

COMMITTEE OF THE WHOLE - FEBRUARY 20, 2006

**VILLAGE GREEN DRIVE AND VELMAR DRIVE (EAST INTERSECTION)
PROPOSED ALL-WAY STOP CONTROL**

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control be installed at the east leg intersection of Village Green Drive and Velmar Drive; and
2. That the statutory 50 km/h speed limit on Village Green Drive not be reduced to 40 km/h.

Economic Impact

The cost to install the stop signs and pavement markings would be an initial impact to the 2006 Operating Budget, and the cost to maintain the signs and pavement markings would be a future budget impact.

Purpose

To review the feasibility of implementing additional traffic controls at the east leg intersection of Velmar Drive and Village Green Drive, in response to direction from City Council.

Background - Analysis and Options

At its meeting on November 28, 2005, under Item 10, Report No. 64 Council adopted the following recommendation:

“By approving that staff provide a report on traffic management measures for the east intersection of Velmar Drive and Village Green Drive.”

Velmar Drive and Village Green Drive are feeder roads with a 23.0 metre right-of-way width. The existing speed limit on Village Green Drive is a statutory 50 km/h, and the speed limit on Velmar Drive is posted at a reduced 40 km/h. The existing stop control is located on Velmar Drive. The area is shown on Attachment No. 1.

Staff conducted a turning movement count on Thursday, January 19, 2006 at the subject intersection during peak travel periods. The traffic count was conducted from 7:00am to 9:00am and 3:00pm to 6:00pm. On the day of the traffic study the weather was overcast and the roads were dry. The collected traffic volumes compared to the Provincial Warrant for All-Way Stop Control are as shown below.

- | | |
|---|----------------|
| • Warrant 1 – Minimum Vehicular Volumes | Warranted 124% |
| • Warrant 2 – Accident Hazard | Warranted 0% |
| • Warrant 3 – Sight Restriction | Warranted 0% |

For an all-way stop control to be warranted, one or more of the 3 warrants must be satisfied 100% or more. The results of the turning movement counts meet the requirements of the Provincial Warrant for All-Way Stop Control. The above results reflect the highest peak traffic hour at the intersection.

There are no sight distance restrictions noted at this intersection. There were zero reported vehicle collisions in the past year at this intersection. Sidewalks are available in the vicinity.

Staff then revisited the intersection on Thursday, January 26, 2006 based on the peak traffic hours and observed the eastbound right turns and northbound left turns at this intersection to determine if drivers were not properly negotiating the turn and/or traveling into the oncoming lane. The results of staff's observations are shown below.

Time	# of Improper Northbound Left Turns	# of Improper Eastbound Right Turns
7:45-8:45am	5 (49)	11 (299)
5:00-6:00pm	33 (228)	2 (56)

Based on observations, staff concludes there are a relatively low number of drivers not negotiating the turn properly. The numbers in brackets in the chart above show total volumes for that turn. There is no threshold number or percentage warrant where a centre median island could be installed. The installation of a centre median on the south leg of the intersection would correct any potential behaviour by forcing drivers to turn into the proper travel lanes.

Should Council approve the centre median on the south leg of the intersection, the cost would be approximately \$5,500. There are no funds available in the 2006 Capital Budget for these works.

Staff also noted low stopping compliance at the existing stop sign on Velmar Drive during both studies as motorists are not forced to stop due to the very low traffic volume from the east. Staff will send correspondence to the York Regional Police to request increased enforcement of the northbound stop sign compliance at this intersection.

In addition, a request was received to review the feasibility of reducing the speed limit on Village Green Drive from the statutory 50 km/h speed limit to 40 km/h. There are existing all-way stop controls and traffic calming speed humps located on Village Green Drive. All-way stop controls are located at the intersections of Village Green Drive and Woolacott Road, Village Green Drive and Polo Crescent, and Village Green Drive and Velmar Drive (west leg). Two speed humps are also installed on Village Green Drive.

Previously collected speed data on Village Green Drive covering a 24-hour period showed high compliance with the statutory 50 km/h speed limit. The average speeds along Village Green Drive and Orr Avenue ranged from 35 km/h to 42 km/h. As the average speeds are consistently below the statutory speed limit, staff do not recommend reducing the speed limit on Village Green Drive to 40 km/h.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to ensure enhanced safety standards are incorporated in community designs (1.1.2).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

Conclusion

Based on staff's review, it is recommended that an all-way stop control be installed at the east leg intersection of Velmar Drive and Village Green Drive and that the statutory 50 km/h speed limit not be reduced to 40 km/h on Village Green Drive.

Attachments

- 1. Location Map

Report prepared by:

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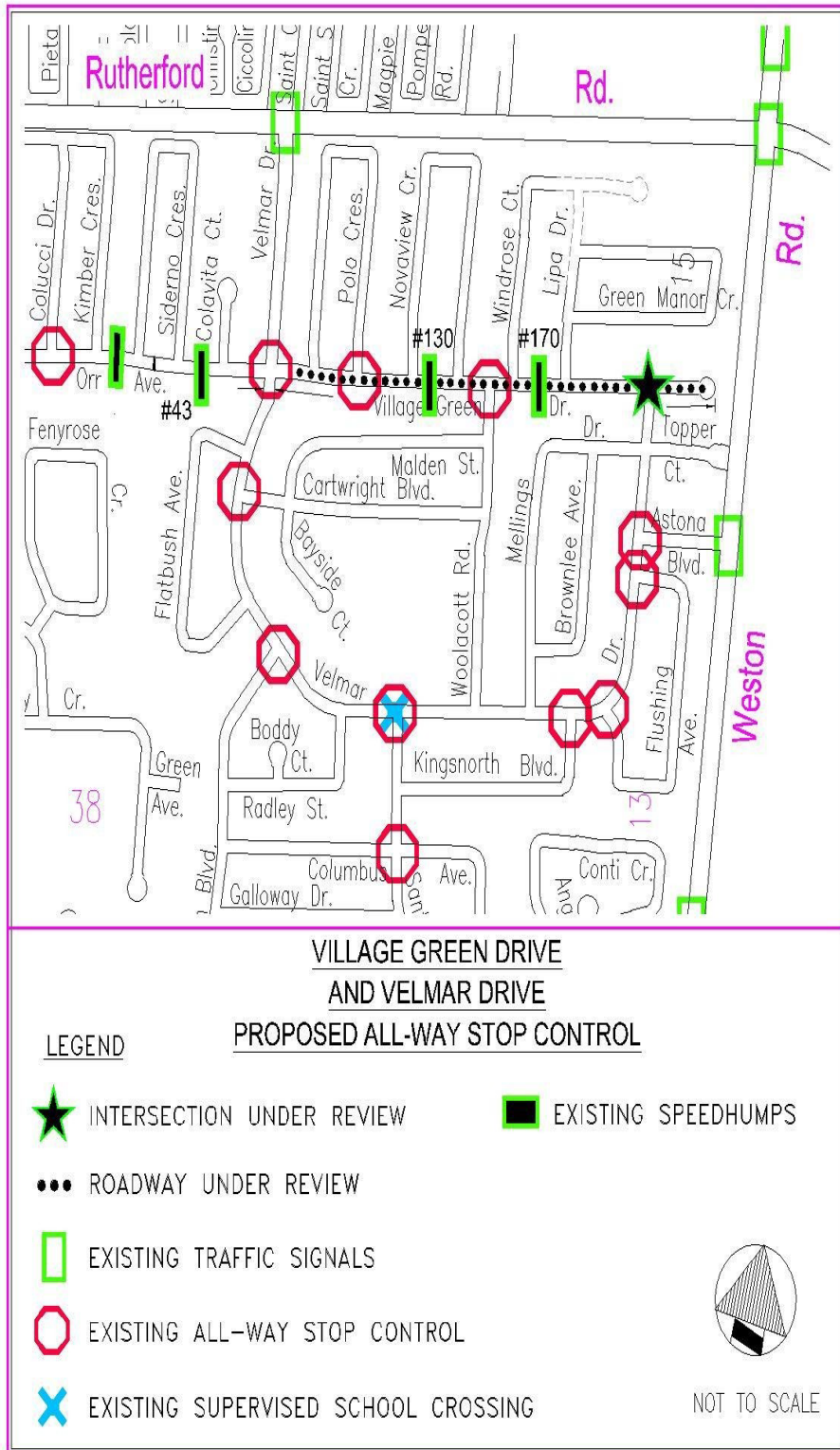
Respectfully submitted,

Bill Robinson, P. Eng.,
Commissioner of Engineering and Public Works

Gary Carroll, P. Eng.,
Director of Engineering Services

:MR

ATTACHMENT No. 1



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