



STAFF REPORT ACTION REQUIRED

Carlingview Drive Northbound at Attwell Drive - Proposed Exclusive Right Turn Lane

Date:	December 18, 2006
To:	Etobicoke York Community Council
From:	Director, Transportation Services, Etobicoke York District
Wards:	Ward 2 – Etobicoke North
Reference Number:	eycc070008-to, eycc070008-to-att1

SUMMARY

The purpose of this report is to obtain approval for the installation of an exclusive right turn lane northbound on Carlingview Drive at Attwell Drive.

The designation of the northbound curb lane as an exclusive right turn lane is recommended to improve traffic movements on Carlingview Drive at Attwell Drive.

RECOMMENDATIONS

Transportation Services recommends that:

1. The northbound curb lane on Carlingview Drive at Attwell Drive be designated for right turning vehicles only, from Attwell Drive to a point 30.5 metres southerly thereof; including installation of appropriate signs and pavement markings.

Financial Impact

Type of Funding	Source of Funds	Amount
Available within current budget	Transportation Services Operating Budget	\$600.00

ISSUE BACKGROUND

At the request of Councillor Rob Ford, Ward 2, Etobicoke North, on behalf of an area business, Transportation Services staff investigated operational concerns at the intersection of Carlingview Drive and Atwell Drive. The specific concern was with utilization of the northbound lanes on Carlingview Drive and incidents where cars are passing to the inside (right of) trucks who swing wide when making right turns into Attwell Drive. Staff investigated the existing lane designations and also, at the request of the area business, the feasibility of installing an all-way stop at the intersection of Carlingview Drive and Attwell Drive. A map of the area is Attachment No. 1.

COMMENTS

Carlingview Drive is classified as a minor arterial road, and Atwell Drive is classified as a local road in the industrial area between Highway No. 27 and Highway No. 427, north of Highway No. 409. The intersection is controlled by stop signs on Attwell Drive.

On Carlingview Drive, south of Attwell Drive, there is a four lane cross section (two lanes in each direction) with the northbound lane closest to the centre line marked with pavement arrows as a left turn lane. Therefore, the lane closest to the curb is intended for through and right turn movements. The road narrows to a two lane cross-section (one lane in each direction) north of Attwell Drive.

One of the concerns expressed at the aforementioned meeting was with motorists in the northbound curb lane proceeding to the right of (inside of) trucks attempting to turn right onto Attwell Drive. Our review of the collision history over a three year period, January 1, 2003 to December 31, 2005 reveals four collisions at this intersection. One incident in 2005 occurred as a result of this movement. No other collision patterns were observed.

Although the northbound lane closest to the centre line is exclusively for northbound left turning traffic, 40 percent of northbound traffic used this lane to proceed straight through this intersection. During our study we also noticed that most of the northbound right turns are by trucks, and while making a right turn, most of these trucks “swing wide” and either partially or fully use the northbound left turn lane.

Lane Utilization studies conducted at this intersection producing the following results:

Carlingview Drive at Atwell Drive

Date: August 24, 2006

Time: 7:00 a.m. to 9:00 a.m., 4:00 p.m. to 6:00 p.m.

Movement	Volume	Percentage
Through from centre lane	287	40 % *
Through from curb lane	430	60 %

* Lane marked for left turns only

Based on our observations of traffic movements and our review of the intersection design, we are recommending that the northbound right turn lane be designated

exclusively for right turning traffic. The northbound lane closest to the centre line will, by default, be used by northbound left turns and through traffic. Not only will this clearly designate the movements at this intersection but will also provide for better alignment with the lanes to the north of Attwell Drive and discourage through motorists from passing to the right of trucks making wide northbound right turns to Attwell Drive.

In addition to the lane utilization study, we also conducted a four hour turning movement count at this intersection. Application of study data to the All-Way Stop Control Warrant reveals that the requirements for the installation of an all-way stop control are not achieved at the intersection of Carlingview Drive and Attwell Drive at this time. The results are presented in Appendix A.

CONTACT

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SIGNATURE

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ATTACHMENTS

Appendix A

Attachment No. 1: Map

APPENDIX A

Four-Hours Study Period *	Total Approach Vehicle Volume	Vehicle/Pedestrian Volume Crossing Major Road	Unit Volume Split Major/Minor Roads
Study Period Average	432	106	75/25
Warrant Requirements For Study Period Average	≥ 500	≥ 200	≤ 70/30

*Considering the peak four hours did not warrant an all-way stop, a full eight hour study was not necessary.

To warrant the installation of an all-way stop control, the traffic volume requirements for the “Study Period Average” must be completely satisfied in either of the following two combinations of the above three categories:

- a. “Total Approach Vehicle Volume” and “Unit Volume Split – Major/Minor Road”
- or
- b. “Vehicle/Pedestrian Volume Crossing Major Road” and “Unit Volume Split - Major/Minor Roads”

These two warrant criteria are not achieved.