

## COMMITTEE OF THE WHOLE – FEBRUARY 7, 2005

### **DUFFERIN HILL DRIVE ALL-WAY STOP CONTROL**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control not be installed at the intersection of Dufferin Hill Drive and Forecastle Road; and
2. That the speed limit on Dufferin Hill Drive between Dufferin Street and Confederation Parkway not be reduced from the existing statutory 50 km/h to 40 km/h.

#### **Purpose**

To review the feasibility of implementing an all-way stop control at the intersection of Dufferin Hill Drive and Forecastle Road, as well as reducing the speed limit on Dufferin Hill Drive from Confederation Parkway to Dufferin Street, in response to direction from Council.

#### **Background - Analysis and Options**

At its meeting on October 25, 2004 Council directed:

**“In response to requests from local residents, Councillor Sandra Yeung Racco recommends:**

- 1. That staff be requested to investigate the need for and the feasibility of installing an allway stop control at Dufferin Hill Drive and Forecastle Road; and**
- 2. That staff investigate the need for and the feasibility of reducing the speed limit on Dufferin Hill Drive from Dufferin Street to Confederation Parkway from the statutory 50 kilometres per hour to 40 kilometres per hour; and**
- 3. That staff report to a future Committee of the Whole meeting with respect to their findings as soon as possible.”**

Dufferin Hill Drive is a two lane primary feeder roadway with a 23.0 metre right-of-way and Forecastle Road is a local residential roadway with a 17.5 metre right-of-way. The existing speed limit on both streets is a statutory 50 km/h. The existing stop control is located on Forecastle Road at Dufferin Hill Drive. The area is shown on Attachment No. 1.

Staff conducted a turning movement count on November 16, 2004 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. The collected traffic volumes compared to the Provincial Warrant for All-Way Stop Control are as shown below.

- |   |               |
|---|---------------|
| • Warrant 1 – Minimum Vehicular Volumes | Warranted 15% |
| • 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 count do not meet the requirements of the Provincial Warrant for All-Way Stop Control. The above results reflect the highest peak traffic hour at this intersection.

In addition, radar speed studies were conducted on November 18, 2004 from 7:45am to 8:45am and from 4:15pm to 5:15pm on Dufferin Hill Drive near Forecastle Road. The following table summarizes the results of this investigation.

DATE	TIME	LOCATION	DIRECTION	AVERAGE SPEED
November 18, 2004	7:45am – 8:45am	Near Forecastle Road	Eastbound	46.6
	7:45am – 8:45am		Westbound	46.0
November 18, 2004	4:15pm – 5:15pm	Near Forecastle Road	Eastbound	45.4
	4:15pm – 5:15pm		Westbound	47.0

The average speeds on Dufferin Hill Drive range from 45 to 47 km/h, which is in compliance with the existing 50 km/h speed limit. Therefore, staff does not recommend a reduction of the speed limit to 40 km/h on Dufferin Hill Drive from Confederation Parkway to Dufferin Street.

There are no sight distance restrictions noted at this intersection. Sidewalks are available on both sides of the street. There were also no reported vehicle collisions at this intersection. Dufferin Hill Drive is designated as a through street with the stop control located on the side street.

#### **Relationship to Vaughan Vision 2007**

This traffic study is consistent with Vaughan Vision 2007 as to identify and implement innovative traffic management alternatives to improve general traffic safety (1.1.3).

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 not be installed at the intersection of Dufferin Hill Drive and Forecastle Road. It is also recommended that no changes be made to the statutory 50 km/h speed limit on Dufferin Hill Drive between Confederation Parkway and Dufferin Street.

#### **Attachments**

1. Location Map

#### **Report prepared by**

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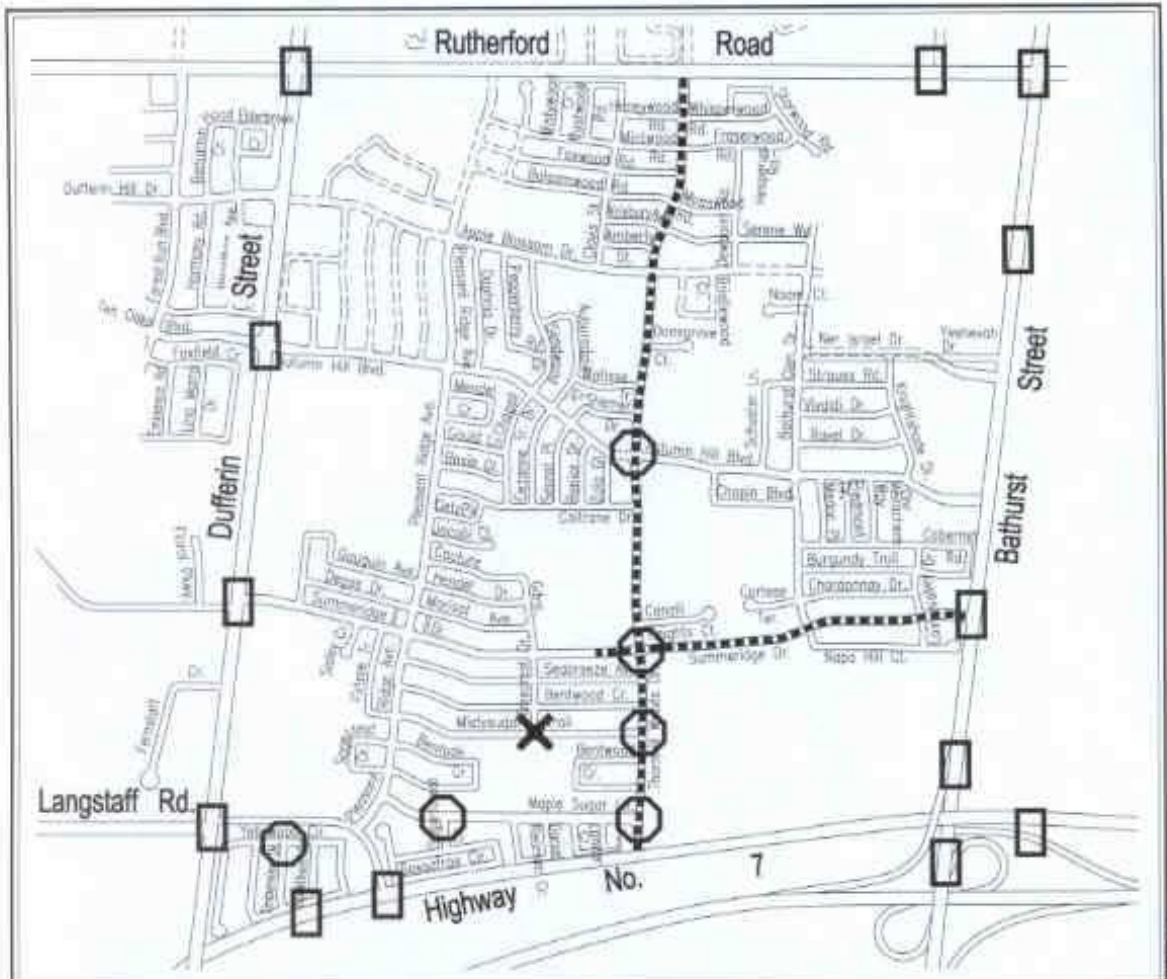
Respectfully submitted,

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

Gary Carroll, P. Eng.  
Director of Engineering Services

:MR

# ATTACHMENT No. 1



## THORNHILL WOODS & SUMMERIDGE DRIVE TRAFFIC CALMING MEASURES

### LEGEND

- ..... ROADWAY UNDER REVIEW
- EXISTING TRAFFIC SIGNALS
- EXISTING ALL-WAY STOP CONTROL
- ✕ EXISTING SUPERVISED SCHOOLCROSSING



NOT TO SCALE