

Traffic Calming – Ballacaine Drive, between Bethnal Avenue and Bernice Avenue

Date:	March 11, 2016
To:	Etobicoke York Community Council
From:	Director, Transportation Services - Etobicoke York District
Wards:	Ward 5 – Etobicoke-Lakeshore
Reference Number:	p:\2016\Cluster B\TRA\Etobicoke York\eycc160050-to

SUMMARY

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

This report outlines the results of our investigation into installing speed humps on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue. The results indicate that the criteria to justify installing speed humps are not satisfied.

RECOMMENDATIONS**Transportation Services recommends that:**

1. Etobicoke York Community Council NOT install traffic calming on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue.

Financial Impact

Adopting the above-noted recommendation does not result in any financial impact; however, if Etobicoke York Community Council decides to approve installing traffic calming devices on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, the following financial impact will result:

1. The estimated cost for installing two speed humps is \$6,000.00. This can be accommodated within funds allocated by City Council as part of the Transportation Services Capital Budget, subject to competing priorities and funding availability.

ISSUE BACKGROUND

Transportation Services received a request from the Ward Councillor, on behalf of area residents, to investigate the feasibility of physical traffic calming measures (speed humps) on Ballacaine Drive, to address concerns with speeding vehicles. A map of the area is Attachment 1.

COMMENTS

Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, is a two-lane road classified in the City's Road Classification System as a "Local" road. It is located in a residential community north of Berry Road, east of Prince Edward Drive South. The roadway is built to rural standards (ditches and swales) without a sidewalk on the west side. A sidewalk is present on the east side of the street along the frontage of Park Lawn Junior Middle School; between Bernice Avenue and Bethnal Avenue. The speed limit on Ballacaine Drive is 40 km/h.

We assessed the subject location according to the City of Toronto's Traffic Calming Policy. The principal criteria for installing speed humps are vehicle operating speeds and volume. Other environmental factors are also examined, such as road width, pedestrian facilities and grade. The proposal was evaluated under each of the three criteria (Warrants 1, 2 and 3), with the results summarized in Appendix A.

To address the Councillor's request for traffic calming, speed and volume studies were conducted on Ballacaine Drive between Bethnal Avenue and Bernice Avenue on March 9, 2016. The results of these studies are summarized in the following table:

Study Location	Speed Ranges – km/h					85 th Percentile	24 Hr Total
	1-40	41-50	51-60	61-65	>65		
Ballacaine Drive	498	62	3	0	1	39 km/h	564

The 85th percentile speed is the vehicle operating speed at or below which 85 percent of all traffic is moving. Studies show that collision rates are lowest at or around the 85th percentile speed.

Based on our assessment, Ballacaine Drive does not satisfy the technical requirements, specifically in the 85th percentile speed and volume criteria requirement for Warrant 3.1 & 3.2.

Accordingly, based on data collected and evaluated against the warrant for the installation of traffic calming measures, the installation of speed humps is not recommended on Ballacaine Drive. Furthermore, it was noted that there have been no reported collisions in the preceding three year period ending December 31, 2014, where vehicle speed was identified as a contributing factor.

Notwithstanding our recommendation, if Etobicoke York Community Council decides to proceed with installing speed humps on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, we recommend that:

1. The City Clerk (Polling Registry Services) survey eligible householders in English or any other language specified by Community Council, on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, to determine if property owners/occupants support the installation, according to 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 Ballacaine Drive, between Bethnal Avenue and Bernice Avenue for traffic calming purposes, generally as shown on Drawing EY16-44, dated March 2016, and circulate to residents during the polling process.
 - b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, when the speed humps are installed.

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.

The current City of Toronto Traffic Calming Policy requires that the City Clerk (Polling Registry Services) formally survey property owners/occupants who are directly affected by installing speed humps on Ballacaine Drive. Under the policy, the City Clerk must receive a minimum response rate of 51 percent, of which at least 60 percent of respondents must favour installing speed humps.

Subject to approval by Etobicoke York Community Council, according to the recommendations indicated above, the City Clerk will survey property owners/occupants and report the results to Etobicoke York Community Council. If the survey supports installing speed humps on Ballacaine Drive, between Bethnal Avenue and Bernice Avenue, Transportation Services staff will schedule their installation based on relative need and competing priorities.

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

“...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 effect 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 vehicles (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.”

Regardless, given the low incidence of speeding on Ballacaine Drive, the installation of speed humps or other traffic calming measures are not technically warranted at this time and, therefore, not recommended.

CONTACT

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ATTACHMENTS

Appendix A: Traffic Calming Warrant Criteria
Attachment 1: Speed Hump Location Plan

Appendix A

Traffic Calming Warrant Criteria Ballacaine Drive between Bethnal Avenue and Park Lawn Rd

Warrant	Criterion	Requirement		Met/Not Met
Warrant 1 Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. OR A direct request from the Ward Councillor in consultation with the public. Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.		Met – Ward Councillor direct request
Impacts to Adjacent Streets		No significant traffic impacts on adjacent streets		Met – No anticipated traffic diversion
Warrant 2 Safety Requirements	2.1 Sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). OR Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered.		Met – sidewalk on east side
	2.2 Road Grade	Road grade 5% or less. OR Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.		Met – 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.		Met -General objections from Toronto Fire, Ambulance and Police.
Warrant 3 Technical Requirements (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 th 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. OR On streets where the 85 th 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.		Not Met - Speed studies show 85 th percentile as 39 km/h (1 km/h under the speed limit)
	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	Not Met - Local Road with volume of 564 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)		Met – Street segments exceed 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)		Met – No TTC service.