#### **CITY OF VAUGHAN**

### **EXTRACT FROM COUNCIL MEETING MINUTES OF SEPTEMBER 17. 2013**

Item 24, Report No. 35, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on September 17, 2013.

# 24 ALLWAY STOP CONTROL AT THORNHILL WOODS DRIVE AND FOXWOOD ROAD

The Committee of the Whole recommends approval of the recommendation contained in the following resolution submitted by Councillor Yeung Racco, dated September 3, 2013:

#### **Member's Resolution**

Submitted by Councillor Sandra Yeung Racco

Whereas, a number of residents living near the intersection of Thornhill Woods Drive and Foxwood Road have expressed concerns regarding pedestrian safety; and

*Whereas,* there are no allway stops controls or other vehicular movement control measures along Thornhill Woods Drive between Rutherford Road and Apple Blossom Drive; and

*Whereas,* with the location of Mosswood Park on the east side of Thornhill Woods Drive at Foxwood Road, there are peak times for high pedestrian activity at this intersection; and

**Whereas**, Foxwood Road provides a mid-block access point for pedestrians crossing Thornhill Woods Drive to access Mosswood Park;

It therefore recommended that an allway stop control, as well as advance notification signage, be installed at the intersection of Thornhill Woods Drive and Foxwood Road to provide safe crossing for pedestrians and safe access for surrounding residents crossing Thornhill Woods Drive.

### **Attachments**

 Memorandum from Jack Graziosi, Director of Engineering Services, regarding Traffic Operations Review for the intersection of Thornhill Woods Drive in the vicinity of Mosswood Park

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)



### **MEMBER'S RESOLUTION**

Date: SEPTEMBER 3, 2013 – COMMITTEE OF THE WHOLE

Title: ALLWAY STOP CONTROL AT THORNHILL WOODS DRIVE AND

**FOXWOOD ROAD** 

Submitted by: Councillor Sandra Yeung Racco

*Whereas,* a number of residents living near the intersection of Thornhill Woods Drive and Foxwood Road have expressed concerns regarding pedestrian safety; and

*Whereas,* there are no allway stops controls or other vehicular movement control measures along Thornhill Woods Drive between Rutherford Road and Apple Blossom Drive; and

*Whereas,* with the location of Mosswood Park on the east side of Thornhill Woods Drive at Foxwood Road, there are peak times for high pedestrian activity at this intersection; and

**Whereas**, Foxwood Road provides a mid-block access point for pedestrians crossing Thornhill Woods Drive to access Mosswood Park;

It therefore recommended that an allway stop control, as well as advance notification signage, be installed at the intersection of Thornhill Woods Drive and Foxwood Road to provide safe crossing for pedestrians and safe access for surrounding residents crossing Thornhill Woods Drive.

Respectfully submitted,

Sandra Yeung Racco
Councillor, Ward 4 (Concord/Thornhill North)

### **Attachments**

 Memorandum from Jack Graziosi, Director of Engineering Services, regarding Traffic Operations Review for the intersection of Thornhill Woods Drive in the vicinity of Mosswood Park



# memorandum

**DATE:** August 14, 2013

TO: Councillor Sandra Yeung Racco – Ward 4

FROM: Jack Graziosi

**Director of Engineering Services** 

RE: Thornhill Woods Drive and Foxwood Road

**Traffic Operations Review** 

Further to concerns raised by area residents regarding traffic operations on Thornhill Woods Drive at Foxwood Road, Mintwood Road/Fraserwood Road, and Balsamwood Road/Mosswood Road (in the vicinity of Mosswood Park), staff carried out a traffic operations review. The review included an analysis of the physical characteristics of the roadway, traffic controls, vehicular speeds, pedestrian activity, as well as collision history.

### **Physical Characteristics**

Thornhill Woods Drive is a minor collector roadway with a 23 metre right-of-way, an 11.5 metre pavement width, and sidewalks along both sides of the roadway. The posted speed limit is 40 km/h from Rutherford Road to Highway 7. It is identified as a primary emergency response route. Refer to Attachment No. 1.

Opposite to Mosswood Park, on the west side of Thornhill Woods Drive, is Foxwood Road which forms a T-intersection with Thornhill Woods Drive. Mosswood Park is located on the east side of Thornhill Woods Drive between Mosswood Road and Fraserwood Road.

The intersections of Thornhill Woods Drive at Mintwood Road/Fraserwood Road, at Foxwood Road, and at Balsamwood Road/Mosswood Road are all stop-controlled for the east-west roads only. The intersection of Thornhill Woods Drive and Foxwood Road includes traffic calming (constructed during the development of this community) consisting of a raised intersection. Refer to Attachment 1.

### **Analysis**

Details of the technical analysis can be found in Attachment No. 2.

### Traffic Controls

Engineering Services staff completed turning movement counts at the intersections of Thornhill Woods Drive at Fraserwood Road/Mintwood Road, at Thornhill Woods Drive at Foxwood Road, and at Thornhill Woods Drive at Balsamwood Road/Mosswood Road. The data was compared to the Provincial Warrant for All-way Stop Control, and none of these intersections fulfill the minimum requirements of the Provincial All-Way Stop Warrant.



# memorandum

### Vehicular Speeds

A review of the speed data shows that the vehicular speeds on Thornhill Woods Drive are compliant with the existing 40 km/h speed limit.

Thornhill Woods Drive was part of the 2011 Speed Compliance Program. This initiative was launched in 2010 in partnership with York Regional Police, to raise awareness of motorist travel speed, in comparison to the posted speed limit, using Radar Message Boards (RMBs).

All traffic data collected from the RMB is analyzed, and study results are forwarded to York Regional Police for their information, driver education, and any associated enforcement efforts.

### Pedestrian Activities

Staff conducted a pedestrian study on May 14, 2013, and a video review of pedestrian activity in the vicinity of Mosswood Park on June 18-19, 2011. The studies show that pedestrians had no difficulties crossing Thornhill Woods Drive to/from Mosswood Park, and there were sufficient gaps to facilitate safe crossings.

### Collision History

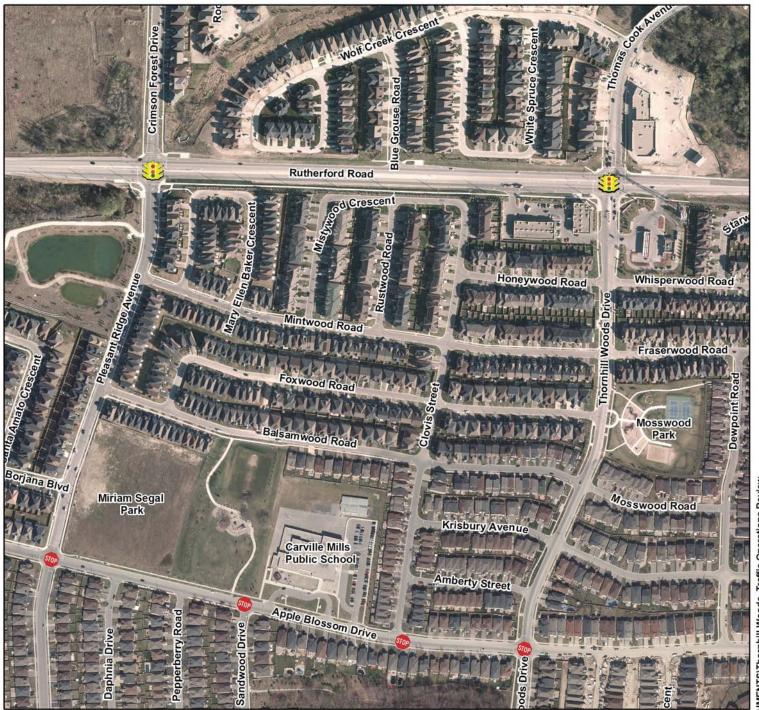
A review of the five year collision history, from July 2008 to July 2012 (to date, this is the latest available collision data) on Thornhill Woods Drive in the vicinity of Mosswood Park revealed two collisions.

Both collisions occurred at the intersection of Thornhill Woods Drive and Balsamwood Road / Mosswood Road and were caused by driver error, and were not attributable to excessive speeds.

### **Conclusion**

Thornhill Woods Drive is a minor collector roadway, and is operating as it was designed. The recorded traffic volumes and speeds are in keeping with industry standards. No further changes are recommended at this time. This information has been communicated with the area residents who have raised concerns.

# ATTACHMENT No. 1



# THORNHILL WOODS DRIVE AND FOXWOOD ROAD TRAFFIC OPERATIONS REVIEW

### **LEGEND**



**EXISTING TRAFFIC SIGNALS** 



EXISTING ALL-WAY STOP CONTROL

Note: Aerial Photography Taken in Spring, 2012



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### ATTACHMENT NO. 2

## Technical Analysis and Review of Thornhill Woods Drive at Mosswood Park

The findings of the traffic studies completed in 2009, 2011, and 2013 are summarized below.

### All-way Stop

Engineering Services staff conducted all-way stop studies at the three intersections along Thornhill Woods Drive in the vicinity of Mosswood Park to determine the feasibility of implementing all-way stop controls. Traffic volumes were collected during the peak time periods of 7:00-9:00 a.m. and 3:00-6:00 p.m.

LocationDateThornhill Woods Drive and Fraserwood Road / Mintwood RoadMay 15, 2013Thornhill Woods Drive and Foxwood RoadApril 3, 2013Thornhill Woods Drive and Foxwood RoadOctober 7, 2009Thornhill Woods Drive and Balsamwood Road / Mosswood RoadNovember 3, 2009

The data collected was compared to the Provincial Warrant for All-way Stop Control with the following results.

Location	Warrant 1	Warrant 2	Warrant 3
	Min Vehicular Volumes	Accident Hazard	Sight Restriction
Thornhill Woods Drive and	81%	0%	0%
Fraserwood Road /			
Mintwood Road (2013)			
Thornhill Woods Drive and	33%	0%	0%
Foxwood Road (2013)			
Thornhill Woods Drive and	25%	0%	0%
Foxwood Road (2009)			
Thornhill Woods Drive and	47%	0%	0%
Balsamwood Road /			
Mosswood Road (2009)			

All-way stop controls are recommended when one of the above warrants is satisfied 100% or more.

### Thornhill Woods Drive and Fraserwood Road / Mintwood Road (2013)

The minimum vehicular volumes collected at Thornhill Woods Drive and Fraserwood Road / Mintwood Road only warranted 81% of requirement. There were zero reported collisions at this intersection. There were no sightline concerns identified at the intersection. According to the results above, this intersection did not meet the minimum requirements of the Provincial All-way Stop Warrant.

### Thornhill Woods Drive and Foxwood Road (2013)

The minimum vehicular volumes collected at Thornhill Woods Drive and Foxwood Road only warranted 33% of requirement. There were zero reported collisions at this intersection. There were no sightline concerns identified at the intersection. According to the results above, this intersection did not meet the minimum requirements of the Provincial All-way Stop Warrant.

### Thornhill Woods Drive and Foxwood Road (2009)

The minimum vehicular volumes collected at Thornhill Woods Drive and Foxwood Road warranted only 25% of requirement. There were zero reported collisions at this intersection. There were no sightline concerns identified at this intersection. According to the results above, this intersection did not meet the minimum requirements of the Provincial All-way Stop Warrant.

### Thornhill Woods Drive and Balsamwood Road / Mosswood Road (2009)

The minimum vehicular volumes collected at Thornhill Woods Drive and Balsamwood Road / Mosswood Road only warranted 47% of requirement. There were zero reported collisions at this intersection. There were no sightline concerns identified at this intersection. According to the results above, this intersection did not meet the minimum requirements of the Provincial All-way Stop Warrant. A review of the collision history at this intersection revealed a collision in July 2009. At the time the warrant was prepared, this collision report would not have been available.

### Vehicular Speeds

Utilizing Automatic Traffic Recorders (ATRs) and the Speed Compliance Program's radar message boards, Staff collected the traffic speed data over a 24-hour time period, listed below:

- Thornhill Woods Drive north of Mosswood Road, from April 20-23, 2010 (ATRs)
- Thornhill Woods Drive south of Foxwood Road, from April 4-15, 2011 (Radar Message Boards)
- Thornhill Woods Drive north of Foxwood Road, from May 13-17, 2013 (ATRs)

Study Period	Direction	Posted Speed Limit	Average Speed	85 <sup>th</sup> Percentile
	Thornhill \	Woods Drive north of Mos	swood Road	1
April 20-23, 2010	Northbound	40 km/h	40 km/h	48 km/h
	Southbound	40 km/h	42 km/h	52 km/h
	Thornhill	Woods Drive south of Fox	wood Road	
April 4-15, 2011	Northbound	40 km/h	43 km/h	51 km/h
	Southbound	40 km/h	40 km/h	49 km/h
	Thornhill	Woods Drive north of Fox	wood Road	1
May 13-17, 2013	Northbound	40 km/h	42 km/h	52 km/h
	Southbound	40 km/h	43 km/h	50 km/h

The average speeds collected in 2010, 2011, and 2013 on Thornhill Woods Drive range between 40 and 43 km/h, which is in good compliance with the 40 km/h speed limit.

### Pedestrian Study

### May 2013 Study

Engineering Services staff completed a pedestrian study on May 14, 2013 from 2:00pm to 6:00pm on Thornhill Woods Drive in the vicinity of Mosswood Park to determine the volume of pedestrian activity as well as a measure of ease to cross Thornhill Woods Drive to/from the park.

During this study, a total of 19 pedestrians crossed Thornhill Woods Drive in the vicinity of Mosswood Park. The breakdown of pedestrians was five adults, one high school student, seven primary age children, and six children in strollers.

Crossing activity waits for gaps in traffic to make a safe crossing. In this case, the longest wait for an acceptable gap in traffic was 25 seconds. There were no observed difficulties for pedestrians to cross during observations.

### June 2011 Study

Engineering Services staff completed a pedestrian study by video review on Saturday, June 18<sup>th</sup> and Sunday, June 19<sup>th</sup>, 2011 in response to pedestrian crossing activity on weekends. The video reviews were from 9:00am to 9:00pm on both days.

There were no observed difficulties for pedestrians to cross during these observations, and there were acceptable gaps in traffic for safe crossing activity.