TORONTO

STAFF REPORT
ACTION REQUIRED

Tilden Crescent – Speed Limit Amendment

Date:	July 16, 2010
To:	Etobicoke York Community Council
From:	Acting Director, Transportation Services - Etobicoke York District
Wards:	Ward 2 – Etobicoke North
Reference Number:	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100118-to

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

The purpose of this report is to obtain approval to reduce the speed limit on Tilden Crescent, between Scarlett Road and Raymore Drive, from 50 km/h to 40 km/h.

A staff assessment has determined that the warrant for installing a 40 km/h speed limit is met on Tilden Crescent.

RECOMMENDATIONS

Transportation Services recommends that Etobicoke York Community Council approve:

1. Enacting a 40 km/h speed limit on Tilden Crescent, between Scarlett Road and Raymore Drive.

Financial Impact

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

ISSUE BACKGROUND

Transportation Services staff received a request from an area resident to investigate the feasibility of installing an all-way stop control at the intersection of Tilden Crescent and Waterton Road due to the vehicle operating speeds on Tilden Crescent. In response, a turning movement count was conducted at the intersection of Tilden Crescent and Waterton Road and the results were applied to the all-way stop warrant. In addition, speed studies were conducted by Transportation Services staff on Tilden Crescent, east of Waterton Road. The study results are applied to the City's 40 km/h Speed Limit Warrant.

A map of the area is Attachment 1.

COMMENTS

Tilden Crescent is a two-way local road with an 8.5 metre pavement width, located in the residential community to the south of Lawrence Avenue West and east of Scarlett Road. There is a sidewalk located on the north and west sides of Tilden Crescent. The existing speed limit on Tilden Crescent is 50 km/h.

A speed and volume study was conducted on Tilden Crescent, east of Waterton Road. The study results are shown in the following tables:

Location:	Tilden Crescent					
Count Date:	Wednesday, May 12, 2010					
	Eastbound			Westbound		
Time Period	Vehicle Volume	85th %-tile Speed (km/h)	10 km/h Pace (km/h)	Vehicle Volume	85th %-tile Speed (km/h)	10 km/h Pace (km/h)
a.m. Peak Hour	4	40		9	42	
p.m. Peak Hour	10	40		10	34	
24 Hour	93	42	28 – 37	90	42	36 – 45

The 85th percentile and 10 km/h pace speeds are statistical measures of free flow vehicle operating speeds. The 85th percentile speed is the vehicle operating speed at or below which 85 per cent of all vehicle traffic is moving. Studies show that crash rates are lowest at around the 85th percentile speed. The 10 km/h pace speed represents the speed range, 10 km/h in this case, containing the highest number of observations.

Toronto Police Service collision records for a three-year period ending December 31, 2008, report no crashes on Tilden Crescent where speeding was identified as a contributing factor.

Under current Council policy, 40 km/h speed limits may be introduced on streets where the road width and either pedestrian or road and traffic environment criteria are satisfied. Tilden Crescent satisfies both the Road Width and Road and Traffic Environment criteria as set in the attached Appendix A: Table 1, since the road has two curves with a safe travel speed of less than 40 km/h. It is prudent to reduce the speed limit to reflect these conditions.

The justification for the installation of an all-way stop control is based on a technical warrant adopted by Toronto City Council based on collision history and traffic volume. Our study results are summarized in Appendix A: Table 2. The technical warrants for the installation of an all-way stop control are not met in this instance and no vehicular conflicts or motorist confusion with respect to right-of-way were observed during our investigation.

CONTACT

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SIGNATURE

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ATTACHMENTS

Appendix A:	Table 1
Appendix B:	Table 2
Attachment 1:	Map

APPENDIX A – Table 1

40 Km/h Speed Limit Warrant – Tilden Crescent

A.	***ROAD WIDTH***		
1.	(i)	Pavement width equal to or greater than 10.5 metres and the 85th percentile speed is equal to or less than 50 km/h	
		OR	
	(ii)	Pavement width less than 10.5 metres	*Yes ☑ No ☐*
		PAVEMENT WIDTH: ***8.5 metres*** *85TH PERCENTILE SPEED:* ***42 km/h***	

AND

B.	***PEDESTRIAN ENVIRONMENT***		
1.	(i)	Elementary or junior high school abuts the road Yes ☐ No☑	*Yes ☐ No ☑*
		OR	
	(ii)	Parkland abuts the road which is contiguous to and used to gain access to an elementary or junior high school Yes ☐ No ☑	
		OR	
	(iii)	Absence of sidewalk on both sides of the road or a major portion of the road Yes ☐ No ☑	

OR

C.	***ROAD AND TRAFFIC ENVIRONMENT***		
1.	(i)	Two or more locations where grades are greater than 5%; and/or safe speed on curves is less than 50 km/h Yes ☑ No ☐	*Yes ☑ No ☐*
		OR	
	(ii)	2 or more locations where there is lack of sufficient distance to stop safely traveling at 50 km/h Yes ☐ No ☑	
		OR	
	(iii)	Pattern of collisions where vehicle speed was identified as a factor Local streets – 3 or more over 3 years Other streets – 5 or more over 3 years Yes ☐ No ☑	

APPENDIX A – Table 2

Warrants for All-way "Stop" Sign Control

Study location: Tilden Crescent and Waterton Road

Four-Hour Study Period	Total Approach Vehicle Volume	Vehicle/Pedestrian Volume Crossing Major Road	Unit Volume Split Major/Minor Roads
Study Period Average	42	8	84/16
Warrant Requirements for Study Period Average	≥250	≥100	≥30/70 or ≤70/30

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:

1. "Total Approach Vehicle Volume" & "Unit Volume Split – Major/Minor Roads"

   or

2. "Vehicle/Pedestrian Volume Crossing Major Road" & "Unit Volume Split-Major/Minor Roads"