

STAFF REPORT ACTION REQUIRED

Appropriateness of the Eastbound "Stop" Sign – Oxton Avenue at Oriole Parkway

Date:	October 22, 2009
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	St. Paul's, Ward 22
Reference Number:	Ts09189te.top.doc

SUMMARY

Transportation Services has reviewed the impact that the installation of an eastbound "Stop" sign on Oxton Avenue at Oriole Parkway, in conjunction with several other traffic regulations implemented in this area, has had on traffic flow in the Avenue Road/Oxton Avenue/Oriole Parkway arterial corridor. The presence of the "Stop" sign disrupts the eastbound-to-southbound arterial traffic flow and somewhat negates the improvements in traffic flow that resulted following reconstruction of this intersection in 2002. However, this "Stop" sign provides a measure of safety for pedestrians crossing at the west side of the Oxton Avenue/Oriole Parkway intersection that would not exist in a free-flow environment.

Removal of the eastbound "Stop" sign on Oxton Avenue at Oriole Parkway would enhance vehicular traffic operation but providing a safe crossing environment for pedestrians is the more advisable alternative. Staff recommends retaining the eastbound "Stop" sign on Oxton Avenue at Oriole Parkway.

RECOMMENDATIONS

Transportation Services recommends that City Council:

1. Retain the compulsory stop regulation for eastbound traffic on Oxton Avenue at Oriole Parkway.

Financial Impact

There is no financial impact associated with the receipt of this report. However, if Toronto and East York Community Council recommends removal of the "Stop" sign, the

estimated following costs will be incurred to remove the sign and modify the pavement markings at the intersection.

Type of Funding	Source of Funds	Amount
Available within current budget	Transportation Services 2009 Operating Budget	\$1000.00

ISSUE BACKGROUND

Toronto and East York Community Council at its meeting of October 13, 2009 gave consideration to a staff report dated August 25, 2009 entitled, "Effectiveness and Impact of Turn Prohibitions – Avenue Road, between Hillholm Road and Kilbarry Avenue", (Item TE28.30), received this report for information and requested the Director, Transportation Services, Toronto and East York District, to review the appropriateness of the southbound "Stop" sign (technically the eastbound "Stop" sign) on Oxton Avenue at Oriole Parkway, and report to the November 10, 2009 meeting of Toronto and East York Community Council on this matter.

COMMENTS

Intersection characteristics

Oxton Avenue intersects Oriole Parkway on a slightly skewed angle. A "Stop" sign is posted for eastbound traffic on Oxton Avenue at Oriole Parkway. Oxton Avenue is classified as a major arterial road carrying a two-way traffic volume of about 20,000 vehicles a day. TTC service is provided by the 142-Downtown/Avenue Road express bus.

Oriole Parkway also is classified as a major arterial road. Oriole Parkway, south of Oxton Avenue consists of four lanes for through traffic and carries a two-way traffic volume of about 49,000 vehicles a day. Oriole Parkway north of Oxton Avenue has two lanes for through traffic and carries a two-way traffic volume of about 29,000 vehicles a day. TTC service is provided by the 5-Avenue Road bus and the 142-Downtown/Avenue Road express bus (south of the intersection). About 80 pedestrians cross Oxton Avenue at the west side of Oriole Parkway during the peak eight hours on a typical weekday.

With the discontinuation of Avenue Road at the Upper Canada College campus (three blocks south of Oxton Avenue), Avenue Road/Oxton Avenue/Oriole Parkway forms the main north/south arterial road link in this area of the City.

Operational background

Several regulatory and physical enhancements have been made in this area over the past 10 years to try and discourage traffic infiltration of adjacent local neighbourhoods, while enhancing pedestrian safety and traffic operation.

 December 14, 15 and 16, 1999 – City Council adopted Clause No. 50 of Report No. 15 of the Toronto Community Council, authorizing the realignment of the intersection of Avenue Road and Oxton Avenue to, in part, encourage the traffic using Avenue Road, north of Oxton Avenue, to stay on the Avenue Road/Oxton Avenue/Oriole Parkway arterial road link, rather than infiltrate through the residential community to the south and west

- October 1, 2 and 3, 2002 City Council adopted Clause No. 5 of Report No. 7 of the Midtown Community Council, authorizing the installation of a pedestrian crossover (PXO) on Avenue Road, south of Hillholm Road to provide crossing protection for pedestrians crossing Avenue Road, in the vicinity of Oxton Avenue and at a point south of the arterial road link.
- November 26, 27 and 28, 2002 City Council adopted Clause No. 22 of Report No. 9 of the Midtown Community Council approving, in part, the reconfiguration of the Oriole Parkway and Oxton Avenue intersection, to allow for an eastbound to southbound "free-flow" operation to further enhance traffic flow. The reconstruction of this intersection was completed in late 2002. At that time, the "Stop" sign that had existed for eastbound right-turning motorists at Oxton Avenue and Oriole Parkway was replaced with a "Yield" sign.
- April 14, 15 and 16, 2003 City Council adopted Clause No. 18 of Report No. 3
 of the Midtown Community Council approving the installation of a pedestrian
 crossover (PXO) on Oxton Avenue at Highbourne Road to provide crossing
 protection for pedestrians crossing Oxton Avenue, in the vicinity of Oriole
 Parkway.
- February 1, 2 and 3, 2005 City Council adopted Clause No. 56 of Report No. 1 of the Toronto and East York Community Council approving the removal of the "Yield" sign for eastbound right-turning motorists on Oxton Avenue at Oriole Parkway due to ongoing operational delays and to enhance "free-flow" operation.
- September 25, 26 and 27, 2006 City Council adopted Clause No. 21 of Report No. 8 of the Toronto and East York Community Council approving the installation of a "Stop" sign for eastbound traffic on Oxton Avenue at Oriole Parkway as a means of enhancing crossing safety for pedestrians at the west side of the intersection.
- April 8, 2008 Toronto and East York Community Council in considering Item TE14.45 directed that right-turns by southbound traffic be prohibited from 7:00 a.m. to 9:00 a.m., Monday to Friday on Avenue Road at Hillholm Road Killarney Road and Kilbarry Road.

The combination of the various regulatory amendments and intersection modifications noted above has produced both positive and negative impacts on traffic flow in the area.

Reconstruction of the Oxton Avenue/Oriole Parkway intersection, similar reconstruction of the Avenue Road/Oxton Avenue intersection, and removal of the eastbound "Yield" sign on Oxton Avenue at Oriole Parkway was intended to maximize free-flow traffic

operation, reduce traffic congestion and minimize delay to vehicular traffic along the Oxton Avenue link between Oriole Parkway and Avenue Road.

The installation of pedestrian crossovers on Oxton Avenue, at Highbourne Road and on Avenue Road, south of Oxton Avenue provided controlled crossing areas and enhanced pedestrian safety. However, the PXO on Oxton Avenue at Highbourne Road is about 100 metres west of Oriole Parkway and it is unreasonable to expect pedestrians walking along the west side of Oriole Parkway to use this pedestrian crossover to cross Oxton Avenue.

Although a significant number of illegal traffic movements still occur, the turn restrictions into various local streets in the area has discouraged traffic infiltration of local neighbourhoods and for the most part, have been positive measures.

Investigation and Analysis

"Stop" sign compliance

Several investigations at Oriole Parkway and Oxton Avenue classified the type of manoeuvre made by eastbound motorists under "Yield" control, uncontrolled, and "Stop" control conditions. The studies collected data over periods of time ranging from one hour during the afternoon off-peak period to eight hours encompassing the morning and afternoon peak and off-peak periods. The most recent survey (4 hours) encompassed the morning and afternoon 2-hour peak periods. A comparison of the study results is shown in the following chart.

	Study Date (control for eastbound motorists)				
Type of Stop	June 2003	July 2005	July 2007	October 2009	
	("Yield" control)	(Uncontrolled)	("Stop" control)	("Stop" control)	
Complete stop	20 percent	3 percent	16 percent	16 percent	
"Rolling" stop	67 percent	12 percent	82 percent	54 percent	
"No" stop	13 percent	85 percent	2 percent	30 percent	

For the purpose of these surveys, a "rolling" stop is defined as the motorist slowing to a speed of less than 5 km/h in observance of the "Stop" sign, then proceeding to complete their turn. "No" stop indicates the motorist might have been aware of the "Stop" sign but did not slow to a speed of less than 5 km/h before completing their turn.

The surveys indicate there is a significant level of motorist non-compliance with the eastbound "Stop" sign. Of greater concern is that the level of "No" stop activity has significantly increased between 2007 and 2009. The level of non-compliance can possibly be attributed to the following:

• relatively low north/south pedestrian crossing volumes (ranging from about 15 to 75 pedestrians) at the west side of the intersection;

- the fact that there is no conflicting traffic in the southbound curb lane on Oriole Parkway, immediately south of Oxton Avenue, given the reconstruction of the intersection; or
- higher traffic volume and congestion on Oxton Avenue as a result of turn restrictions implemented on other streets in the area.

Collision Experience

A review of the Toronto Police Service's collision data records for the intersection of Oxton Avenue and Oriole Parkway indicate a total of 25 collisions have been reported at this intersection between July 31, 2006 and July 31, 2009. None of these collisions involved a pedestrian or cyclist, but 16 of these collisions were of a rear-end type involving two or more eastbound vehicles.

Analysis and conclusion

There are two points that suggest removing the eastbound "Stop" sign on Oxton Avenue at Oriole Parkway is the appropriate course of action.

- The "Stop" sign compliance data indicates that a majority of motorists consider the eastbound "Stop" sign as a nuisance device that creates unnecessary delay; and
- Book 5 Regulatory Signs of the Ontario Traffic Manual indicates a "Stop" sign should not be used where the protection of pedestrians is the expressed primary concern.

However, despite there being a relatively low volume of pedestrians crossing Oxton Avenue compared to the high volume of eastbound vehicular traffic, the eastbound "Stop" sign provides pedestrians walking along the west side of Oriole Parkway and crossing Oxton Avenue with a much safer walking environment. At the same time, eastbound motorists experience only minor delays before being able to turn onto Oriole Parkway. Lesser delay could not be provided under any other operational scenario, including signalization.

Pedestrians are the most vulnerable users of our public infrastructure and their well-being and safety should be given priority when considering the installation of traffic control regulations or traffic management measures.

In this instance, staff recommends retaining the eastbound "Stop" sign on Oxton Avenue at Oriole Parkway to ensure that motorists are lawfully required to yield right-of-way to pedestrians crossing Oxton Avenue along the west side of Oriole Parkway.

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SIGNATURE

Peter Noehammer, P.Eng. Director, Transportation Services

LIST OF ATTACHMENTS

(1) Drawing No. 421F-9833, dated October 2009

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