

## **COMMITTEE OF THE WHOLE – JANUARY 19, 2004**

### **PROPOSED CLOSURE OF KING HIGH DRIVE AT DUFFERIN STREET**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends:

That King High Drive not be closed at Dufferin Street.

#### **Purpose**

To report on the feasibility and impacts associated with closing King High Drive at Dufferin Street.

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

At its meeting of September 22, 2003, Council adopted:

“That a report on the implications to the traffic patterns with the closure of King High Drive, be referred to the Committee of the Whole meeting of December 8, 2003.”

Refer to Attachment No. 1 for the area network.

#### **Background**

King High Drive is within the area of the King High Drive Traffic Committee, which was formed as per Council direction at its meeting of May 13, 2002, to look at the installation of traffic calming measures on King High Drive, Concord Road and Lawrie Road. One of the issues identified by the residents at the initial public meeting was traffic infiltration on King High Drive.

The initial infiltration study was conducted by staff in October 2002. The results of the study indicate that during the morning peak period approximately 34 percent of motorists travelling between the Dufferin Street/King High Drive and Concord Road/Centre Street intersections are infiltrating. The corresponding amount during the afternoon peak period is approximately 14 percent. However, the actual number of motorists turning onto King High Drive from Dufferin Street during each of these time periods is low, at less than 50 vehicles.

A follow-up infiltration study was conducted by staff in March 2003 during the morning peak period. The results indicate that approximately 49 percent of motorists travelling between the Dufferin Street/King High Drive and Concord Road/Centre Street intersections during this time are infiltrating. The actual number of motorists turning onto King High Drive from Dufferin Street during the morning peak period is low, at less than 50 vehicles.

At the Council meeting dated March 31, 2003 the Region of York was requested to review the feasibility of altering the signed timings at the intersection of Dufferin Street and Centre Street so that motorists will be less inclined to use King High Drive. In May 2003, the Region of York reviewed this request and increased the southbound left turn phase timing by 7 seconds.

#### **Recently Conducted Traffic Studies**

Engineering Staff followed up with a third infiltration study in October 2003 during the morning peak period. The results indicate that approximately 41 percent (53 vehicles) of motorists travelling between the Dufferin Street/King High Drive and Concord Road/Centre Street intersections during this time are infiltrating. Therefore, it appears that the signal phasing change at Dufferin Street and Centre Street has reduced the percentage of vehicles infiltrating through King High Drive during the morning peak hours. The actual number of motorists turning onto King

High Drive from Dufferin Street was 130 vehicles.

### Traffic Volumes

Location	Number of Vehicles/Direction
1. King High Dr west of Dufferin St	1838 vehicles/eastbound 967 vehicles/westbound
2. King High Dr east of Concord Rd	991 vehicles/eastbound 935 vehicles/westbound
3. Concord Rd north of Centre St	1220 vehicles/northbound 1957 vehicles/southbound
4. Concord Rd south of Beverly Glen Blvd	1355 vehicles/northbound 1588 vehicles/southbound
5. Beverley Glen Blvd west of Concord Rd	2819 vehicles/westbound 3263 vehicles/eastbound

King High Drive and Concord Road are designed to local road standards with a right-of-way width of 20.0 metres. Beverley Glen Boulevard is designed to a feeder road standard with a right-of-way width of 23.0 metres. Traffic volumes for a local roadway should not exceed 3,000 vehicles/day and for a feeder roadway volume should not exceed 8,000 vehicles/day. The above collected traffic volume for each roadway is well within these specified limits.

### Radar Studies

Location	Average Speed/Direction
1. King High Dr west of Dufferin St	46 km/h/eastbound 48 km/h/westbound
2. King High Dr east of Concord Rd	41 km/h/eastbound 41 km/h/westbound
3. Concord Rd north of Centre St	39 km/h/northbound 39 km/h/southbound

The recorded vehicle speeds are comparable to other similar roadways within the City.

There are existing allway stop controls at the following intersections:

Beverly Glen Blvd/Concord Rd, Concord Rd/King High Dr, Concord Rd/Lawrie Rd and King High Dr/Vaughan Blvd.

### Road Closure Impacts

Closing King High Drive at Dufferin Street would:

- Affect residents on adjacent streets. Many motorists currently driving through the neighbourhood, as well as residents living on King High Drive, would divert to Beverley Glen Boulevard to the north. The residents of these other streets would likely oppose a road closure on King High Drive.
- Inconvenience residents of King High Drive by forcing them to divert onto other streets.

- Increase emergency response times. This will be the case even if an emergency access with removable bollards is provided at the intersection, as the Fire Department has indicated the act of removing these bollards often involves an equivalent amount of time as diverting to another street.
- Set a precedent in the City of Vaughan. Similar road closure requests, such as on Santa Barbara Place in Weston Downs, or Wigwoss Drive in the Vaughanwood neighbourhood, have been refused by Council in the past.
- Impact access for a planned development on the southeast corner of the intersection. A site plan application (DA.02.062) was considered by Committee of the Whole at its meeting of March 3, 2003, for an office building with 33 parking spaces on the site. Access would be via a full movements driveway off King High Drive, and a right in/right out driveway off Dufferin Street. Should King High Drive be closed the location of the closure would have to be carefully considered. If the closure was at Dufferin Street, the patrons unable to use the right in/right out driveway would be forced to divert through the adjacent residential neighbourhood. If the closure was located east of the driveway, it would be difficult to implement given limited space in the right of way and the locations of existing driveways. The west end of the closure on King High Drive would have to be designed to incorporate a turning circle to accommodate waste collection and snow ploughing vehicles so that they could turn around without backing up. This turning circle would impact the boulevard and driveways of the existing homes at this location

In light of these impacts, and the low volume of infiltrating traffic on King High Drive, staff does not recommend the closure of King High Drive at Dufferin Street.

Engineering Staff has initiated contact with the resident representative of the community to inform her of the outcome of the studies and staff's recommendation. Staff will continue to be in contact with the resident representative.

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

This traffic study is consistent with Vaughan Vision 2007 as to ensure that the enhancement of safety standards are adhered to (1.1.2) and that effective traffic calming measures meet the City's Neighbourhood Policy and Procedures and Warrants for traffic calming (3.3.1).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

### **Conclusion**

Based on the above review, it is recommended that King High Drive not be closed at Dufferin Street.

### **Attachments**

1. Location Map

### **Report prepared by**

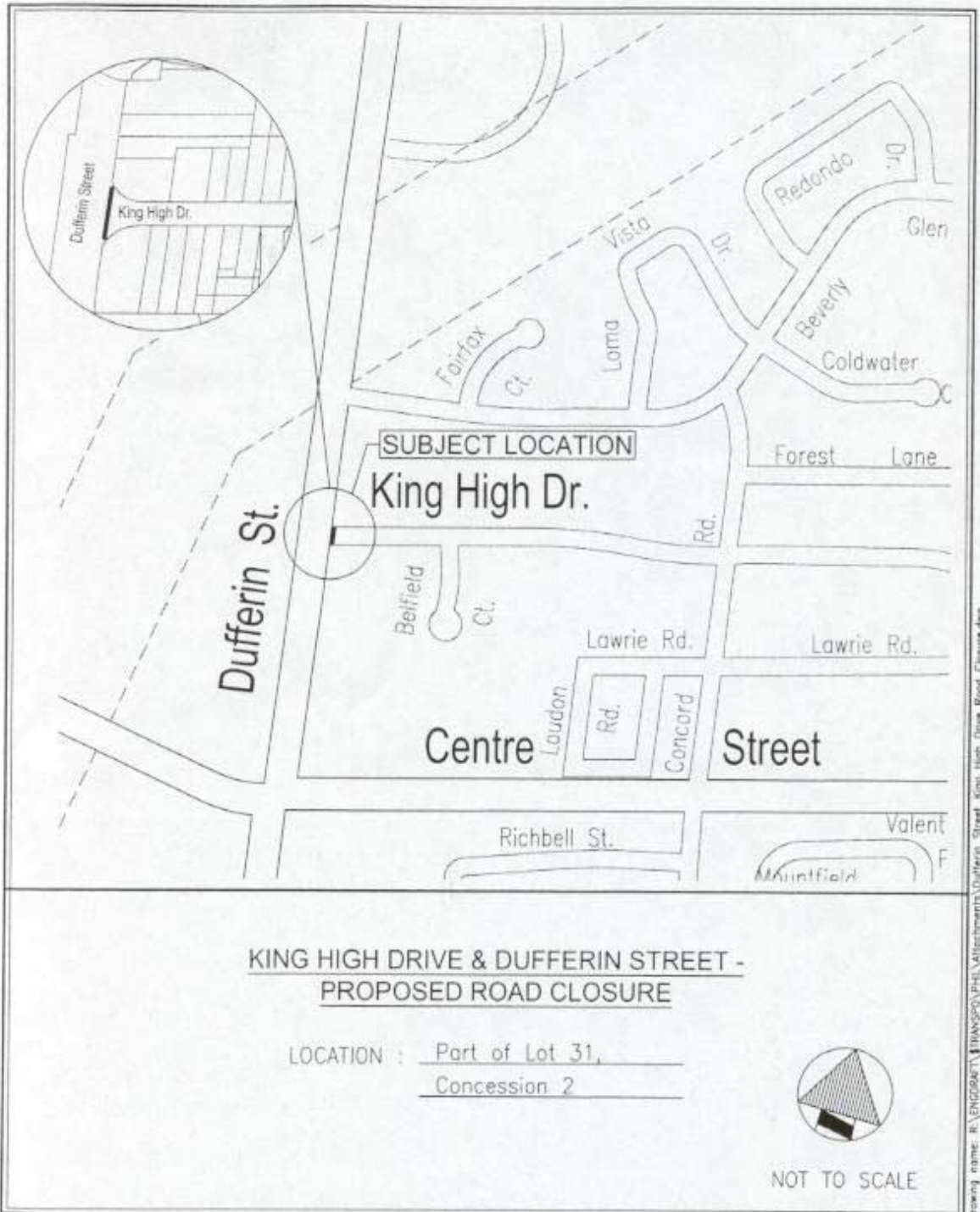
Mike Dokman, Acting Transportation Supervisor, ext 8031

Respectfully submitted,

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

Michael Won, P. Eng.  
Director of Development/Transportation  
Engineering

# ATTACHMENT No. 1



CITY OF VAUGHAN - ENGINEERING DEPARTMENT

Drawing name: R:\ENGINEERING\DRAWINGS\PHL\Attachments\Dufferin Street\_King High Drive Road Closure.dwg