

COMMITTEE OF THE WHOLE – DECEMBER 11, 2006

**FLETCHER DRIVE
TRAFFIC CONCERNS**

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control not be installed at the intersection of Fletcher Drive and Kilbride Gate;
2. That an all-way stop control not be installed at the intersection of Fletcher Drive and Wildhaven Crescent (east intersection);
3. That a speed hump not be installed on Fletcher Drive;
4. That “School Area” signage not be installed on Fletcher Drive; and
5. That the petition from the area residents be received.

Economic Impact

Not Applicable.

Purpose

To address traffic concerns on Fletcher Drive, in response to the petition received.

Background - Analysis and Options

Engineering staff received a petition (see Attachment No. 2) from residents of Fletcher Drive that requested:

- An all-way stop control at the intersection of Fletcher Drive and Kilbride Gate;
- An all-way stop control be installed at the intersection of Fletcher Drive and Wildhaven Crescent (east intersection);
- A speed hump on Fletcher Drive; and
- “School Area” signage indicating Fletcher Drive as a school zone.

Fletcher Drive and Kilbride Gate

Staff conducted field studies on Thursday, October 12, 2006 to determine the feasibility of implementing an all-way stop control at the intersection of Fletcher Drive and Kilbride Gate. Traffic volumes were collected during the peak time periods of 7:00 a.m. to 9:00 a.m., and 3:00 p.m. to 6:00 p.m. The data collected was compared to the Provincial Warrant for All-way Stop Control with the following results:

- | | | |
|---|-----------|-----|
| • Warrant 1 – Minimum Vehicular Volumes | Warranted | 21% |
| • Warrant 2 – Collision Hazard | Warranted | 0% |
| • Warrant 3 – Sight Restriction | Warranted | 0% |

All-way stop controls are recommended when one of the above warrants are satisfied 100% or more. Existing traffic volumes fulfill 21% of the requirements. There have been no vehicle collisions at this intersection susceptible to prevention by an all-way stop control over the last

twelve-month period. There are no sight distance restrictions at this intersection. Based on this review, staff does not recommend the installation of an all-way stop control for the intersection of Fletcher Drive and Kilbride Gate.

Fletcher Drive and Wildhaven Crescent (east intersection)

Staff conducted field studies on October 12, 2006 to determine the feasibility of implementing an all-way stop control at the intersection of Fletcher Drive and Kilbride Gate. Traffic volumes were collected during the peak time periods of 7:00 a.m. to 9:00 a.m., and 3:00 p.m. to 6:00 p.m. The data collected was compared to the Provincial Warrant for All-way Stop Control with the following results:

- Warrant 1 – Minimum Vehicular Volumes Warranted 22%
- Warrant 2 – Collision Hazard Warranted 0%
- Warrant 3 – Sight Restriction Warranted 0%

All-way stop controls are recommended when one of the above warrants are satisfied 100% or more. Existing traffic volumes fulfill 22% of the requirements. There have been no vehicle collisions at this intersection susceptible to prevention by an all-way stop control over the last twelve-month period. There are no sight distance restrictions at this intersection. Based on this review, staff does not recommend the installation of an all-way stop control for the intersection of Fletcher Drive and Wildhaven Crescent (east intersection).

The Ontario Traffic Manual states that stop signs are not intended to be used as a speed control device. Their usage should be limited to the control of right-of-way conflicts at an intersection.

Speed Humps

Fletcher Drive is a two-lane, local roadway with a 20.0-metre right of way and a speed limit of 50km/h. Staff conducted speed and volume studies on Fletcher Drive, west of Wildhaven Crescent (east intersection), from Monday, October 2, 2006 to Friday, October 6, 2006. The results have been summarized below:

Direction	Average Speed	85th Percentile Speed	Average Daily Traffic
Eastbound	42 km/h	53 km/h	370 vehicles
Westbound	41 km/h	51 km/h	380 vehicles

The recorded average speeds on Fletcher Drive range between 41 km/h and 42 km/h. The 85th percentile speed (the speed at which 85% of the vehicles are traveling at or below) range between 51 km/h to 53 km/h. The results of this study suggest a good level of motorist compliance with the 50 km/h speed limit. In accordance with Council's approved Neighbourhood Traffic Committee Policy and Procedure, speed humps are 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.
- The average speed is measured to be 10 km/h greater than the speed limit.

Fletcher Drive is not a primary emergency response route and the speed limit is 50 km/h, however the recorded average speeds do not exceed the speed limit by 10 km/h and therefore do not warrant the installation of speed humps. Furthermore, a review of the collision history indicates there have been no reported collisions on Fletcher Drive within the past three years.

School Area Signage

In the petition, the residents had also requested signage to indicate that Fletcher Drive is a school zone. The Ontario Traffic Manual states "School Area" warning signs should only be installed on roadways where an existing school is present. As there is no school on Fletcher Drive, staff does not recommend the installation of "School Area" warning signs as over usage may reduce their effectiveness in other areas.

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 safety (1.1.3).

This report is consistent with the priorities previously set by Council.

Conclusion

Based on this review, it is recommended:

1. That an all-way stop control not be installed at the intersection of Fletcher Drive and Kilbride Gate;
2. That an all-way stop control not be installed at the intersection of Fletcher Drive and Wildhaven Crescent (east intersection);
3. That a speed hump not be installed on Fletcher Drive; and
4. That "School Area" signage not be installed on Fletcher Drive.

Attachments

1. Location Map.
2. Letter/Petition Dated September 7, 2006 to the Mayor and Members of Council only.

Report prepared by:

Tim Apostolopoulos, Traffic Analyst, Ext. 3120
Mike Dokman, Supervisor, Traffic Engineering, Ext. 3118

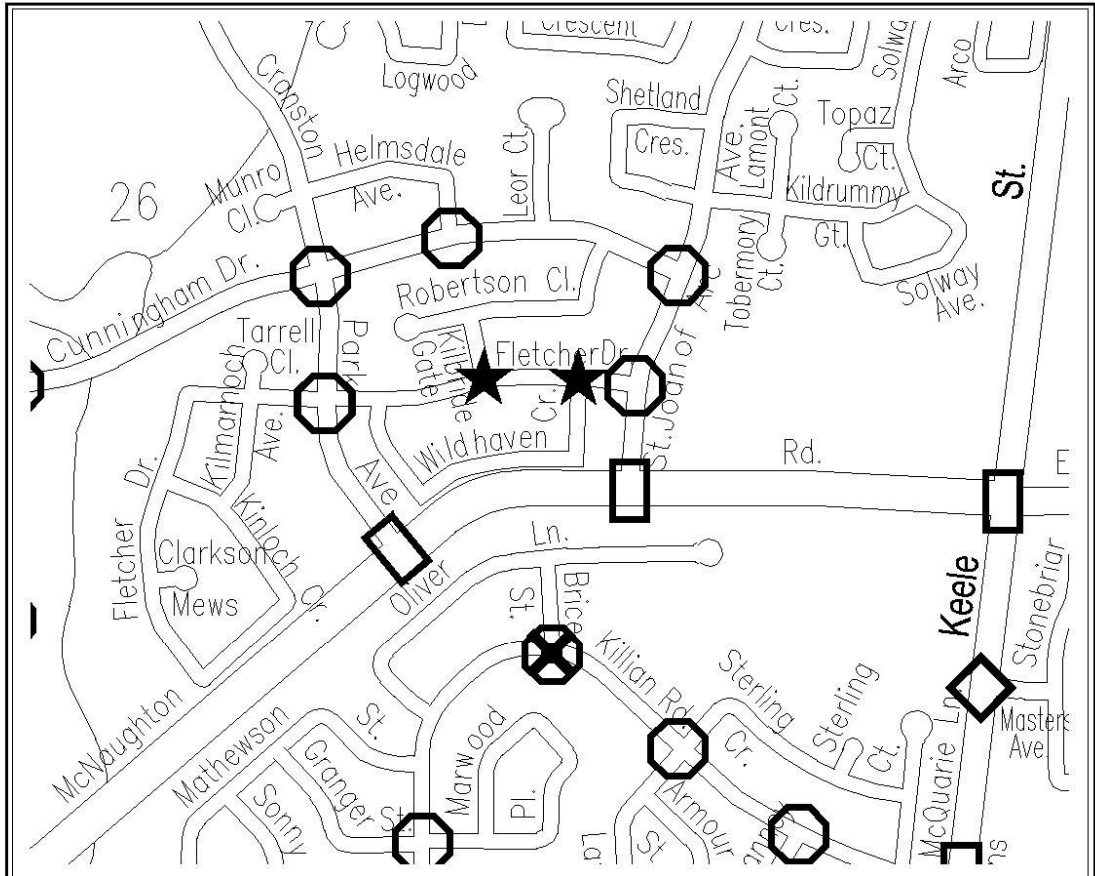
Respectfully submitted,

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

Gary Carroll, P. Eng.
Director of Engineering Services






TA:mc

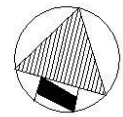
ATTACHMENT No. 1



FLETCHER DRIVE PROPOSED ALL-WAY STOPS

LEGEND

-  INTERSECTION UNDER REVIEW
-  EXISTING TRAFFIC SIGNALS
-  EXISTING ALL-WAY STOP CONTROL
-  EXISTING SUPERVISED SCHOOL CROSSING
-  PEDESTRIAN SIGNAL OR HALF SIGNAL



NOT TO SCALE