COMMITTEE OF THE WHOLE - AUGUST 18, 2003

DISCOVERY TRAIL PROPOSED ALLWAY STOP CONTROL

Recommendation

The Commissioner of Engineering and Public Works recommends:

- 1. That an allway stop control not be installed at the intersection of Discovery Trail and Equator Crescent;
- 2. That an allway stop not be installed at the intersection of Discovery Trail and Santa Maria Trail; and
- 3. That an allway stop not be installed at the intersection of Discovery Trail and Stern Gate.

Purpose

To review the feasibility of implementing an allway stop control on Discovery Trail in the vicinity of Discovery Trail Elementary School and the adjacent Discovery Park, in response to requests received from area residents. Parents have concerns about children crossing Discovery Trail to use the adjacent Discovery Park when the crossing guards are not on duty.

Background - Analysis and Options

Discovery Trail is a two-lane feeder type roadway. The existing speed limit on Discovery Trail is 50 km/h except a 40 km/h speed limit from 150 metres north to 150 metres south of the Discovery Trail Elementary School. There are six traffic calming measures installed in the form of a raised curb road narrowing between Santa Maria Trail and Ferdinand Avenue. The existing traffic controls and school crossing guard locations are indicated on Attachment No. 1.

In response to the subject requests, staff conducted traffic studies at three Discovery Trail intersections during the AM and PM Peak periods to determine if an allway stop control is warranted. The studies occurred during school days when students were present.

The results of the studies are indicated below:

| Intersection | Date Completed | Warrant % |
|--------------------------------------|--------------------------|-----------|
| Discovery Trail at Santa Maria Trail | Thursday, June 12, 2003 | 28% |
| Discovery Trail at Stern Gate | Tuesday, June 17, 2003 | 5% |
| Discovery Trail at Equator Crescent | Wednesday, June 18, 2003 | 31% |

Based on the studies, the minimum traffic volume warrants for the installation of an allway stop control at the three intersections are not met. Rolling stops can occur on the main street (Discovery Trail) if the motorist right-of-way is not challenged by cross traffic or pedestrians.

There are no sight distance restrictions noted at the intersections. There are no reported vehicle collisions at the three intersections. The raised curb bump-out measures were installed to reduce the distance required for a pedestrian to cross Discovery Trail and to act as traffic calming.

However, the Discovery Trail and Equator Crescent intersection has the highest warrant value and it is located mid-way along this section of road. If Council wishes to install an allway stop control the most appropriate intersection would be Discovery Trail and Equator Crescent.

Conclusion

Based on staff's review, it is concluded that allway stop control is not warranted at any of the three subject intersections.

Attachments

1. Location Map

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Respectfully submitted,

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

MG/fc

