



REPORT FOR ACTION

Traffic Calming (Speed Humps) and U-Turn Prohibition Review - Vradenberg Drive and Lowcrest Boulevard

Date: April 29, 2019
To: Scarborough Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 22 – Scarborough-Agincourt

SUMMARY

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

Transportation staff have reviewed the need for traffic calming on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive and on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate. The request is as a result of the Councillor and residents' concerns regarding the speed of vehicles. Our assessment indicates the criteria as set out in the Traffic Calming Policy has not been satisfied on either street. Therefore, traffic calming should not be installed on Vradenberg Drive or Lowcrest Boulevard.

Transportation staff have also reviewed the feasibility of prohibiting U-turns on Vradenberg Drive, between Lowcrest Boulevard and Ashglen Court and determined that installation of a U-turn prohibition will reduce conflicts between all users and improve safety along this section of Vradenberg Drive in the vicinity of Vradenberg Junior Public School.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that:

1. Scarborough Community Council not authorize the installation of traffic calming measures on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive.

2. Scarborough Community Council prohibit eastbound and westbound U-turn movements at all times on Vradenberg Drive, between Lowcrest Boulevard and Ashglen Court.
3. Scarborough Community Council not authorize the installation of traffic calming measures on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate.

FINANCIAL IMPACT

The financial cost of installing the U-Turn prohibition signs on Vradenberg Drive is approximately \$1,000.00. The funding for these signs is available in the Transportation Services Division's 2019 Operating Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Existing Conditions

Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive is a two-way local road. Lowcrest Boulevard, between Warden Avenue to Wishing Well Drive, is also a two-way local road. The pavement width for both of these roadways is approximately 8.1 metres and both roadways have a posted speed limit of 40 km/h. There are municipal sidewalks along both sides of Vradenberg Drive and Lowcrest Boulevard and there is no TTC service along either roadway.

Analysis

Traffic Calming Warrants

Transportation Services conducted mid-block speed and volume studies on both Vradenberg Drive and Lowcrest Boulevard. The study found the vehicular operating speed on Vradenberg to be between 44 km/h and 46 km/h and the average daily traffic volume of approximately 1,848 vehicles. The vehicular operating speed on Lowcrest Boulevard was between 38 km/h and 44 km/h, with a vehicle volume of approximately 1,528 vehicles.

The operating speed, also known as the 85th percentile speed, is the speed at which 85 percent of vehicles travel at or below. The study findings were assessed against the Staff Report for Action on Vradenberg Dr and Lowcrest Blvd Traffic Calming (Speed Humps) and U-turn Prohibition Review

City of Toronto's traffic calming policy and it was found that neither Vradenberg Drive nor Lowcrest Boulevard satisfy the installation criteria for traffic calming devices. More specifically, the recorded operating speed must be at least 10 km/h over the warranted 40 km/h speed limit.

The following table identifies the result of the studies:

Roadway	Speed Limit	Direction	85th percentile	Vehicle Volume	Warranted
Vradenberg Dr, between Ashglen Ct and Lowcrest Blvd	40	Eastbound	47 km/h	1,848	NO
		Westbound	43 km/h		
Vradenberg Dr, between Ashglen Ct and Wishing Well Dr	40	Eastbound	44 km/h	1,696	NO
		Westbound	44 km/h		
Lowcrest Boulevard, between Rotunda Pl and Vradenberg Dr	40	Northbound	38 km/h	991	NO
		Southbound	37 km/h		
Lowcrest Boulevard, between Vradenberg Dr and Cloverleaf Gt	40	Northbound	44 km/h	1,528	NO
		Southbound	44 km/h		

The warrants were not met based on the following criteria:

Speed: The operating speeds as noted above on each block between Lowcrest Boulevard and Wishing Well Drive on Vradenberg Drive and between Warden Avenue and Cloverleaf Drive on Lowcrest Boulevard are less than the required minimum 10 km/h over the warranted speed limit to satisfy the traffic calming installation criteria.

Therefore, the installation of traffic calming on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive and on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate, is not warranted.

The attached technical summary entitled Attachment 1 Table 1: Traffic Calming Warrant Criteria - Vradenberg Drive and Attachment 2 Table 2: Traffic Calming Warrant Criteria - Lowcrest Boulevard, outlines the results of our assessment.

U-Turn Prohibition

The U-turn prohibition on Vradenberg Drive, between Lowcrest Boulevard and Ashglen Court in the vicinity of Vradenberg Junior Public School will improve overall safety of all road traffic, including vulnerable road users, by minimizing vehicle conflicts. Prohibiting

U-turns at this location will also allow for stricter enforcement by Toronto Police Services and bring this community one step closer to the City-wide Vision Zero initiative.

Collision Analysis

A review of Toronto Police Services collision records for a three-year period ending December 31, 2018, did not find any reported collisions attributed to speeding on Vradenberg Drive or Lowcrest Boulevard.

Alternate Recommendations

If, despite the findings above, the Scarborough Community Council determines that traffic calming would be beneficial, it may approve the following as to form:

1. The Scarborough Community Council direct the Acting Director, Traffic Management, Transportation Services to request the City Clerk to poll eligible householders on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive and on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate. The poll is to determine whether residents support the installation of traffic calming, in accordance with the City of Toronto Traffic Calming Policy.
2. Subject to favourable results of the poll, the Scarborough Community Council authorize the installation of Traffic Calming on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive and Lowcrest Boulevard between Warden Avenue and Cloverleaf Gate.
3. Subject to favourable results of the poll, the Scarborough Community Council direct the City Solicitor to prepare a by-law to alter the roadways of Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive and on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate, for traffic calming purposes, generally as shown on the Location Plans, attached to the report entitled "Traffic Calming and U-Turn Prohibition Review - Vradenberg Drive" and "Traffic Calming Review - Lowcrest Boulevard".

The estimated cost of installing speed humps on Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive, and on Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate is approximately \$24,000.00. The installation of speed humps on the subject roadways would be subject to availability in Transportation Services 2019 Capital Funding estimates and competing priorities.

CONTACT

Shawn Dillon
Manager, Traffic Operations Area 1
Traffic Management
Transportation Services
Tel: 416-397-5021
Fax: 416-396-5641
E-Mail: shawn.dillon@toronto.ca

SIGNATURE

Roger Browne, M.A.Sc., P.Eng.
Acting Director
Traffic Management
Transportation Services

DH:cr

sc1939
D19-9407096
D18-9219012

ATTACHMENTS

1. Attachment 1 - Table 1: Traffic Calming Warrant Criteria Vradenberg Drive
2. Attachment 2 - Table 2: Traffic Calming Warrant Criteria Lowcrest Boulevard
3. Attachment 3 - Traffic Calming and U-turn Prohibition Review - Vradenberg Drive
4. Attachment 4 - Traffic Calming Review - Lowcrest Boulevard

Attachment 1: Table 1: Traffic Calming Warrant Criteria

Vradenberg Drive, between Lowcrest Boulevard and Wishing Well Drive

All three of the following warrants must be achieved

Warrant	Criterion	Requirement		Warrant Satisfied
Warrant 1 Petition	1.1 Petition	Petition signed by at least 25% of the households on the street and/or 10% multiple family rental dwellings		Yes
Warrant 2 Safety Criteria [all three criteria must be fulfilled to satisfy warrant]	2.1 Sidewalks	Are there continuous sidewalks on at least one side of street [both sides for collector of higher classification] OR On streets where no sidewalks exist, installation of sidewalks on at least one side must first be considered		Yes
	2.2 Road Grade	Road grade does not exceed 8% [Traffic calming measures must not be installed at or near these locations where grade exceeds 8%]		Yes
	2.3 Emergency Response	Emergency Services have noted that the impact of traffic calming, specifically speed humps, will not significantly affect service delivery		N/A
Warrant 3 Technical Requirement [all four criteria must be fulfilled to satisfy warrant]	3.1 Minimum Speed	The 85th percentile speed must be a minimum of 10 km/h over the warranted speed limit and the volume warrant [3.2] must be fulfilled*		No (37 - 42 km/h)
	3.2 Traffic Volumes	Local Road Traffic volume must be between 1,000 and 8,000 vehicles per day	Collector Road Traffic volumes must be between 2,500 and 8,000 vehicles per day	Yes (1,848 vpd)
	3.3 Minimum Block Length	On streets where mid-block traffic calming measures are proposed, the minimum block length must exceed 120 metres		Yes
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Service vehicles will not be significant [as determined in consultation with TTC staff]		N/A

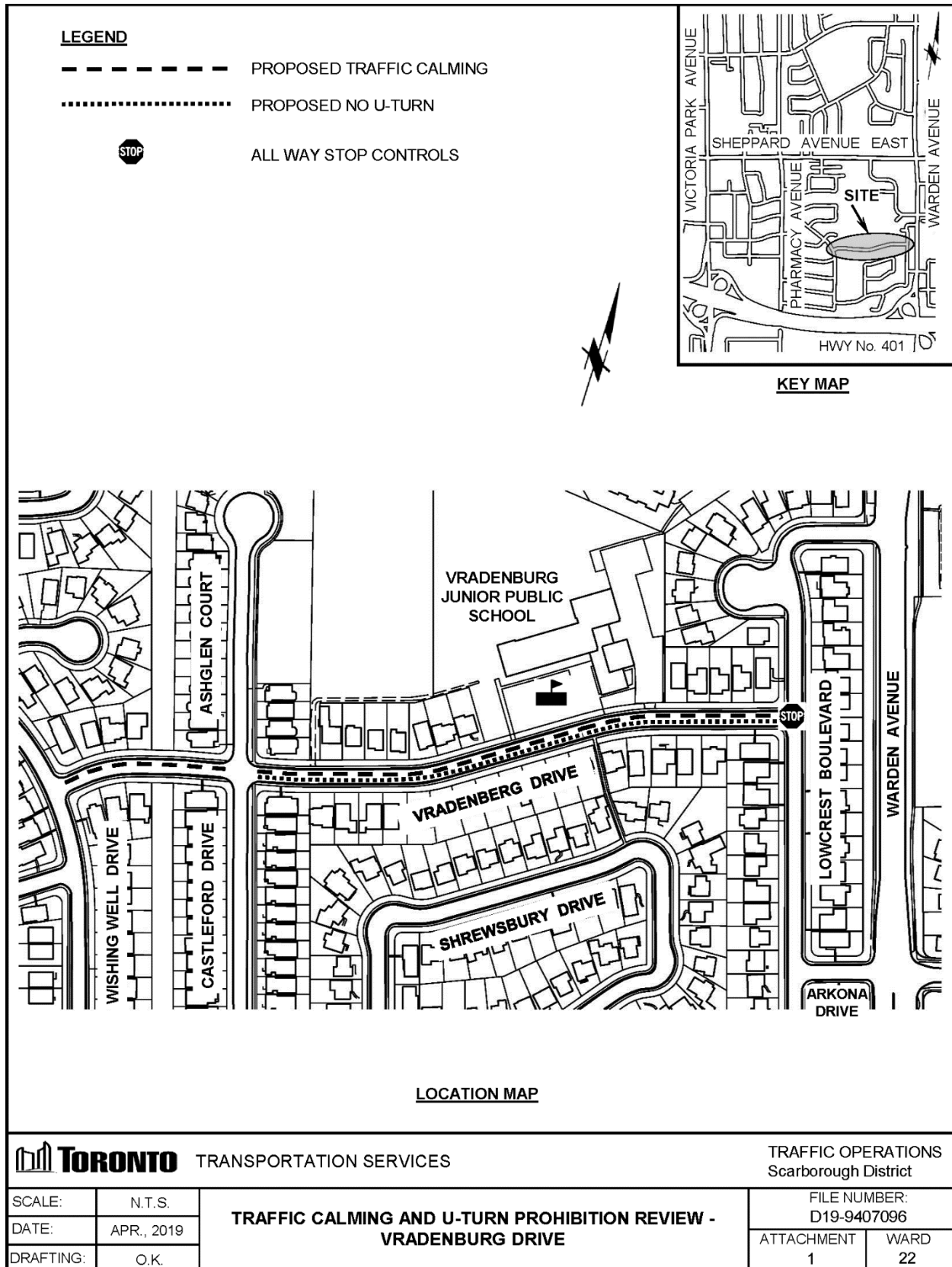
Attachment 2: Table 2: Traffic Calming Warrant Criteria

Lowcrest Boulevard, between Warden Avenue and Cloverleaf Gate

All three of the following warrants must be achieved

All three of the following warrants must be achieved				
Warrant	Criterion	Requirement		Warrant Satisfied
Warrant 1 Petition	1.1 Petition	Petition signed by at least 25% of the households on the street and/or 10% multiple family rental dwellings		Yes
Warrant 2 Safety Criteria [all three criteria must be fulfilled to satisfy warrant]	2.1 Sidewalks	Are there continuous sidewalks on at least one side of street [both sides for collector of higher classification] OR On streets where no sidewalks exist, installation of sidewalks on at least one side must first be considered		Yes
	2.2 Road Grade	Road grade does not exceed 8% [Traffic calming measures must not be installed at or near these locations where grade exceeds 8%]		Yes
	2.3 Emergency Response	Emergency Services have noted that the impact of traffic calming, specifically speed humps, will not significantly affect service delivery		N/A
Warrant 3 Technical Requirement [all four criteria must be fulfilled to satisfy warrant]	3.1 Minimum Speed	The 85th percentile speed must be a minimum of 10 km/h over the warranted speed limit and the volume warrant [3.2] must be fulfilled*		No (37 - 45 km/h)
	3.2 Traffic Volumes	Local Road Traffic volume must be between 1,000 and 8,000 vehicles per day	Collector Road Traffic volumes must be between 2,500 and 8,000 vehicles per day	Yes (1528 vpd)
	3.3 Minimum Block Length	On streets where mid-block traffic calming measures are proposed, the minimum block length must exceed 120 metres		Yes
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Service vehicles will not be significant [as determined in consultation with TTC staff]		N/A
Warranted [yes/no]				No

Attachment 3: Traffic Calming and U-turn Prohibition Review – Vradenberg Drive



Attachment 4: Traffic Calming Review – Lowcrest Boulevard

