



## TOWN OF RICHMOND HILL

### COMMITTEE OF THE WHOLE

December 7, 2009

SREPW.09.097

Engineering and Public Works  
Transportation, Environmental & Development Engineering

**SUBJECT: SCHEDULING POLICY FOR POLE-MOUNTED RADAR SPEED BOARDS AND CURRENT DEPLOYMENT PRACTICE FOR THE VARIABLE MESSAGE RADAR TRAILERS**  
**OUR FILE: T07-RMB (SREPW.09.097)**

### PURPOSE:

To prioritize the scheduling of the Town's pole-mounted radar speed boards and review the current practice for the deployment of the variable message radar trailers.

### RECOMMENDATIONS:

That the criteria policy shown in Appendix 1 be adopted to establish a prioritized scheduling process for deployment of the electronic radar speed boards.

Contact: George Chau, Ext. 3536

Italo Brutto, P. Eng.  
Commissioner of Engineering & Public Works

M. Joan Anderton  
Chief Administrative Officer

### BACKGROUND:

Staff has been requested to develop a policy to prioritize the deployment of the pole-mounted radar speed boards as a follow-up to Staff Report SREPW.09.055 submitted at the Committee of the Whole meeting of June 16, 2009. A review of the deployment practice for the variable message radar trailers is also provided.

#### *Pole Mounted Radar Speed Boards*

In the spring of 2008, Staff installed two pole-mounted radar speed boards on High Tech west of Silver Linden Drive. After approximately 1 year of operation, compliance to the posted 50 km/hr posted speed limit still remains at about 65% to 70 %, significantly improved from the original 10% to 13% experienced prior to installation. As a result, two additional pole-mounted radar boards were acquired in early September and await assignment.

Appendix 1 outlines an objective ranking system based on speeding and accident history, traffic volumes and physical environment. The location with the highest overall score is given the highest priority for deployment.

In order to make the most effective use of the pole mounted radar boards, they will be relocated on a yearly basis. The relocation dates for each pair will be staggered by six months. In this way, a new location could be served every six months. A location that has had the radar speed boards deployed in the past will be required to wait for a two year period before it could be considered for redeployment.

#### *Variable Message Radar Trailers*

Two solar powered variable message radar trailers were acquired in 2008 to supplement the two existing battery operated radar message trailers that have been in place since 1998.

Currently, locations for the radar trailers are based on community requests, requests from 2 District Police and as required by traffic staff for driver education. Residents with speeding concerns are asked to submit a letter or an e-mail explaining the circumstances for their requests. Since the above method of deploying the radar trailers is working satisfactorily, it is recommended that it continue.

Because of battery life limitations, the two existing trailers are deployed on a weekly basis from Monday to Friday. The two new solar equipped trailers can be at any one location indefinitely. Staff recommends scheduling two week periods at problem locations for the solar powered radar trailers. This will improve their effectiveness in educating drivers and reduce staff effort required for pick-up and delivery.

#### **FINANCIAL/STAFFING/OTHER IMPLICATIONS:**

The cost of installation of the pole-mounted boards is \$1,250 per sign. At the rate of four (4) relocations per year, a total of \$5,000 plus taxes would be required. The deployment of the variable message radar trailers has no additional cost associated with its bi-weekly relocation schedule.

#### **RELATIONSHIP TO THE STRATEGIC PLAN:**

The recommendations of this staff report are consistent with the goal of providing Stronger Connections in Richmond Hill by responding to the changing needs of the community through adapting services and programs.

#### **CONCLUSIONS:**

Staff has developed an objective radar sign board policy that will prioritize location requests based on specific traffic criteria assessment. Based on the scoring shown in Appendix 2, the new pole mounted radar boards will be located on Canyon Hill between Yonge Street and Shaftsbury Avenue. The pole mounted radar boards currently on High Tech Road will be moved to Bantry Avenue between Red Maple Road and Silver Linden Drive. The ranking noted in Appendix 2 will be reviewed regularly and the scheduling revised accordingly to reflect new traffic data.



Staff will monitor the operating speed of traffic on High Tech between Silver Linden Drive and Red Maple Road over the next year following the removal of the pole mounted radar boards to determine if the operating speeds go back up. The result of this monitoring will provide staff with insight into the option of making the pole mounted radar boards a permanent installation on certain roads.

GC/ML:sh

Attachment – Appendix 1, Appendix 2

## APPENDIX 1

### *Traffic Criteria Scoring for the Deployment of the Pole Mounted Radar Speed Boards*

Traffic Criteria	Pole Mounted Radar Speed Boards --- Scoring Categories				Criteria Scoring
	Extreme (6 points)	High (4 points)	Medium (2 points)	Low (0 point)	
Daily Traffic (veh. per day)	> 8,000	≤ 8,000 and > 5,000	≤ 5,000 and > 2,500	≤ 2,500	
85 <sup>th</sup> Percentile Speed Difference over Speed Limit	> 15	≤ 15 and > 10	≤ 10 and > 5	≤ 5	
Number of Reported Accidents over past three years	> 8	≤ 8 and > 5	≤ 5 and > 3	≤ 3	
Spacing between stop signs	> 750 m	≤ 750 m and > 500 m	≤ 500 m and > 250 m	≤ 250	
Overall Score:	(See Note 1 for tied scores)				

Note 1 - Competing values will be prioritized based on the following:

- 1<sup>st</sup> – School Zone
- 2<sup>nd</sup> – Parks and Community Centres
- 3<sup>rd</sup> – Major Collectors Roads
- 4<sup>th</sup> – Minor Collectors Roads
- 5<sup>th</sup> – Local Roads

**APPENDIX 1**  
**SREPW.09.097**

## APPENDIX 2

### 2010 – 2011 Ranking of roads for Pole Mounted Radar Message Boards (PMRB):

<u>Road Name</u>	<u>Score</u>
High Tech (Silver Linden to Red Maple)	20 (will qualify for PMRB in 2012)
-----	
Canyon Hill Avenue (Yonge to Shaftbury)	15 (2010 – mid 2011)
Bantry Avenue (Red Maple to Silver Linden)	12 (2010)
-----	

Note: (The ranking of the following road sections will be undertaken annually as other roads are added to the list and updated traffic information becomes available):

Old Colony Road (Yonge to Nantucket)

Brookside Road (Shaftsbury to Alamo Heights)

Farmstead Road (Frank Endean to Shirley)

Valleymede Drive (16<sup>th</sup> Avenue to Strathearn)

Spadina Road (Weldrick to Chadwick)

Worthington Avenue (Yonge to Lorridge)

Regent Street (Baynards to Ellsworth)

Mill Street (Bathurst to Ellery)

Red Maple Road (Bantry to High Tech)

Redstone Road (Frank Endean to Shirley)

Humberland Drive (Bathurst to Red Cardinal)

Devonsleigh Boulevard (19<sup>th</sup> Avenue to Brookwood)

Tower Hill Road (Selwin to Rollinghill)

