there.

The remaining three intersections studied did not have sufficient pedestrian and vehicular traffic to warrant all-way stop control. Attached, for the Community Councils review is a table illustrating the results of all of the previous studies that have been done in the past ten years. As can be seen from the attached table the results of the studies have concluded that the traffic patterns within this community have remained constant over the years.

A review of the physical geometry of each of the intersections has indicated that they are typical four legged intersections and the sight lines for all motorists and pedestrians were found to be unobstructed.

All-way stop control is primarily intended to alternate the right of way between competing flows of traffic and/or pedestrians. Stop signs are not effective in reducing vehicle speeds and, as such, should not be installed unless warranted. The installation of unwarranted stop controls may lead to a high level of non-compliance, which may result in an increase in the number of collisions and the reduction in the level of safety for motorists and pedestrians.

In summary, all-way stop control is warranted at the intersection of Corona Street and Claver Avenue, and should be installed to improve the intersection operation and the environment for pedestrians. The installation of an all-way stop control cannot be justified at the intersections of Corona Street at Cork Avenue, Bolingbroke Road at Cork Avenue, or Bolingbroke Road at Claver Avenue.

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

CONTACT

Shawn Dillon Manager, Traffic Operations Transportation Services Division, North York District Tel: 416-395-7463 Fax: 416-395-7544 Email: <u>sdillon2@toronto.ca</u>

SIGNATURE

Jacqueline White, P. Eng. Director

ATTACHMENTS

Att 1: Map - All-Way Stop Control: St. Charles Catholic School Community

Att 2: Table - Historical Study Results: St. Charles Catholic School Community