



**STAFF REPORT  
ACTION REQUIRED**

**Duncanwoods Drive – Traffic Calming**

<b>Date:</b>	September 27, 2007
<b>To:</b>	Etobicoke York Community Council
<b>From:</b>	Director, Transportation Services - Etobicoke York District
<b>Wards:</b>	Ward 7 – York West
<b>Reference Number:</b>	p:\2007\Cluster B\TRA\EtobicokeYork\eycc070158-to – AFS6050

**SUMMARY**

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

The purpose of this report is to outline the findings of an investigation to determine the need to install speed humps on Duncanwoods Drive. A staff assessment has shown that the criteria for the installation of speed humps are met for the section of Duncanwoods Drive between Finch Avenue West and Pearldale Avenue. On the remaining sections of Duncanwoods Drive, from Pearldale Avenue to Rubydale Gardens, speed humps already exist, and the section between Rubydale Gardens and Islington Avenue does not meet the required criteria.

**RECOMMENDATIONS**

**Transportation Services recommends that Etobicoke York Community Council:**

1. Authorize the City Clerk to conduct a poll of eligible householders in English, Italian and Punjabi, on Duncanwoods Drive between Finch Avenue West and Pearldale Avenue, to determine resident support for the proposed speed hump plan, in accordance with the City of Toronto Traffic Calming Policy;
2. Subject to favourable results of the poll;
  - a. The City Solicitor prepare a by-law to alter sections of the roadway on Duncanwoods Drive between Finch Avenue West and Pearldale Avenue, for traffic calming purposes, generally as shown on the attached print Drawing No. EY07-256, dated October 2007 and circulated to residents through the polling process;

- b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on Duncanwoods Drive between Finch Avenue West and Pearldale Avenue when the speed humps are installed.

**Financial Impact**

Type of Funding	Source of Funds	Amount
Available within current budget	Transportation Services Capital Budget	\$15,000.00

**ISSUE BACKGROUND**

In December 2004, as a result of a request from Etobicoke York Community Council, staff conducted a poll of residents of Duncanwoods Drive to determine support for the installation of speed humps on this street. The results of this poll revealed a poor response rate (25%) for the entire street (between Islington Avenue and Finch Avenue West). However, a further breakdown of the responses revealed an acceptable response rate of 51% (50% plus 1 required) on the section of Duncanwoods Drive between Pearldale Avenue and Rubydale Gardens. As a result, speed humps were installed on this section of road in the summer of 2005.

Although another petition was received in October 2005 requesting the installation of speed humps on the remainder of Duncanwoods Drive, as there is a two-year moratorium on conducting another poll, Duncanwoods Drive was not eligible to be reconsidered until December 2006. Transportation Services staff has re-examined Duncanwoods Drive for traffic calming further to this petition at the end of the two-year moratorium.

**COMMENTS**

Duncanwoods Drive is classified as a collector road in the residential community to the east of Islington Avenue and north of Finch Avenue West. The speed limit on this road is currently 40 km/h between Finch Avenue West and Pearldale Avenue and between Rubydale Gardens and Islington Avenue. There are sidewalks on both sides of this street. Humber Summit School and St. Roch School access Duncanwoods Drive between Pearldale Avenue and Rubydale Gardens and appropriate school area signs exist in advance of these schools. All-way stop controls exist on Duncanwoods Drive at Pearldale Avenue, Rubydale Gardens, Goldsboro Road and Gracedale Boulevard. Speed humps with a 30 km/h speed limit exist on the section of Duncanwoods Drive between Pearldale Avenue and Rubydale Gardens. A map of the area is Attachment No. 1.

We assessed the subject location against the City of Toronto’s Traffic Calming Policy, adopted by City Council at its meeting of April 16, 17 and 18, 2002. According to the policy guidelines, the prime criteria for the installation of speed humps are vehicle speeds and traffic volume. Other environmental factors are also considered, such as road width, pedestrian facilities and gradient. The proposal was further evaluated under the technical criteria, with the results summarized in Appendix A attached.

As part of our investigation, speed and volume studies were conducted on the sections of Duncanwoods Drive that currently do not contain speed humps.

These locations are as follows:

1. Duncanwoods Drive between Islington Avenue and Rubydale Gardens; and
2. Duncanwoods Drive between Pearldale Avenue and Finch Avenue West.

On the first section of Duncanwoods Drive, between Islington Avenue and Rubydale Gardens, two automatic speed and volume studies were conducted (either side of Seacliff Boulevard). Our speed studies revealed an 85<sup>th</sup> percentile speed (the speed at or below which the majority of motorists feel comfortable travelling under the existing roadway conditions) of between 42 km/h and 43 km/h. The 24 hour volume recorded was between 3,214 and 3,482. The current speed limit is 40 km/h. The details of our studies are contained in the attached Technical Summary.

To record the automatic speed studies, road tubes are placed across the road. A resident in the area stated that motorists were slowing down when crossing over these tubes. To further confirm our automatic speed results and address the resident's concerns, staff also conducted a radar spot speed study in an unmarked vehicle in the same area. The results of the radar study revealed an 85<sup>th</sup> percentile speed of 44 km/h. Combining the results of the automatic and radar studies produced an average 85<sup>th</sup> percentile speed of 43 km/h.

The second section of Duncanwoods Drive is between Pearldale Avenue and Finch Avenue West. Two automatic speed studies were also conducted in this area and revealed an 85<sup>th</sup> percentile speed (the speed at or below which the majority of motorists feel comfortable travelling under the existing roadway conditions) of 49 km/h. The radar speed studies revealed an average 85<sup>th</sup> percentile of 51 km/h, with a combined 85<sup>th</sup> percentile speed of 50 km/h. The 24 hour volume is between 2,261 and 3,168. The current speed limit is 40 km/h. The details of our studies are contained in the attached Technical Summary.

Application of study data to the Traffic Calming Warrant, adopted by Toronto City Council, determined that traffic characteristics on the first section of Duncanwoods Drive (between Islington Avenue and Rubydale Gardens) do not satisfy the criteria to warrant traffic calming based on the relatively low 85<sup>th</sup> percentile speed. However, the second section of Duncanwoods Drive (between Pearldale Avenue and Finch Avenue West), do satisfy the criteria to warrant traffic calming. A map of the speed hump location is Attachment No. 2.

Accordingly, based on the data collected and evaluated against the warrants for the installation of traffic calming measures, the installation of speed humps is only warranted on Duncanwoods Drive between Finch Avenue West and Pearldale Avenue.

Installing speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles, and could result in increased response times in the event of an emergency.

According to the provisions of the City of Toronto Traffic Calming Policy, the City Clerk must formally poll householders who would be directly affected by installing speed humps on this section of Duncanwoods Drive. Under this policy, Transportation Services staff must receive a minimum response of 50 percent plus one ballot, of which at least 60 percent of the households that respond must be in favour of installing speed humps. Then staff can proceed with the installation. Accordingly, subject to approval by Council of the recommendations outlined above, the City Clerk would poll householders on Duncanwoods Drive. If the poll supports installing speed humps on Duncanwoods Drive, Transportation Services staff will schedule installation according to relative need and competing priorities.

Transportation staff use a method to determine relative need and to prioritize installing speed humps, based on traffic volume, vehicle speed percentages, speed related collisions, and the presence of schools, parks, seniors' residences or bicycle routes. Based on this technical review, Duncanwoods Drive scored 14 ranking points out of a possible 100.

No alterations to parking regulations are required, nor would the number of parking spaces be affected, and the effects on winter services, street cleaning and garbage collection should be minimal.

Consultation with emergency services (Police, Fire and Emergency Medical Services) is required in order to ensure that the design and layout of traffic calming proposals do not unduly affect their operations. Although we generally advise emergency services of our intentions, we do not always receive a formal response. However, Toronto Fire Services has provided the following general statement in the past regarding the installation of speed humps:

“...Toronto Fire Service is supportive of initiatives that improve the life safety of our citizens. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area.

The vertical restrictions imposed by speed humps have a much greater affect on large fire vehicles than smaller passenger vehicles. Response time increases with every obstacle a fire vehicle encounters en route from the fire station to the incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time that could result in increased property damage, unnecessary injury or loss of life.

Speed humps are generally hard on large, heavy vehicle (fire vehicles) and increase the potential to suffer mechanical damage. This in turn can lead to a vehicle being placed out of service for considerable periods of time. Aside from the costs associated with repairs, there is a decrease in the resources available to respond to other emergency situations.”

## **CONTACT**

Bruce Clayton, Supervisor, Traffic Operations - Etobicoke York District  
Phone: 416-394-8408; Fax: 416-394-8942  
Email: clayton@toronto.ca

## **SIGNATURE**

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John Niedra, P.Eng.,  
Director, Transportation Services - Etobicoke York District

## **ATTACHMENTS**

Attachment No. 1: Appendix A – Table 1 & Table 2  
Attachment No. 2: Map  
Attachment No. 3: Area Map

## Appendix A – Table 1

### Traffic Calming Warrant Criteria

Duncanwoods Drive between Islington Avenue and Rubydale Gardens

Warrant	Criterion	Requirement	Met/Not Met
<b>Warrant 1</b> Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. <b>OR</b> A direct request from the Ward Councillor.  <b>Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.</b>	<b>Met</b> – petition
Impacts to Adjacent Streets		No significant traffic impacts on adjacent streets	<b>Met</b> –there should be no traffic spill-over to other streets given the configuration of streets in the area
<b>Warrant 2</b> Safety Requirements  (all three criteria must be fulfilled to satisfy this Warrant)	2.1 sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). <b>OR</b> Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered	<b>Met</b> – continuous sidewalk on both sides of Duncanwoods Drive
	2.2 Road Grade	Road grade 5% or less <b>OR</b> Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.	<b>Met</b> – Road grade is less than 8%
	2.3 Emergency Response	No significant Impacts on Emergency Services (as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.	General objections from Toronto Fire, Ambulance and Police
<b>Warrant 3</b> Technical Requirements  (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 <sup>th</sup> percentile speed is a minimum of 10 km/h (but less than 15 km/h) over a warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. <b>OR</b> On streets where the 85 <sup>th</sup> percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.	<b>Not Met</b> – Speed studies show 85 <sup>th</sup> percentile as 43 km/h
	3.2 Min. and Max. Traffic Volume	Local Roads Traffic volume between 1,000 Veh/day and 8,000 Veh/day	Collector Roads Traffic volume between 2,500 Veh/day and 8,000 Veh/day
	3.3 Minimum Street Segment Length between stop controls	Street segment length must exceed 120 meters between stop controls (signals or stop signs)	<b>Met</b> – Street segments exceeds 120 metres
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)	<b>Met</b> – No TTC service

## Appendix A – Table 2

### Traffic Calming Warrant Criteria

Duncanwoods Drive between Pearldale Avenue and Finch Avenue West

Warrant	Criterion	Requirement	Met/Not Met
<b>Warrant 1</b> Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. <b>OR</b> A direct request from the Ward Councillor.  <b>Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.</b>	<b>Met</b> – petition
Impacts to Adjacent Streets		No significant traffic impacts on adjacent streets	<b>Met</b> –there should be no traffic spill-over to other streets given the configuration of streets in the area
<b>Warrant 2</b> Safety Requirements  (all three criteria must be fulfilled to satisfy this Warrant)	2.1 sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). <b>OR</b> Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered	<b>Met</b> – continuous sidewalk on both sides of Duncanwoods Drive
	2.2 Road Grade	Road grade 5% or less <b>OR</b> Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.	<b>Met</b> – Road grade is less than 8%
	2.3 Emergency Response	No significant Impacts on Emergency Services (as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.	General objections from Toronto Fire, Ambulance and Police
<b>Warrant 3</b> Technical Requirements  (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 <sup>th</sup> percentile speed is a minimum of 10 km/h (but less than 15 km/h) over a warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. <b>OR</b> On streets where the 85 <sup>th</sup> percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.	<b>Met</b> – Speed studies show 85 <sup>th</sup> percentile as 50 km/h
	3.2 Min. and Max. Traffic Volume	Local Roads Traffic volume between 1,000 Veh/day and 8,000 Veh/day	Collector Roads Traffic volume between 2,500 Veh/day and 8,000 Veh/day
	3.3 Minimum Street Segment Length between stop controls	Street segment length must exceed 120 meters between stop controls (signals or stop signs)	<b>Met</b> – Street segments exceeds 120 metres
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)	<b>Met</b> – No TTC service