

## COMMITTEE OF THE WHOLE – JUNE 23, 2009

### **EDGELEY BOULEVARD AND BASS PRO MILLS DRIVE TRAFFIC REVIEW WARD 4**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends:

1. That Engineering Services staff continue to monitor the intersection in the Summer and Fall of 2009 to determine the traffic signal warrant values; and
2. That if the traffic signal warrant values are met, Engineering Services staff commence the design and tender of the traffic signals at the intersection of Edgeley Boulevard and Bass Pro Mills Drive.

#### **Contribution to Sustainability**

The installation of traffic signals at the intersection of Edgeley Boulevard and Bass Pro Mills Drive once the Provincial Traffic Signal Warrant is met, will promote and improve traffic flow movements within this area.

#### **Economic Impact**

There are no economic impacts stemming from the recommendations of this report for the 2009 Budget Year. The approximate cost for the installation of traffic signals is \$125,000, and is approved in the 2009 Capital Budget Account EN-1757-09. There will be future impacts on the Operating Budgets for the maintenance of the traffic signals, if the Provincial warrants are met, and these costs will be incorporated in future budgets.

#### **Communications Plan**

Staff will contact the area businesses on the outcome of Council's decision in this matter.

#### **Purpose**

To report on the feasibility of installing traffic signals at the intersection of Edgeley Boulevard and Bass Pro Mills Drive.

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

At its meeting on November 10, 2008, Council adopted without amendment:

**“That Engineering Services Staff monitor the intersection in the spring 2009 to determine the traffic signal warrant values and report to a Committee of the Whole with this information.”**

Several business employees on Four Valley Drive expressed concerns regarding the intersection of Edgeley Boulevard and Bass Pro Mills Drive. Their concerns relate to the number of accidents and heavy traffic volumes, especially during the peak time periods.

Edgeley Boulevard is designed as a 26.0 metre collector road with an existing posted speed limit of 40 km/h. Bass Pro Mills Drive is designed as a 30.0 metre arterial road with an existing 50 km/h statutory speed limit. There is an existing all-way stop control at the intersection. Refer to Attachment No. 1.

Engineering Services staff conducted three intersection turning movement counts at the intersection. The studied time periods were 7:00 am to 9:00 am, 11:00 am to 2:00 pm and 3:00 pm to 6:00 pm. On March 27, 2008, the weather was clear and sunny, on September 11, the weather was clear and sunny, and on April 28, 2009, the weather was rainy in the AM and partly cloudy in the PM.

The results of the studies are summarized below.

	27-Mar-08	11-Sep-08	28-Apr-09
<b>Warrant #1 - Minimum Vehicular Volumes</b>			
Part A – All Approaches	95%	95%	96%
Part B – Minor Street Both Approaches	100%	100%	100%
<b>Percentage Warrant (lowest of the two above)</b>	<b>95%</b>	<b>95%</b>	<b>96%</b>
<b>Warrant #2 - Delay to Cross Traffic</b>			
Part A – Major Street Both Approaches	67%	68%	68%
Part B – Traffic Crossing Major Street	100%	100%	100%
<b>Percentage Warrant (lowest of the two above)</b>	<b>67%</b>	<b>68%</b>	<b>68%</b>
<b>Warrant #3 - Accident Experience</b>			
Part A – Reportable Accidents Correction by a Traffic Signal	70%	60%	47%
Part B – Adequate trial of less restrictive remedies	100%	100%	100%
Part C – Warrant 1 or Warrant 2 satisfied 80% or more	100%	100%	100%
<b>Percentage Warrant (lowest of the three above)</b>	<b>70%</b>	<b>60%</b>	<b>47%</b>
<b>Warrant #4 - Combination Warrant</b>			
Two Warrants Satisfied 80% for Traffic Signals	NO	NO	NO

For a traffic signal control to be warranted on the basis of individual warrants, one or more of the 3 warrants must be satisfied 100% or more.

There is a Warrant 4 – Combination Warrant which may be used if no individual warrants are satisfied 100%, in which two warrants being satisfied 80% or more could warrant the installation of a traffic signal.

Based on the above results, the Provincial Traffic Signal warrant is not met. Warrant 1 is very close to being met. The accident experience has not been reduced with the installation of the all-way stop control.

Staff did note that the southeast corner of the intersection is in the process of being developed. There is a sign on the property, stating that occupancy will begin in September of 2009. Once development in this area is completed, it is anticipated that the traffic generated by this development may fulfill the requirements of the Provincial Traffic Signal warrant.

Staff will monitor the development and will follow-up with intersection turning movement counts at this intersection in late Summer 2009 and Fall 2009, depending on when the development is complete. If the traffic signal warrant values are met, Engineering Services staff will commence the design and tender of the traffic signals at the intersection of Edgeley Boulevard and Bass Pro Mills Drive.

If the traffic signal warrants are not met, a report will be submitted to a Committee of the Whole meeting to update the status of the traffic signal warrants.

The approximate cost for the installation of traffic signals is \$125,000, and is approved in the 2009 Capital Budget Account EN-1757-09.

### **Relationship to Vaughan Vision 2020/Strategic Plan**

Enhance and Ensure Community Safety, Health & Wellness – To advocate for, protect and enhance community safety, health and wellness through education, design and enforcement.

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

### **Regional Implications**

Not Applicable.

### **Conclusion**

Engineering Services staff recommends that the intersection be monitored in the Fall 2009 or the Spring 2010 to determine if the traffic signal warrant values have been met. The required budget sheets have been submitted in the 2009 Capital Budget in anticipation that the Provincial Warrant for traffic signals will be met.

### **Attachments**

1. Location Map

### **Report prepared by**

Leslie Potvin, Senior Traffic Technologist, ext 3131  
Mike Dokman, Supervisor, Traffic Engineering, ext 3118

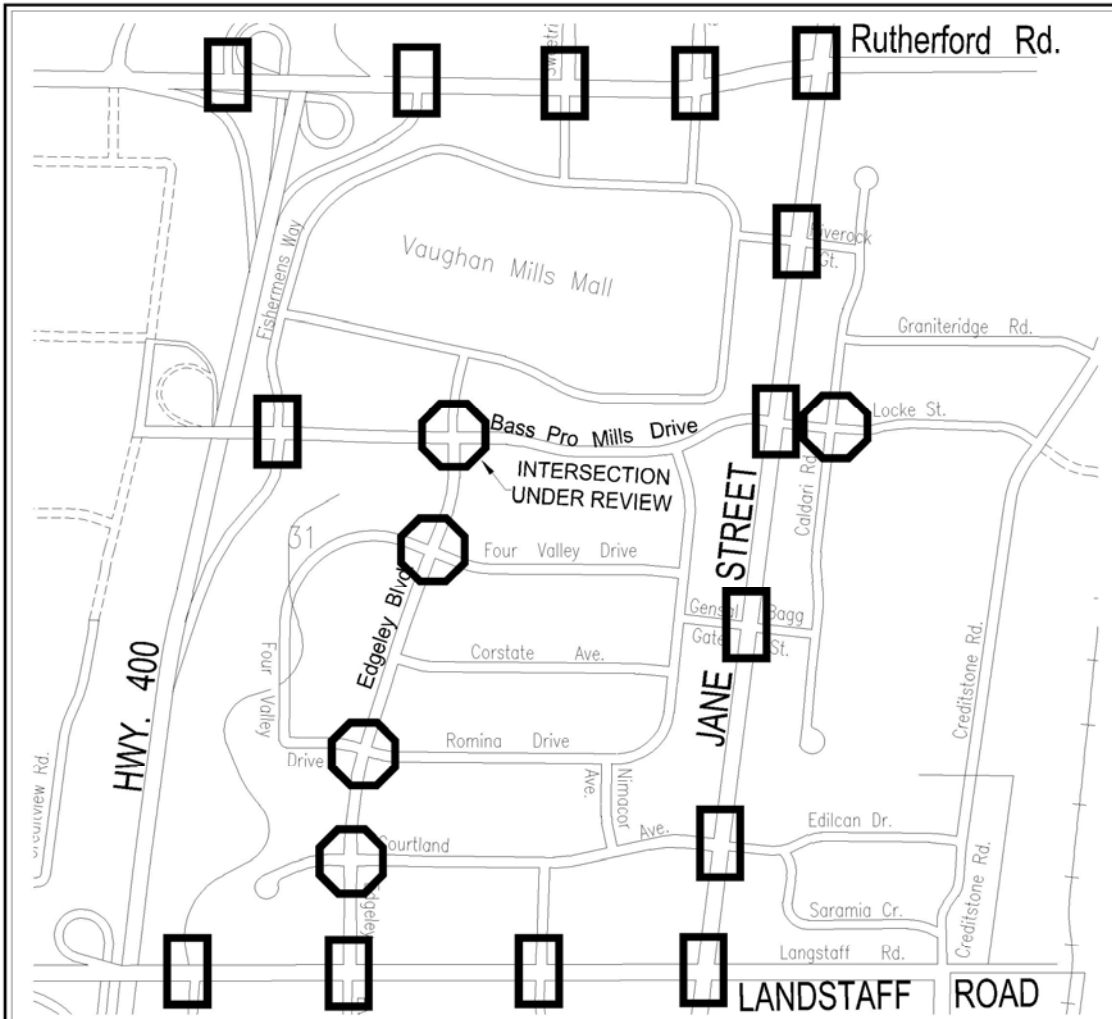
Respectfully submitted,

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

Jack Graziosi, P. Eng.  
Director of Engineering Services


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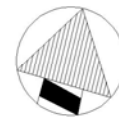
# ATTACHMENT No. 1



## EDGELEY BLVD. & BASS PRO MILLS DR. TRAFFIC REVIEW

### LEGEND

-  EXISTING TRAFFIC SIGNALS
-  EXISTING ALL-WAY STOP CONTROL



NOT TO SCALE