COMMITTEE OF THE WHOLE NOVEMBER 21, 2005

WESTON DOWNS COMMUNITY VILLAGE GREEN DRIVE REVIEW

Recommendation

The Commissioner of Engineering and Public Works recommends:

That no further traffic calming measures or traffic control devices be installed on Village Green Drive or Orr Avenue.

Economic Impact

Not Applicable.

Purpose

To review the feasibility of implementing additional traffic control options on Village Green Drive, in response to direction from City Council.

Background - Analysis and Options

At its meeting on September 12, 2005, under Item 39, Report No. 46 Council made the following recommendations:

"That the City of Vaughan Engineering Department be requested to conduct a review of traffic control options such as stop signs, median, or speed humps on Village Green in the vicinity of Velmar Drive."

Residents have seen numerous vehicles approach the stop sign at Village Green and Velmar Drive and not stop to turn sharply into incoming vehicles.

Residents then have expressed that they immediately speed onto Village Green while traveling westerly during PM rush hours.

Recommendations include: an island or median at Village Green and Velmar Drive with road narrowing, raised intersection, or three way stop signs.

Other recommendations include a three way stop sign on Village Green west of Velmar Drive."

Village Green Drive, Velmar Drive, and Orr Avenue are feeder roadways with a 23.0m right-of-way, typically accommodating volumes of up to 8,000 vehicles per day. There are pre-existing all-way stop controls and traffic calming measures located along Village Green Drive. The intersection of Village Green Drive/Orr Avenue and Velmar Drive is under existing all-way stop control, and there are existing centre medians at all four approaches to the intersection. There are also existing all-way stop controls at Babak Boulevard and Orr Avenue, Colucci Drive and Orr Avenue, Village Green Drive and Polo Crescent (east leg), and at Village Green Drive and Woolacott Road. Five speed humps are installed along Village Green Drive and Orr Avenue. Refer to Attachment No. 1.

Staff collected speed and volume data on Village Green Drive and on Orr Avenue from October 25, 2005 to October 27, 2005. The collected speed and volume data covered a 24-hour time period and is summarized below.

| Location | Direction | 24 Hour Volume | Average Speed over Study |
|--|---------------------------------|----------------------|-----------------------------|
| Village Green Drive between Novaview Crescent (W) and Novaview Crescent (E) | Eastbound Westbound Total | 1212 1221 2433 | 35 km/h 38 km/h |
| Orr Avenue between Siderno Crescent (W) and Siderno Crescent (E) | Eastbound Westbound Total | 1079 1050 2129 | 42 km/h 41 km/h |

The existing speed limit on Village Green Drive and Orr Avenue is posted at 40km/h. The collected vehicle speeds are similar to other feeder type roadways within the City. The collected volumes are within feeder roadway capacities.

In accordance with the Council's Neighbourhood Traffic Committee Policy and Procedure;

Warrant 1 - speed humps shall be considered only when the following three warrants are met; the street is not a primary emergency response route, the speed limit is 50 km/h or less, and the average speed is measured to be 10 km/h greater than the speed limit.

The collected speeds do not exceed the posted speed limit by 10 km/h. Village Green Drive is classified as a primary response route. Based on the above warrant, the warrant for the installation of additional speed humps on Village Green Drive is not met.

In comparison, staff collected speed and volume data on Village Green Drive and Orr Avenue from March 30, 2005 to April 6, 2005, and also on Village Green Drive from November 29, 2004 to December 1, 2004. The collected speed and volume data covered a 24-hour time period and is summarized below.

March 30, 2005 - April 6, 2005 Data Summary

| Location | Day of Week (highest weekday volume)/Saturday | Direction | 24 Hour Volume | Average Speed over Study |
|--|---|---------------------------------|----------------------|--------------------------------|
| Village Green Dr – west of Nova View Cres | Friday | Eastbound Westbound Total | 1121 1303 2424 | 41 km/h 39 km/h |
| Village Green Dr – west of Nova View Cres | Saturday | Eastbound Westbound Total | 953 1094 2047 | |
| Orr Ave – west of Kimber Cres | Friday | Eastbound Westbound Total | 759 775 1534 | 40 km/h 40 km/h |
| Orr Ave – west of Kimber Cres | Saturday | Eastbound Westbound Total | 650 633 1283 | |

November 29, 2004 – December 1, 2004 Data Summary

| Location | Direction | Average Speed | 24 Hour Volume |
|--------------------------------------|-----------|------------------|----------------|
| Village Green Dr – west of Nova View | Eastbound | 41 km/h | 1137 |
| Cres | Westbound | 41km/h | 1363 |
| | Total | | 2500 |

The average speeds on Village Green Drive and Orr Avenue have remained consistent throughout the conducted studies ranging from 35 to 42 km/h. As indicated from the collected traffic volumes, the Orr Avenue traffic volumes have increased, however, the Village Green Drive traffic volumes are relatively the same. The study also indicates that the traffic volume on Village Green Drive has accommodated a similar volume from the Spring 2005 and Fall 2005.

A review of the collision history on Village Green Drive and on Orr Avenue in the vicinity of Velmar Drive showed zero collisions from 2001 to present. There was a single collision in 2004 near the intersection of Village Green and Lipa Drive where a vehicle collided with a second vehicle attempting to turn into a residential driveway.

Summary Response to Resident Issues/Items:

1. Residents have seen numerous vehicles approach the stop sign at Village Green and Velmar Drive and not stop to turn sharply into incoming vehicles.

Staff notes that York Regional Police Services have been requested to provide more frequent traffic surveillance within the Weston Downs Community, specifically with respect to stop sign compliance and speeding violations. Also, there are existing centre medians which deliniates traffic away from oncoming vehicles at the intersection.

2. Residents then have expressed that they immediately speed onto Village Green while traveling westerly during rush hours.

Staff notes that the collected westbound traffic speeds on Village Green Drive and Orr Avenue average from 38 to 41 km/h which is an acceptable speed and is comparable to earlier studies.

3. Recommendations include: an island or median at Village Green and Velmar Drive with road narrowing, raised intersection, or three way stop signs.

Staff notes the intersection of Village Green Drive and Velmar Drive is under existing all-way stop control, and centre medians are installed at all four approaches. The medians act to reduce the pavement width at the intersection and assist drivers to turn into their proper lane. A retro-fitted raised intersection would not be recommended due to the existing centre medians and associated costs.

4. Other recommendations include a three way stop sign on Village Green west of Velmar Drive.

Staff notes an all-way stop control would not be warranted at any of the intersections of Orr Avenue west of Velmar Drive. Staff compared the number of housing units on Kimber Crescent, Siderno Crescent, and Colavita Court that have vehicular access to the Provincial Warrant for All-Way Stop Control. Part 1 of the Provincial Warrant requires a minimum of 120 vehicles entering the intersection from the minor street(s) during the highest peak traffic hour.

Staff used an estimate of one vehicle trip per unit (as per the Institute of Transportation Engineers – Trip Generation model) entering the intersection during the highest peak traffic hour. As the total of housing units is 72 housing units on Kimber Crescent (divided by 2 accesses), 71 housing units on Siderno Crescent (divided by 2 accesses), and 14 housing units on Colavita Court, Part 1 of the Provincial Warrant is not met.

Environmental Assessment Act Requirements

As required under the Environmental Assessment Act, whenever traffic calming measures are installed or removed a Schedule B Environmental Assessment process must be followed. This process requires public notification and consultation, the identification of alternates, and the filing of a Notice of Completion with the Ontario Ministry of the Environment and publication in local media.

Should Council approve traffic calming measures for installation on Village Green Drive then the City would be required to publish a Notice of Commencement, develop a plan for review by the public and publish a Notice of Completion. The notices would also have to be filed with the Ministry of the Environment and published in editions of the Vaughan Citizen, Lo Specchio and Vaughan Weekly newspapers.

Prior to construction, the City's normal practice is to mail letters to the residents of Village Green Drive should traffic calming measures be approved informing them of their installation.

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

Staff concludes that no further traffic calming measures or traffic control devices be installed on Village Green Drive or Orr Avenue based on data collected and the existing traffic control devices and traffic calming measures in place. The intersection of Village Green Drive and Velmar Drive is under existing all-way stop control, and centre medians are installed at all four intersection approaches. Staff to contact York Regional Police Services to undertake additional neighbourhood surveillance to enforce any Highway Traffic Act violations observed.

Attachments

1. Location Map

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Respectfully submitted,

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

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

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ATTACHMENT No. 1

