



City of Richmond

Report to Committee

To Planning - Jun 17, 2008

To: Planning Committee

Date: May 30, 2008

From: Victor Wei, P. Eng.
Director, Transportation

File: 10-6450-09-01/2008-Vol
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Re: PROPOSED TRAFFIC CALMING MEASURES ON DALLYN ROAD -
FOLLOW-UP REPORT

Staff Recommendation

That staff proceed with the implementation of the proposed speed humps as a traffic calming measure for the Dallyn Road area, as described in the attached report, with the funding source being the 2006 Major Capital Works Program - Neighbourhood Traffic Safety Improvements (Account No. 40271).

Victor Wei, P. Eng.
Director, Transportation
(4131)

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ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER	
Engineering	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
Fire Rescue	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
R.C.M.P.	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REVIEWED BY CAO		

Staff Report

Origin

Over the past year, residents of Dallyn Road and the surrounding area have expressed concerns to the City regarding commuters who bypass the intersection of No.5 Road and Cambie Road to shortcut through their neighbourhood. At the July 17, 2007 Planning Committee meeting, staff were directed to investigate the residents' concerns and report back with findings and recommendations.

Consequently, at the July 23, 2007 regular Council meeting, it was resolved that staff proceed with consultation with the area residents by means of a neighbourhood questionnaire/survey on the proposed installation of a traffic diverter (raised median) at Dallyn Road and Cambie Road to mitigate traffic shortcutting in the area.

This report presents the results of the public survey and rationale for staff's recommendation for a revised traffic calming plan to address the traffic-related concerns of residents of the Dallyn Road area.

Analysis

1. Public Consultation: August 2007 Survey

Following the direction from Council in July 2007, Transportation staff conducted a neighbourhood survey in August 2007 to seek residents' feedback on the original recommended traffic calming measure of a traffic diverter at Dallyn Road and Cambie Road to address the issue of traffic shortcutting. Based on the results of that survey, the traffic diverter was overwhelmingly rejected by area residents with 80% of the residents not in favour of the proposed traffic calming measure. Hence, a petition representing 73 area residents was subsequently submitted to the City at the September 2007 meeting of the Public Works and Transportation Committee requesting the installation of speed humps at several locations on Dallyn Road.

2. Public Consultation: October 2007 Survey

As a result of the above residents' petition, staff carried out a second survey of area residents in October 2007 to verify the level of support for the revised traffic calming option of the installation of speed humps on Dallyn Road and Thorpe Road. The survey results indicated that 74% of the area residents that responded were in favour of the installation of speed humps.

It should be noted that out of the 73 area residents who had signed the September 2007 petition, only 30 (41%) responded in the second survey expressing support of the revised proposed traffic calming plan, while 41 (56%) did not respond and two (3%) were not in favour.

3. Vehicle Origin-Destination Study: April 2008

In order to determine the shortcutting traffic patterns in more detail, staff also carried out a second vehicle origin-destination study of the Dallyn Road neighbourhood in April 2008 to

verify the extent of traffic shortcutting during the weekday afternoon peak hour at the following intersections:

- Cambie Road and Dallyn Road;
- No. 5 Road and Woodhead Road;
- No. 5 Road and Montego Street;
- No. 5 Road and Dewsbury Drive; and
- No. 5 Road and Thorpe Road.

This second study included the addition of Thorpe Road and was conducted following the completion of construction work for drainage upgrades and watermain replacement in the Dallyn Road subdivision that affected traffic flows in the area during the winter of 2007-2008.

As shown in the table below, a review of the recorded licence plates obtained in the second study confirmed that there is traffic shortcutting through the above subdivisions in order to avoid the signalized intersection at No. 5 Road and Cambie Road. Both studies indicated that the predominant direction of traffic shortcutting is eastbound on Cambie Road to southbound No. 5 Road.

Total Traffic Entering Neighbourhood Via Dallyn Road		
Year of Study	Total # Vehicles	% Shortcutting to No. 5 Road
2005 (excluding Thorpe Road)	175	19%
2008 (including Thorpe Road)	117	20%

The results of both vehicle origin-destination surveys indicated that the extent of traffic shortcutting is higher than the acceptable industry level of 10%. The most effective way to address and minimize the intrusion of traffic shortcutting in the Dallyn Road neighbourhood would involve some form of road closure or traffic diversion. As this option was overwhelmingly rejected by area residents in the first neighbourhood survey, staff recommended that a series of speed humps be placed on Dallyn Road and Thorpe Road as an alternative means to address the vehicle speeding and traffic shortcutting at this location.

4. Revised Traffic Calming Measures

The revised traffic calming measures consist of the installation of four speed humps on Dallyn Road and two speed humps on Thorpe Road (**Attachment 1**). The installation of these speed humps is expected to effectively reduce vehicle speed on Dallyn Road and eliminate the instances of shortcutting by drivers bypassing the No. 5 Road and Cambie Road intersection. While area residents requested the installation of speed humps on Dallyn Road only, based on the results of the origin-destination study conducted in April 2008, staff recommend that speed humps also be placed on Thorpe Road to effectively address the ongoing traffic-related issues in the area.

Although speed humps can be very effective in keeping vehicle speed down in a residential neighbourhood, support for their use by area residents is typically mixed as this measure can potentially cause noise and vibration when vehicles traverse over the device. However, these

adverse impacts are not expected to be significant in the subject area due to the setback of the properties adjacent to where the speed humps will be placed. As such, staff propose to install temporary speed humps only for an initial trial period of three months so that area residents can evaluate their effectiveness and provide feedback to the City during the trial period. If no major concerns with the speed humps are indicated in the trial period, the temporary speed humps will be replaced with permanent speed humps. Transportation staff will report back to Council on other alternative traffic calming measures if the temporary speed humps are deemed unacceptable by the majority of the affected residents.

5. Long Term Improvements at the No. 5 Road/Cambie Road Intersection

As part of the City's long term capital road plan, it is anticipated that future improvements will be made at the No. 5 Road/Cambie Road intersection to provide designated left-turn lanes in order to address traffic flow concerns. As traffic congestion at this intersection is currently the primary cause of shortcutting through the Dallyn Road neighbourhood, the proposed intersection improvements would significantly reduce traffic queuing and thus, together with the current proposed traffic calming measure, further reduce the likelihood of through traffic intruding into the Dallyn Road area. The proposed intersection improvements, however, would require significant capital funding to be implemented, as they would necessitate property acquisition to accommodate the proposed road widening. As such, staff will carry out further assessments to determine the proposed scope of work and the associated costs with a view to including this project in future consideration of the City's 5-Year Capital Plan.

Financial Impact

The estimated cost for the six proposed permanent speed humps, including the installation and replacement of the temporary speed humps, is \$21,000 with the funding source being the 2006 Major Capital Works Program – Neighbourhood Traffic Safety Improvements (Account No. 40271).

Conclusion

In light of the concerns raised by area residents regarding speeding vehicles and traffic shortcutting in the Dallyn Road area and based on the results of the recent area resident survey, staff recommend that speed humps be installed on Dallyn Road and Thorpe Road as safety enhancement measures, with temporary speed humps initially installed on a three-month trial basis. Upon installation of the proposed traffic calming measure, staff will continue to monitor the traffic conditions in the area and consult with the area residents on an on-going basis to determine if there is a need for any further action at this location.



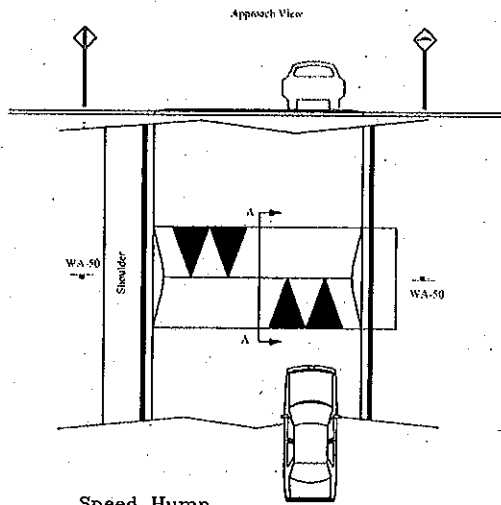
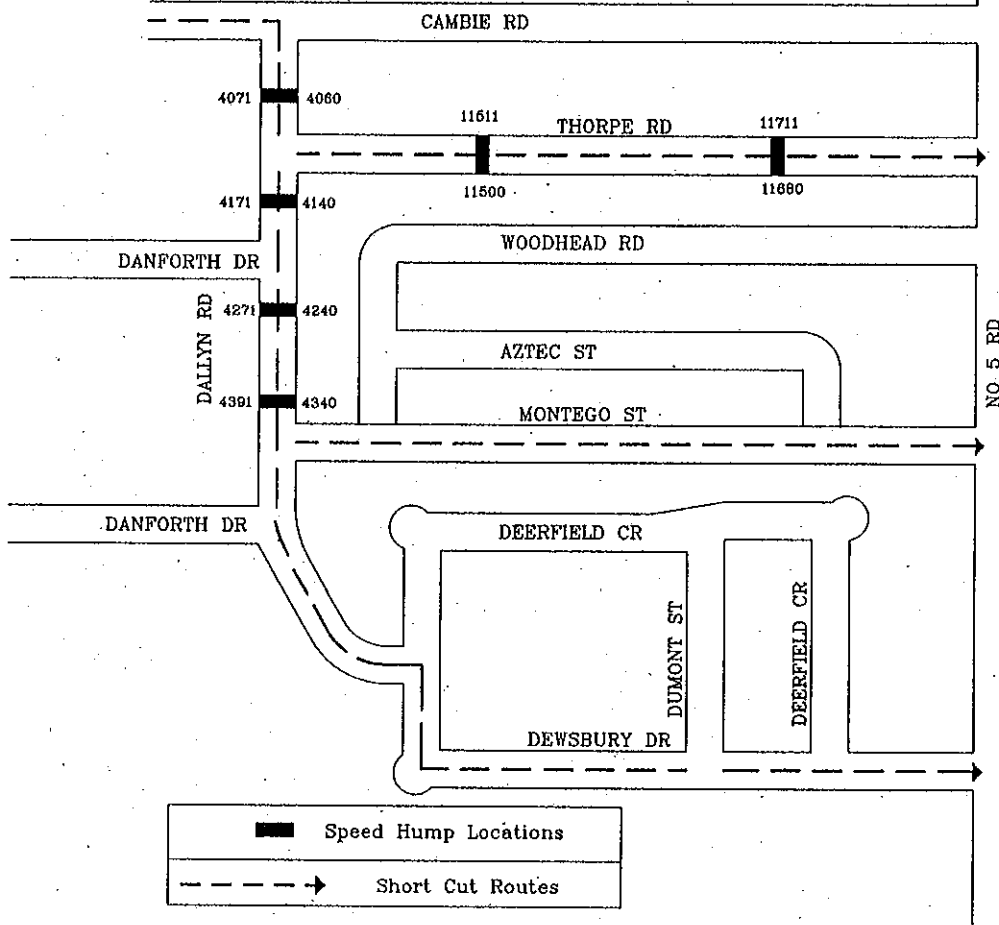
Bill Dhaliwal
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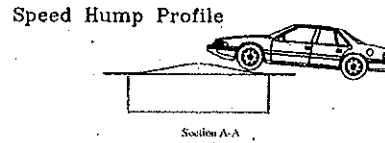
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ATTACHMENT 1



Speed Hump
Typical Signs & Roadmarkings



Proposed Traffic Calming - Dallyn Road