COMMITTEE OF THE WHOLE – WORKING SESSION – JUNE 12, 2007

REVIEW OF TRAFFIC CALMING INITIATIVES

Recommendation

The Commissioner of Engineering and Public Works in consultation with the Fire Chief recommends:

1. That the proposed updated 'Neighbourhood Traffic Committee Policy and Procedure', and the proposed NEW 'Traffic Calming Criteria', as attached, be approved;

2. That Council provide direction concerning a proposed moratorium on the installation of vertical traffic calming measures, such as speed humps/raised crosswalks, and the like, in the City of Vaughan;

3. That prior to the approval of any Plan of Subdivision, the Traffic Management Plan should be presented to Council for approval of all the proposed traffic calming measures for the subject Block/Draft Plan;

4. That prior to Assumption, if the implemented traffic calming measures as approved at the Block Draft Plan stage are not reliable and/or are ineffective as solution(s) for resident safety, then any additional constructed traffic calming measure will be the responsibility of the Developer;

5. That speed humps not be installed on Clarence Street north of Mounsey Street near the Board of Trade Gold Course;

6. That a raised crosswalk not be installed on Vaughan Mills Road in front of Vaughan Mills Park;

7. That a speed hump not be installed on Vaughan Mills Road between Jolana Court/Dunforest Gate and Roselawn Drive;

8. That speed humps not be installed on Pleasant Ridge Avenue;

9. That the Sonoma Heights Phase 2 Neighbourhood Traffic Committee plan proposal not be approved and that Engineering Services staff reconvene with the Traffic Committee to discuss alternative options for the vertical traffic calming measures within this Plan;

10. That the Sonoma Heights Phase 3 Neighbourhood Traffic Committee plan proposal not be approved and that Engineering Services staff reconvene with the Traffic Committee to discuss alternative options for the vertical traffic calming measures with the Plan; and

11. That a speed hump not be installed on Martin Grove Road at the north end of the Humber River/Robinson Creek Bridge.

Economic Impact

None.

Communication Plan

Engineering Services staff have requested information from the Vaughan Fire and Rescue Services Department, York School Boards and York Region Transit with respect to traffic calming measures. Engineering Services staff will provide each agency of Council's decision. There was

public consultation regarding Clarence Street, Woodbridge Highlands and Area Traffic Committee, Pleasant Ridge Avenue, Sonoma Heights Phase 2 and 3 Traffic Committee and Woodbridge Meadows Traffic Committee.

Purpose

To provide a report on the Traffic Calming Policy, to seek Council approval for the adoption of several revised traffic calming initiatives, to propose a moratorium on the installation of speed humps/raised crosswalks and the like on City roadways, and to report on deferred reports.

Background – Analysis and Options

There has been much discussion between Council and staff regarding the existing traffic calming process and traffic calming implementation in new developments. The last revision date of the Traffic Calming process, warrants and resident input was in January, 2003.

Current Traffic Calming Practice

The process by which traffic calming is implemented in existing areas of the City of Vaughan is through the 'Neighbourhood Traffic Committee Policy and Procedure'. The current version of this document is dated January, 2003. Refer to Attachment No. 1.

Proposed New Neighbourhood Traffic Committee Policy and Procedure

An updated version is proposed that provides more detail, reflects the current Neighbourhood Traffic Committee process, and proposes further improvements to that process. The proposed update is included as Attachment No. 2.

Highlighted changes from the previous version include:

- The removal of the Class EA Process.
- The elimination of the 'Traffic Committee', to be replaced by the 'Plan' and that it will now be developed by Engineering Services Department Traffic Engineering staff.
- The requirement that the support of at least two-thirds of the public (by Petition) is needed before a review for traffic calming commences.
- No longer is it a requirement that Council be involved in the initial stages, i.e. traffic committee approved by Council.

Traffic Calming Procedures in Other Municipalities

A questionnaire was completed by TSH Engineers Architects Planners on behalf of the City of Brampton in which the City of Vaughan had participated. The summary results were provided on how other municipalities are dealing with traffic calming. Refer to Attachments No. 3 and 4.

A general summary of the questionnaire is noted below.

- 11 municipalities participated in the questionnaire.
- Community support: 5 municipalities require at least 60% in favour, 4 municipalities require 50% + 1 in favour, two municipalities did not indicate a threshold.
- Notifications: majority of municipalities send out to the affected study area.
- Methods of Notifications: varies between letters, newspaper ads and websites.
- Survey residents on the level of satisfaction on implemented measures: 8 municipalities do not survey residents, 3 municipalities do survey residents.

Vaughan does incorporate or go beyond expectations regarding the traffic calming process with resident notifications and resident feedback on the implemented measures.

Municipal Class Environmental Assessment

Traffic calming installations are now exempt from the Class Environmental Assessment Act as of February 22, 2007.

> "Section 3.3 (1) A traffic calming measure is not an undertaking for the purposes of this Act and cannot be included in the definition of a class for the purposes of this Act. 2006, c. 11, Sched. B, s. 5."

This now means that the following is not required:

- Notice of Commencement of study
- Notice to be placed in the local papers
- Mail out of Notices (not a full requirement by the Municipality)
- 30-day Comment period following Notice of Completion of study

However, to maintain proper communication with residents and outside agencies, it is recommended that Notices still be mailed out at the beginning and the end of the particular project.

Traffic Calming Warrant

It is proposed that in the future traffic calming measures to be considered for installation on City of Vaughan streets in accordance with warrants as noted below. These warrants should be maintained to simply dictate where certain traffic calming measures should not be considered.

For example, it is proposed that:

- Speed humps and raised crosswalks **not** be considered on streets that are primary emergency response routes. This would eliminate streets such as Martin Grove Road or Clark Avenue, and most primary roads similar to Fossil Hill Drive, from being candidates for speed humps and raised crosswalks.

- Traffic calming measures **not** be considered on streets where the speed limit is greater than 50 km/h.

- Traffic calming measures **not** be considered where speeds are not in excess of the existing speed limit by at least 10 km/h. This will ensure that traffic calming measures are used only on streets where a speeding problem has been established.

The proposed REVISED criteria are included as Attachment No. 5.

Speed Hump/Raised Crosswalk Design

Speed humps in the City of Vaughan are currently 7.0 metres long by 100 mm high and constructed entirely out of asphalt. Raised crosswalks are the same height and length and are constructed with a coloured impressed concrete on the top portion of the hump.

Future Traffic Calming in the City of Vaughan

The City of Vaughan has been a leading proponent of traffic calming in the Greater Toronto Area. Over the past several years over 210 speed humps and raised crosswalks, and a number of other measures, have been implemented through 40 separate Neighbourhood Traffic Committees. At least 12 other committees are in the process of developing traffic calming plans or waiting for their implementation. If a moratorium on the installation of speed humps/raised crosswalks is

approved, the Committees or roadways in process should be exempt. The moratorium should start with the Council meeting date of approval. At the current rate traffic calming measures will soon be implemented in most existing residential areas of the City. To date the City has spent a total of over $2.4 million on 40 individual traffic calming projects.

Each Traffic Committee involves a considerable amount of staff time: preparation and attendance at a minimum of two community meetings; working meetings with the Traffic Committee members; distribution of meeting notices; preparation of advertisements in the local papers; field work including speed studies, traffic counts and sometimes infiltration studies; a report to Committee of the Whole; traffic calming design; tender preparation and contract administration of the construction of traffic calming measures. The work is done with limited staff resources to the detriment of fundamental traffic engineering functions such as pedestrian studies, signal timing review, daily vehicle counts, volume/speed studies on our road network, etc.

Staff continue to receive requests for speed humps and raised crosswalks in both newly assumed and unassumed areas such as in Block 10, 17, 32 West, 33 and 39. This is in addition to the raised intersections, roundabouts and curb extensions or road narrowings that were approved and constructed in these areas through the Block/Draft plan processes.

While studies have proven that speed humps and raised crosswalks are effective measures for marginally reducing traffic speeds, and surveys have established they are generally popular with many residents, they have undesirable impacts on heavy vehicles and emergency response times. Unless public expectations begin to change regarding the role of primary roads, residents will continue to demand that additional traffic calming measures, primarily speed humps and raised crosswalks, be implemented on these streets. It is proposed through the Traffic Calming Warrants that most primary roads in these new blocks **not** be candidates for speed humps and raised crosswalks because of their higher volumes and role in providing a route for transit and emergency response, and that other measures be considered should the moratorium on traffic calming be lifted. These may include raised intersections, roundabouts, medians, curb extensions or road narrowings, contrasting materials, pavement markings and warning signage, to name some of the other more popular traffic elements available.

Stakeholder and Agency Feedback and Comments

1. Vaughan Fire & Rescue Services (VFRS)

Staff requested comments from Vaughan Fire and Rescue Service on the implementation of traffic calming. VFRS states that traffic calming measures delay response times, cause injuries to emergency responders and have on occasion resulted in significant enough damage to an emergency response vehicle that it could not complete the emergency assignment. VFRS are opposed to speed humps and/or speed cushions.

Since 2004, there have been four serious lost time injuries to VFRS firefighters riding apparatus that have encountered speed humps travelling to emergencies. One of the injuries (compression type neck trauma) resulted in the firefighter being disabled for regular duty for approximately 8 months from severe contact with the interior cab roof . Additionally, in the same time period VFRS has incurred expenditures of approximately $14000.00 to repair apparatus damage caused by speed humps (broken springs, axle damage, drive line damage). Attachment # 21 graphically illustrates damage caused by an encounter with a speed hump where the emergency response unit was rendered inoperable to complete the alarm assignment. The following additional information (reported by other fire and emergency services) further demonstrate the concern of VFRS regarding speed humps:

- Delayed response time by traffic calming devices makes the community at far greater risk than from vehicles.
- Fire engines with flattened springs or body weld breaking.

- A front axle sheered off during a response after traversing a speed hump
- Several compartment doors abruptly came open on both sides; equipment strewn upon the street.
- Booster/water tank cracked due to humps.
- Booster/water tank broken while going over a hump.
- Approximately 8 and 10 seconds delay per hump for fire trucks.
- Documented injuries of firefighters who have hit the roofs of their cabs when encountering speed humps unexpectedly. Some injuries have placed firefighters on temporary or permanent disability.
- Canada Safety Council reported how traffic calming devices compromised safety in two 1999 incidents in the Ottawa area:

  "A fire fighter struck his head on the roof of the cab as his truck crosses a speed bump while racing to an emergency and was off for three weeks."

  "Traffic calming barricades impeded access to a burning building, forcing fire fighters to ram their truck through iron posts to fight the blaze. The fire destroyed the building, leaving 12 people homeless."

- A quotation dated April 5, 2007 "…Toronto Fire Service is supportive of initiatives that improve the life safety of our citizens. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area."
- International Association of Firefighters Canadian Journal, Volume 4, Issue #1, 2000 "Traffic Calming Devices - Why fire fighters have given them a rough ride..." ***"Speed bumps are a workplace hazard for fire fighters."*** - City Councillor, Peterborough, Ontario
  - *"...speed bumps 'have significantly reduced the response times of all emergency vehicles responding to 911 calls, jeopardizing the lives of the citizens within our communities.' "*
  - *"...speed bumps are a no-win situation for fire trucks. If taken at any speed, they can result in fire fighter injury - even seat-belted fire fighters can strike their heads on the roof of the cab, and there are cases of vertebral compression leading to permanent disability. On the other hand, slowing a truck for speed bumps or navigating other traffic calming devices adds to response time, crucial seconds at a time when every second counts."*
- Damage to a fire vehicle is illustrated on Attachment No. 21.

In the interests of public safety (response time) and the Health & Safety of our firefighters as well as the operational readiness of emergency response equipment, VFRS remains opposed to any further installations of speed humps/speed cushions.

This information is provided at community meetings and placed in Engineering Services reports. Refer to Attachments No. 6, 7, 8 and 9.

2. York Region Transit (YRT)

In 2004, York Region Transit prepared a Policy report on the impacts that occur with the installation of traffic calming measures on their transit vehicles. Refer to Attachment No. 10.

York Region Transit has not been collecting data on bus damages and additional service delays as there are only a few speed humps on routes that their buses travel which were 'grandfathered' prior to the adoption of the Policy.

3. York Region School Boards

The York Region District School Board indicated to staff that although not ideal, school buses because of the heavier duty suspension are not as adversely affected by speed humps. They

also went on to say that speed humps do slow down their vehicles which would negatively affect arrival times at schools if the entire neighbourhood was outfitted with such vertical traffic calming devices as speed humps.

The York Catholic District School Board also indicated that their school buses are able to travel over a speed hump without major issue, but that schedules delays were problematic.

Neither school board advised of any known injuries that have occurred.

4. Land Development Stage Process

As part of the development review at the Block Plan stage, a Traffic Management Plan is to be submitted for review that outlines traffic calming measures and locations with justification by way of a traffic impact study. The Traffic Management Plan is a condition of approval prior to the subdivision agreement being registered. Traffic calming measures that are typically proposed at this stage include raised intersections, roundabouts, chicanes, curb bump-outs, intersection narrowing, pavement texturing, raised/mountable medians and painted road narrowings. Speed humps and raised crosswalks are excluded from this plan.

Over the years, City staff have received complaints from residents that there is excessive speeding, too much traffic on their roadway or traffic is 'cutting through' their neighbourhood. This results in forming a traffic calming committee, specifically for the installation of speed humps. The work completed for these committees is extensive for Engineering Services staff. To assist in these types of requests a Traffic Calming warrant was developed and approved by Council in January 2003.

Prior to the plan of subdivision being approved, the Traffic Management Plan should be presented to Council for approval of all the proposed traffic calming measures for that Block Plan.

Development Engineering staff will proceed to follow up on the effectiveness of the implemented traffic calming measures and report back between one and two years after implementation. Prior to assumption of the subdivision, if the implemented measures are not working then any additional constructed measures are to be the responsibility of the developer. This process will follow through the Policy & Procedure on the development of a Plan.

5, Clarence Street

Staff received a request by the Board of Trade Golf Course to review the feasibility of installing two speed humps on Clarence Street at their 'Golf Crossings'. In the request, the superintendent stated the following:

- Excessive vehicle speeds on Clarence Street.
- There have been many close calls between pedestrians and vehicle traffic over the past years.
- Golfers and staff (approximately 300 to 400 per day) must cross the street at least twice daily. 50% walking, 50% utilizing motorized golf cart maintenance equipment.

Clarence Street is a two-lane, arterial roadway with a paved driving surface of 7.0 metres and a 27.0 metre right-of-way. There are three existing speed humps and one raised crosswalk on Clarence Street between Mounsey Street and Woodbridge Avenue, which were installed in the Summer of 2001 as part of the Woodbridge Core Traffic Calming Committee.

There are two pedestrian crossings on Clarence Street north of Mounsey Street to accommodate golfers and Facility workers. The two existing pedestrian crossings in the vicinity of the golf course are located as follows: (Refer to Attachment No. 11).

- Approximately 110 metres north of Mounsey Street.
- Approximately 200 metres north of Mounsey Street.

The locations of the proposed speed humps in this area have changed from the earlier locations identified in Report No. 63, Item 17, Clarence Street Between Meeting House Road and Rutherford Road Traffic Safety Review, September 27, 2004 Council. (Refer to Attachment No. 12).

Each pedestrian crossing is defined by transverse pavement markings. The proposed two speed humps would be installed approximately ten metres in advance of each pedestrian crossing to reduce vehicle speeds immediately upstream of each 'Golf Crossing area'. There are also eight warning signs on Clarence Street informing traffic to the potential crossing of pedestrians near the golf course; seven "Watch For Golfers" warning signs and one "Pedestrians Ahead" warning sign.

Staff conducted speed and volume studies on Clarence Street, north of Mounsey Street, from November 27 – December 1, 2006. The results have been summarized below:

Direction	Average Speed	85th Percentile Speed	Highest Recorded Weekday Traffic
Northbound	52 km/h	60 km/h	2321 vehicles
Southbound	52 km/h	60 km/h	2311 vehicles

The existing posted speed limit on Clarence Avenue is 40 km/h. The recorded average speeds on Clarence Street are 52 km/h in both directions. The 85th percentile speed (the speed at which 85 percent of the vehicles are traveling at or below) is 60 km/h in both directions. The average daily traffic throughout this week is approximately 4,450 vehicles.

There are several speed humps in place on Clarence Street south of Mounsey. Additional speed humps should not be constructed at this time. It may be appropriate to consider removal of some speed humps to be replaced with speed humps at the golf course crossing locations.

6. Woodbridge Highlands and Area Traffic Committee

At its meeting on December 15, 2003 Council directed:

> **"That the recommendation contained in the following report of the Commissioner of the Engineering and Public Works, dated December 8, 2003, be approved subject to deferring clause 1. i) until such time as the construction of the proposed fire station"**
>
> **1) That the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated December 8, 2003, be approved subject to amending clause 1. i) by approving the proposed raised crosswalk on Vaughan Mills Road in front of Vaughan Mills Park"**

Vaughan Mills Road is a feeder roadway with a pavement width of 11.5 metres. The existing speed limit on Vaughan Mills Road is posted at 40 km/h. The area is shown on Attachment No. 13.

The Woodbridge Highlands and Area Traffic Committee proposed a raised crosswalk on Vaughan Mills Road in front of Vaughan Mills Park, and a speed hump on Vaughan Mills Road between Jolana Court/Dunforest Gate and Roselawn Drive. Both measures were deferred until the opening of the fire station. A copy of the December 15, 2003 Council extract is shown on Attachment No. 14.

Staff collected radar speed data on Vaughan Mills Road in the area of the two proposed measures. Both studies were conducted at peak traffic periods from 8:00am to 9:00am and from 4:00pm to 5:00pm. The result of the studies are shown in the table below.

Location/Date	Direction	Average Speed	
		8:00am to 9:00am	4:00pm to 5:00pm
Vaughan Mills Road at Vaughan Mills Park April 19, 2007	Northbound	50 km/h	49 km/h
	Southbound	47 km/h	55 km/h
Vaughan Mills Road south of Jolana Court/Dunforest Gate AM April 19, 2007, PM April 26, 2007	Northbound	48 km/h	50 km/h
	Southbound	46 km/h	47 km/h

The average recorded vehicle speeds on Vaughan Mills Road range from 47 to 55 km/h in front of Vaughan Mills Park and from 46 to 50 km/h south of Jolana Gate, which ranges from 6 km/h to 15 km/h over the posted speed limit. The overall average roadway speeds are very close to meeting the 10 km/h over the existing speed limit criteria.

In accordance with the Council approved Neighbourhood Traffic Committee Policy and Procedure, speed humps/raised crosswalks are considered only when the following three warrants are met:

- The street is not a primary emergency response route.
- The speed limit is 50 km/h or less.
- The average speed is 10 km/h greater than the speed limit.

Vaughan Mills Road is a primary emergency response route and speed humps or raised crosswalks are not supported by Fire and Rescue Services. The posted speed limit is 40 km/h, however overall average speed of the roadway are close to the posted speed limit. Therefore, staff does not recommend the installation of speed humps and/or raised crosswalks on Vaughan Mills Road on the basis of the Traffic Calming Warrant has not been met. As the recorded speeds are ranging upwards, staff will request York Regional Police to confirm the existing 40 km/h speed limit.

As part of the Traffic Committee Plan, painted road narrowings were installed on both sides of Vaughan Mills Road.

7. Pleasant Ridge Avenue

At its meeting on December 18, 2006 Council directed:

" That staff conduct a further traffic study in the early spring 2007 and provide a report on the feasibility of installing traffic calming measures on Pleasant Ridge Avenue."

Pleasant Ridge Avenue is a feeder road with a 23.0 metre right-of-way and 11.5 metre pavement width. The existing speed limit on Pleasant Ridge Avenue is a statutory 50 km/h. Refer to Attachment No. 15.

Staff collected speed and volume data from Automatic Traffic Recorders installed on Pleasant Ridge Avenue from Monday, November 6, 2006 to Friday, November 10, 2006. The collected speeds and volumes are summarized below:

	Southbound		Northbound	
Location	Average Speed	Average Daily Volume	Average Speed	Average Daily Volume
Pleasant Ridge Avenue south of Autumn Hill Boulevard	54 km/h	964 veh/day	53 km/h	1111 veh/day

Staff collected further speed data on Pleasant Ridge Avenue from Monday, April 16, 2007 to Thursday, April 19, 2007. The collected speeds and volumes are summarized below:

	Southbound		Northbound	
Location	Average Speed	Average Daily Volume	Average Speed	Average Daily Volume
Pleasant Ridge Avenue south of Apple Blossom Boulevard	45 km/h	581 veh/day	46 km/h	679 veh/day
Pleasant Ridge North of Misty Sugar Trail	45 km/h	1301 veh/day	45 km/h	1482 veh/day

According to the Transportation Association of Canada, a feeder road is designed to carry up to 8000 vehicles per day. The volumes on Pleasant Ridge Drive are well below this 8000 vehicle threshold. In both studies, collected speeds are within those volumes typically experienced on such thoroughfares.

In accordance with Council's approved Neighbourhood Traffic Committee Policy and Procedure, speed humps shall be considered only when the following three warrants are met:

- The street is not a primary emergency response route
- The speed limit is 50 km/h or less
- The average speed is measured to be 10 km/h greater than the speed limit

Pleasant Ridge Avenue is a primary emergency response route, and the average speed is not 10 km/h higher than the speed limit. Vaughan Fire and Rescue Services and York Region Transit have indicated that speed humps hinder response times and cause mechanical damage to equipment. Based on the above criteria, the warrant for the installation of speed humps on Pleasant Ridge Avenue is not met.

Possible alternatives for this roadway would be the installation of chicanes, mountable centre medians, painted road narrowings, or a combination of these three alternatives.

8. Sonoma Heights Phase 2

At its meeting on February 14, 2005, under Item 42, Report No. 7 Council adopted the following recommendation:

"The Committee of the Whole recommends that staff be directed to attend the Sonoma Heights Neighbourhood Traffic Committee Meeting."

The Sonoma Heights subdivision was divided into 3 phases for traffic calming committees. The Phase 2 traffic committee area is bounded by Islington Avenue to the east, Sonoma Boulevard to the south, Sonoma Heights street network to the west and Napa Valley Avenue to the north. (Refer to Attachment No. 16 for area map and proposed traffic calming measures).

Public Participation

The initial public meeting of the Sonoma Heights Phase 2 Neighbourhood Traffic Committee was held on Thursday, May 26, 2005. Engineering Department staff outlined the concept of traffic calming and the types of traffic calming measures available, and explained the City's Neighbourhood Traffic Committee Policy and Procedure.

The final public meeting was held on Tuesday, October 3, 2006. The Traffic Committee, with the assistance of Engineering Department staff, introduced the traffic calming proposals for the neighbourhood to the residents in attendance. Of those in attendance, 15 residents were in favour of the plan and 0 residents were against the plan.

The meetings were advertised in the Vaughan Weekly, Lo Specchio, and the Vaughan Citizen newspapers. The Notice of the meetings were also mailed out to the residents in the defined area for this committee.

The residents were all in favour of the proposals, but some wanted amendments to the plan as outlined below. A review of these additional proposals is included later in the report.

- Additional speed hump for Monte Carlo Drive.
- Additional speed hump for Castle Park Boulevard.

Traffic Calming Plan - General

There are nine existing all-way stop controls at the following intersections within the Sonoma Heights Phase 2 Neighbourhood Traffic Committee area:

- Napa Valley Avenue and Silver Oaks Boulevard;
- Napa Valley Avenue and Forest Fountain Drive;
- Napa Valley Avenue and Criscione Drive;
- Napa Valley Avenue and Amarone Drive;
- Napa Valley Avenue and Sunset Ridge;
- Napa Valley Avenue and Casa Vista Drive;
- Napa Valley Avenue and Fonteselva Avenue;
- Forest Fountain Drive and Adrianna Louise Drive
- Castle Park Boulevard and Colle Molito Way; and
- Via Christina Way and Pierina Court.

The existing posted speed limits are 50 km/h on all the roadways within the Sonoma Heights Phase 2 Neighbourhood except Napa Valley Avenue, and Forest Fountain Drive, which are posted at a reduced 40 km/h limit. There are 3 existing elementary schools in this area – St. Padre Pio Catholic School, Lorna Jackson Public School, and St. Stephen Catholic School.

There are existing traffic calming measures, constructed at the time the area was built at the following locations within the Sonoma Heights Phase 2 Neighbourhood Traffic Committee area:

- Existing roundabout: Monte Carlo Drive and Lio Avenue; and
- Existing raised intersections: Napa Valley Avenue and Fonteselva Avenue, and Napa Valley Avenue and Castle Park Boulevard.

Staff undertook field reviews to determine locations that would be feasible for the additional traffic calming measures proposed.

There are six speed humps proposed on the plan and they can be placed at the following locations:

- Napa Valley Avenue between properties #368 and #372;
- Napa Valley Avenue between properties #540 and #544;
- Napa Valley Avenue between properties #604 and #608;
- Napa Valley Avenue near property #646;
- Forest Fountain Drive between properties #326 and #330; and
- Adrianna Louise Drive east of the 'Greenway' crossing.

There are two raised crosswalks proposed on the plan and they can be placed at the following locations:

- Napa Valley Avenue between properties #512 and #516; and
- Napa Valley Avenue at the 'Greenway' Crossing.

The six speed humps will be constructed completely of asphalt and the raised crosswalks will have a coloured impressed concrete top.

The initial plan proposed by the Committee also had a speed hump proposed on Napa Valley Avenue between the east and west driveways of St. Padre Pio School. However, the intersection of Napa Valley Avenue and Criscione Drive/St. Padre Pio School west access has recently been approved with a new all-way stop control. Therefore, staff recommends this proposed speed hump be removed from the plan given the nearby proximity of all-way stop controls at Napa Valley Avenue and Criscione Drive, Napa Valley Avenue and Forest Fountain Drive, and the proposed raised crosswalk on Napa Valley Avenue at the 'Greenway' Crossing west of St. Padre Pio School.

The proposed speed hump at #540 Napa Valley Avenue and the proposed raised crosswalk at #512 Napa Valley Avenue are proposed at the ends of existing lay-by lane areas on the south side of Napa Valley Avenue. Some modification will be required to extend the existing curb area so the proposed traffic calming measures do not interfere with the lay-by lanes.

Speed Studies

Staff collected speed and volume data near the proposed traffic calming locations. All studies were conducted on a 24-hour basis. The results of the studies are shown in the table below.

Location	Direction	24-hour volume	Average Speed
Napa Valley Avenue west of Sgotto Boulevard August 11, 2005	Eastbound	2087	46 km/h
	Westbound	1980	45 km/h
Napa Valley Avenue west of Marco Sgotto Avenue August 11, 2005	Eastbound	1829	43 km/h
	Westbound	1693	42 km/h
Napa Valley Avenue west of Sunset Ridge August 15, 2005	Eastbound	725	45 km/h
	Westbound	1050	46 km/h
Adrianna Louise Drive west of Marco Sgotto Avenue August 16, 2005	Eastbound	165	32 km/h
	Westbound	186	33 km/h
Napa Valley Avenue west of Monte Carlo Drive August 13, 2005	Eastbound	1075	43 km/h
	Westbound	1070	45 km/h
Forest Fountain Drive north of Laura Sabrina Drive August 13, 2005	Northbound	1230	44 km/h
	Southbound	1141	43 km/h

The average recorded vehicle speeds range from 32 to 46 km/h, which is generally in accordance with existing speed limits. All recorded volumes are well within capacities for feeder and local roadways. Should the traffic calming proposal be approved by Council, staff will collect additional speed data 12 months after installation.

Additional Requests

At the final public meeting, requests were received to add an additional speed hump on Monte Carlo Drive, and on Castle Park Boulevard. Staff investigated both streets and determined that a speed hump could be installed at the following locations:

- Castle Park Boulevard between properties #91 and #95;
- Monte Carlo Drive between properties #208 and #214; and
- Monte Carlo Drive between properties #290 and #292.

Staff hand delivered a survey to directly affected residents of Castle Park Boulevard and Monte Carlo Drive (a total of 11 surveys, four for Castle Park Boulevard, and seven for Monte Carlo Drive) to request their support on the proposed speed hump locations, as they are additional to the submitted plan.

A total of six survey responses were received (two for Castle Park, and four for Monte Carlo Drive). All six survey responses indicated support for the additional proposed speed hump locations. Therefore, staff recommend the three proposed speed hump locations be added to the traffic calming plan.

Staff collected speed and volume data near the proposed traffic calming locations. All studies were conducted on a 24-hour basis. The results of the studies are shown in the table below.

Location	Direction	24-hour volume	Average Speed
Castle Park Boulevard south of Laura Sabrina Drive November 8, 2006	Northbound	759	43 km/h
	Southbound	425	40 km/h
Monte Carlo Drive south of Adrianna Louise Boulevard November 9, 2006	Northbound	795	40 km/h
	Southbound	801	39 km/h
Monte Carlo Drive north of Sonoma Boulevard November 9, 2006	Northbound	728	39 km/h
	Southbound	631	37 km/h

The average recorded vehicle speeds range from 37 to 40 km/h, which is in accordance with the existing 50 km/h statutory speed limit. Should the additional requests be approved by Council, staff will add these three speed humps to the traffic calming plan, and collect additional speed data 12 months after installation.

Fire & Rescue Services and York Region Transit Comments

Staff requested comments from Fire & Rescue Services on the plan proposal. Fire & Rescue Services stated that traffic calming measures delay emergency response times and cause mechanical problems with their apparatus braking systems and that they are generally opposed to speed humps.

Comments were also requested from York Region Transit (YRT) on the plan proposal. York Region Transit has provided comments and a copy of their 'Traffic Calming on Public Transit Routes' policy. York Region Transit are opposed to speed humps on roads designated for transit due to service delays and damages to buses. York Region Transit has two existing routes on

Napa Valley Avenue – Route 85 (Rutherford – 16th Avenue Service) and Route 13 (Islington Avenue). (Refer to Attachment No. 17 for YRT's response and copy of their policy).

9. Sonoma Heights Phase 3

At its meeting on February 14, 2005, under Item 42, Report No. 7 Council adopted the following recommendation:

> **"The Committee of the Whole recommends that staff be directed to attend the Sonoma Heights Neighbourhood Traffic Committee Meeting."**

The Sonoma Heights subdivision was divided into 3 phases for traffic calming committees. The Phase 3 traffic committee area is bounded by Islington Avenue to the east, Sonoma Heights street network to the west and Napa Valley Avenue to the south (not including Napa Valley Avenue which is part of the Phase 2 committee). (Refer to Attachment No. 18 for area map and proposed traffic calming measures).

Public Participation

The initial public meeting of the Sonoma Heights Phase 3 Neighbourhood Traffic Committee was held on Tuesday, September 27, 2005. Engineering Department staff outlined the concept of traffic calming and the types of traffic calming measures available, and explained the City's Neighbourhood Traffic Committee Policy and Procedure.

The final public meeting was held on Tuesday, January 23, 2007. The Traffic Committee, with the assistance of Engineering Department staff, introduced the traffic calming proposals for the neighbourhood to the residents in attendance. Of those in attendance, 17 residents were in favour of the plan and 0 residents were against the plan. The vote included the review of curb bump-outs on Silverado Trail, Sunset Ridge and Via Carmine and present the findings in the final report to Council.

The meetings were advertised in the Vaughan Weekly, Lo Specchio, and the Vaughan Citizen newspapers. The Notice of the meetings were also mailed out to the residents in the defined area for this committee.

Traffic Calming Plan - General

There are five existing all-way stop controls at the following intersections within the Sonoma Heights Phase 3 Neighbourhood Traffic Committee area:

- Forest Fountain Drive and Sequoia Road/Calera Crescent;
- Sunset Ridge and Kistler Street;
- Sunset Ridge and Julia Valentina Avenue;
- South Belair Avenue and Silverado Trail; and
- Via Carmine Avenue and Casa Vista Drive.

An all-way stop control is being recommended at the intersection of Forest Fountain Drive and Sunset Ridge and is going to the May 28, 2007 Committee of the Whole meeting.

There is only 1 existing elementary school in this area – St. Padre Pio Catholic School and two elementary schools near this area - Lorna Jackson Public School, and St. Stephen Catholic School.

There are existing traffic calming measures, constructed at the time the area was built at the following locations within the Sonoma Heights Phase 3 Neighbourhood Traffic Committee area:

- Existing traffic circle: Forest Fountain Drive and Silverado Trail; and
- Existing traffic circle: Sunset Ridge and Silverado Trail.

Staff undertook field reviews to determine locations that would be feasible for the additional traffic calming measures proposed.

There are eleven speed humps proposed on the plan and they can be placed at the following locations:

- Julia Valentina Avenue west of #147;
- Julia Valentina Avenue between properties #265 and #277;
- Sunset Ridge between properties #254 and #255;
- Sunset Ridge between properties #169 and #173;
- Sunset Ridge between properties #79 and #83;
- Via Carmine Avenue between properties #290 and #292;
- Silverado Trail opposite properties #201 and #202;
- Kistler Street between properties #60 and #64;
- Stag's Leap Road between properties #84 and #85;
- Forest Fountain Drive between properties #412 and #416; and
- Silver Oaks Boulevard between properties #47 and #51.

The eleven speed humps will be constructed completely of asphalt.

Speed and Volume Studies

Staff collected radar speed data near the proposed traffic calming locations. The speed limit on Sunset Ridge and Forest Fountain Drive is posted at 40 km/h. All other streets are a statutory 50 km/h. All studies were conducted during peak traffic hours. The results of the studies are shown in the table below.

Location	Direction	Average Speed (AM Peak)	Average Speed (PM peak)
Sunset Ridge west of Lookout Point August 16, 2006	Eastbound	48 km/h	48 km/h
	Westbound	46 km/h	48 km/h
Sunset Ridge west of Diletta Court August 17, 2006	Eastbound	47 km/h	49 km/h
	Westbound	48 km/h	44 km/h
Silver Oaks Boulevard south of Silverado Trail May 2, 2006	Northbound	42 km/h	42 km/h
	Southbound	38 km/h	38 km/h
Forest Fountain Drive north of Napa Valley Avenue May 4, 2006	Northbound	42 km/h	42 km/h
	Southbound	40 km/h	43 km/h
Stag's Leap Road south of Sequoia Road August 17, 2006	Northbound	46 km/h	---
	Southbound	46 km/h	---
South Belair Drive north of Silverado Trail May 23, 2006	Northbound	36 km/h	36 km/h
	Southbound	36 km/h	36 km/h
Kistler Street south of South Belair Drive August 24, 2006	Northbound	40 km/h	39 km/h
	Southbound	43 km/h	36 km/h
Via Carmine Avenue east of South Belair Drive May 16, 2006	Eastbound	38 km/h	37 km/h
	Westbound	33 km/h	43 km/h

The average recorded vehicle speeds range from 33 to 49 km/h, which is generally in accordance with existing speed limits.

Staff also collected speed and volume data near some of the proposed traffic calming locations. All studies were conducted on a 24 hour basis. The results of the studies are shown in the table below.

Location	Direction	24 hour Volume	Average Speed
Sunset Ridge west of Forest Fountain Drive May 5, 2006	Eastbound	1236	51 km/h
	Westbound	1320	49 km/h
Silverado Trail west of Kistler Street May 4, 2006	Eastbound	232	38 km/h
	Westbound	233	37 km/h
Silverado Trail west of Forest Fountain Drive May 4, 2006	Eastbound	518	40 km/h
	Westbound	471	38 km/h
Julia Valentina Avenue east of Fonteselva Avenue May 10, 2006	Eastbound	276	30 km/h
	Westbound	268	32 km/h

The average recorded vehicle speeds range from 30 km/h to 40 km/h, with the exception of Sunset Ridge west of Forest Fountain which recorded vehicle speeds ranging from 49 km/h to 51 km/h. The speeds are generally in accordance with the speed limit except for Sunset Ridge where the posted speed limit is 40 km/h. All recorded volumes are well within capacities for feeder and local roadways. Should the traffic calming proposal be approved by Council, staff will collect additional speed data 12 months after installation.

Additional Requests

At the final public meeting, a request was received to review the feasibility of installing curb bump-outs on South Belair Drive, Silverado Trail and Via Carmine Avenue. Staff investigated these streets for suitability of the curb bump-outs and determined that the following locations can accommodate a curb bump-out:

- Silverado Trail between properties #35/#37 and #38/#42;
- Silverado Trail between properties #105/#107 and #106/#108;
- South Belair Drive between properties #155/#159 and #146/#150; and
- Via Carmine Avenue between properties #195/#199 and #192/#196.

Staff hand delivered a survey to directly affected residents of Silverado Trail, South Belair Drive and Via Carmine Avenue on March 8, 2007 (a total of 16 surveys) to request their support on the proposed curb bump-outs, as they are additional to the submitted plan.

A summary of each location is noted below:

Silverado Trail - #35, #37 and #42 not in support, no response from #38. Staff will not recommend the installation of the curb bump-outs at this location.

Silverado Trail - #106 does support, no response from #107, #108 and #105. Staff will recommend the installation of the curb bump-outs at this location.

South Belair Drive – All four households were not in support of the curb bump-outs. Staff will not recommend the installation of the curb bump-outs at this location.

Via Carmine Avenue – There were no responses received from the four households. Staff will recommend the installation of the curb bump-outs at this location.

Fire & Rescue Services and York Region Transit Comments

Staff requested comments from Fire & Rescue Services on the plan proposal. Fire & Rescue Services stated that traffic calming measures delay emergency response times and cause mechanical problems with their apparatus braking systems and that they are generally opposed to speed humps in any location.

Comments were also requested from York Region Transit (YRT) on the plan proposal. York Region Transit has provided comments on the roadways with the proposed speed humps. York Region Transit has stated that it is unlikely transit services would operate on the streets proposed for traffic calming measures in this report.

10. Woodbridge Meadows Neighbourhood

At its meeting on September 13, 2004 Council directed:

> **"By approving that the feasibility of the proposed speed hump at the north end of the Humber River/Robinson Creek Bridge be deferred until the new fire hall has been constructed in West Vaughan"**

Martin Grove Road is a major collector roadway with a four-lane pavement width. The existing speed limit on Martin Grove Road is a statutory 50 km/h. The area is shown on Attachment No. 19.

The Woodbridge Meadows Traffic Committee proposed a speed hump on Martin Grove Road at the northern end of the Humber River/Robinson Creek Bridge. The speed hump was deferred until the opening of the fire station. A copy of the September 13, 2003 extract is shown on Attachment No. 20.

Staff collected radar speed data on Martin Grove Road in the area of the proposed measure. The study was conducted at peak traffic periods from 8:00am to 9:00am and from 4:00pm to 5:00pm. The result of the study is shown in the table below.

Location/Date	Direction	Average Speed	
		8:00am to 9:00am	4:00pm to 5:00pm
Martin Grove Road at the north end of Humber River/Robinson Creek Bridge May 9, 2007	Northbound	49 km/h	51 km/h
	Southbound	48 km/h	48 km/h

The average recorded vehicle speeds on Martin Grove Road range from 48 to 51 km/h, which is in compliance with the statutory 50 km/h limit.

In accordance with the Council approved Neighbourhood Traffic Committee Policy and Procedure, speed humps are considered only when the following three warrants are met:

- The street is not a primary emergency response route.
- The speed limit is 50 km/h or less.
- The average speed is 10 km/h greater than the speed limit.

Martin Grove Road is a primary emergency response route and speed humps are not supported by Fire and Rescue Services. The collected average speeds do not exceed the posted speed

limit by 10 km/h. In addition, Martin Grove Road is used as a transit route, and York Region Transit would also be opposed to the proposed speed hump.

Therefore, staff does not recommend the installation of speed humps and/or raised crosswalks on Martin Grove Road on the basis of the Traffic Calming Warrant has not been met.

Regional Implications

York Region Transit has provided their policy on the use of Traffic Calming on Transit Routes and its impact on damages and injuries.

Much discussion has occurred between City and Regional Regional Transportation and Works staff on the use and effectiveness of traffic calming. Regional Roads do not contain such measures due to the nature and operating characteristics of these thoroughfares.

Conclusion

It is recommended that the proposed updated Neighbourhood Traffic Committee Policy and Procedure and the proposed NEW Traffic Calming Criteria, be approved, and that Council provide direction on the current moratorium on the installation of speed humps/raised crosswalks in the City of Vaughan.

Attachments

1. Neighbourhood Traffic Committee Policy and Procedure – Current
2. Neighbourhood Traffic Committee Policy and Procedure - Revised
3. Questionnaire Chart – Traffic Calming Summary
4. Questionnaire Chart – Traffic Calming Summary
5. Traffic Calming Warrant – June 2007
6. Emergency Response Route Map
7. Emergency Response Route Map
8. Emergency Response Route Map
9. Emergency Response Route Map
10. York Region Transit – Policy Report 2004
11. Clarence Street – Location Map
12. Council Extract, Item 17, Report No. 63, Commiittee of the Whole September 27, 2004
13. Woodbridge Highlands and Area Traffic Committee – Location Map
14. Council Extract, Item 8, Report No. 72, Committee of the Whole December 15, 2003
15. Pleasant Ridge Avenue – Location Map
16. Sonoma Heights Phase 2 – Location Map
17. York Region Transit Comments
18. Sonoma Heights Phase 3 – Location Map
19. Woodbridge Meadows Neighbourhood – Location Map
20. Council Extract, Item 18, Report No. 59, Committee of the Whole September 13, 2005
21. Damage to Fire Vehicle

Report prepared by:

Mike Dokman, Supervisor Traffic Engineering, Ext. 3118

Respectfully submitted,

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

Gary P. Carroll, P.Eng.
Director of Engineering Services

MD:mc

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ATTACHMENT NO. 1

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NEIGHBOURHOOD TRAFFIC COMMITTEE POLICY AND PROCEDURE

REVISED JANUARY 2003

APPLICABILITY

The Neighbourhood Traffic Committee Policy and Procedure applies to Neighbourhood Traffic Committees in place as of December 31, 2002. Under this policy and procedure, a Traffic Committee comprised of neighbourhood residents work with Engineering Department staff to develop a Neighbourhood Traffic Calming Plan proposal. At least two public meetings are required: an initial public meeting to request that residents join the Traffic Committee, and a final public meeting to obtain public input on the Plan proposal.

POLICY

1. Purpose: A Neighbourhood Traffic Committee (the "Committee") may be established in an area where general concern has been expressed about the volume or speed of traffic on the local street system. The goal of the Committee is to prepare a Neighbourhood Traffic Calming Plan (the "Plan"), which should be based on the use of traffic calming, enforcement or regulatory measures to satisfy as fully as practicable the following objectives:

   - Improve safety and convenience for pedestrians and cyclists;
   - Reduce the number and severity of collisions;
   - Reduce the speed and volume of motorized vehicles;
   - Reduce the volume of extraneous or non-local traffic;
   - Minimize traffic impacts on adjacent local residential streets;
   - Reduce motor vehicle emissions; and
   - Maintain access for local traffic and emergency vehicles.

   Formation of a Neighbourhood Traffic Committee and participation of City staff must be specifically authorized by City Council.

2. The Committee: The Committee must be comprised of residents living in the neighbourhood, and should be representative of the whole area. Residents may join the Committee at the initial public meeting or by informing their local Councillor in writing. Members who join the Committee through either of these means shall be designated an "official member". A committee should comprise a minimum of six official members. A majority of committee members must be in attendance to conduct a formal Committee meeting. The Committee should have a maximum of about twelve members.

   The position of Chair or Co-Chair of the Committee must be filled at the initial public meeting. Where necessary, a vote among all residents attending the meeting shall be held to determine the successful candidate. This volunteer shall remain the Chair until such time as either the Chair submits their resignation in writing to the Councillor's office, or is removed and replaced by a two-thirds (66.7 percent) vote of all official members of the Committee.

3. The Plan: The area of the Neighbourhood Traffic Calming Plan should be bounded by collector or arterial roadways, and should correspond as closely as possible to that of the local ratepayers association, if applicable.

The Plan should incorporate traffic calming measures in accordance with the City's Warrants for the Use of Traffic Calming Measures, and as specified in City of Vaughan Standard Drawings P-1 to P-10 and the *Canadian Guide to Neighbourhood Traffic Calming* (Transportation Association of Canada, 1998). Variations in the design of these traffic calming measures may be incorporated into the Plan if approved by the Engineering Department.

4. The Class EA Process: The construction or removal of traffic calming measures under $1,500,000 are considered Schedule B projects under the *Municipal Class Environmental Assessment* Act (Municipal Engineers Association, June 2000). In accordance with the Class EA Act, a copy of the notice of the initial public meeting shall be sent to the Ministry of the Environment to serve as a Notice of Study Commencement. A copy of the notice of the final public meeting shall also be sent to the Ministry.

   Once the Plan is approved by Council a Notice of Completion shall be filed with the Ministry of the Environment and published in two separate editions of the local newspaper. The notice is the means by which individuals or agencies are informed they have a 30 day period within which to request a Part II Order if they have unresolved concerns with the project. It should be noted that these individuals or agencies should have already brought their concerns to the City's attention prior to the Notice of Completion being issued.

5. Public Meetings: Initial and final public meetings shall not be held during the summer vacation months of June, July and August. It may not be appropriate to hold public meetings at other times, such as during religious holidays. All public meetings shall begin no later than 7:00 pm.

PROCEDURE

1. Establishing the Committee: The Committee may be established in one of two ways. If a local ratepayer's association exists in the area, then its executive may contact their Councillor's office in writing and request the formation of a Neighbourhood Traffic Committee. If no such association exists, then an area resident must circulate a petition, signed by at least twenty (20) other such residents, requesting the formation of a Neighbourhood Traffic Committee. In either case, the request shall be brought to Council by a member of Council in order to authorize establishment of the Committee and the assistance of the Engineering Department. A single deputant appearing before Committee of the Whole shall not be sufficient to form a Traffic Committee.

2. The Initial Public Meeting: The Engineering Department shall arrange the time and place of the initial public meeting of the Traffic Committee. The Engineering Department shall prepare notices for the meeting and a map of the area, and mail them to all residents in the area no less than two weeks in advance of the meeting date. A copy of the meeting notice shall be sent to members of the Ward Sub-committee, the Fire Department, York Region Transit, and the Regional office of the Ministry of the Environment. Notices shall be from City staff and follow the sample formats attached.

   The purpose of the initial public meeting is to request that residents join the Committee as official members, and to appoint or elect a Committee Chair or Co-Chair. The meeting may also be useful in gaining an understanding of the traffic concerns in the neighbourhood, and the types of measures that may be used to mitigate the concerns. Engineering Department staff and/or the local Councillor should chair the meeting. Minutes of the meeting shall be prepared by the Engineering Department and forwarded to members of the Ward Sub-committee and the Committee Chair.

3. Developing the Plan: The Committee shall identify any neighbourhood traffic concerns, identify preferences for various traffic calming measures, and develop a Neighbourhood Traffic Calming Plan proposal. The process may involve one or more working meetings. The Committee Chair shall arrange these meetings and, if necessary, request the assistance or attendance of Engineering

Department staff. The Engineering Department shall conduct supporting traffic studies as required to develop the Plan proposal.

The Committee must submit the Plan proposal to the Engineering Department for review of its technical feasibility and appropriateness prior to the final public meeting. The Committee should also circulate the Plan proposal to the local ratepayer's association and advise them when it will be presented to Committee of the Whole.

4. The Final Public Meeting: The Engineering Department shall arrange the time and place of the final public meeting of the Traffic Committee. The Engineering Department shall prepare notices for the meeting and a map of the Plan proposal, and mail them to all residents in the area no less than two weeks in advance of the meeting date. The notices shall also be sent to any institutional and commercial land uses within the Traffic Committee area. A copy of the meeting notice shall be sent to the members of the Ward Sub-committee, the Fire Department, York Region Transit, and the Regional Office of the Ministry of the Environment.

   The locations of the traffic calming measures in the Plan proposal shall be marked in the field by Engineering Department staff prior to the final public meeting.

   The purpose of the final public meeting is to obtain public input on the Plan proposal. This meeting must be attended by Engineering Department staff, and should be chaired by the Traffic Committee. Minutes of the meeting shall be forwarded to the members of the Ward Sub-committee and the Committee Chair. The Plan proposal must have the support of at least two-thirds (66.7 percent) of the residents at the meeting. A formal vote may be held to determine this level of support. Residents may provide input on the Plan proposal to the Engineering Department in advance of the meeting. Signatures on a petition may be considered, but shall not be counted numerically in a formal vote.

   If minor changes are requested to the Plan proposal, and these changes are acceptable to the Engineering Department, then these changes may be incorporated provided they have the support of at least two-thirds (66.7 percent) of the residents present. If major changes are requested, then a further public meeting is required.

5. Approving the Plan: The Committee Chair must present the Plan proposal at a Committee of the Whole meeting. To do so a deputation request must be made through the Clerks Department and a copy of the Plan proposal provided for circulation to Mayor and Members of Council and senior staff. The Committee of the Whole will receive the deputation and request that the Engineering Department report on the Plan proposal as supported by the area residents.

   The report shall include comments on the feasibility, impacts and estimated costs of the Plan proposal, and the concerns of other agencies. The Plan proposal shall be circulated to the following agencies:

   - City of Vaughan Fire Department;
   - City of Vaughan Public Works Department;
   - York Regional Police;
   - York Region EMS;
   - York Region Transit;
   - York Region Transportation and Works Department;
   - York District School Board; and
   - York Catholic District School Board.

   The Committee of the Whole shall consider the Plan proposal and Engineering Department report, hear deputations from the public and interested parties, consider the public support demonstrated at the final public meeting, and make a recommendation to City Council.

6. Notice of Completion: Once the Plan is approved by Council a Notice of Completion shall be filed with the Ministry of the Environment and published on the City Page in two separate editions of the *Vaughan Citizen* or *Liberal*.

7. Dealing with Additional Requests: Should a request for additional traffic calming measures be made after the Plan has been approved by Council, but before the Plan is implemented, then the Committee Chair or resident making the request shall circulate a petition, signed by at least two-thirds (66.7 percent) of the residents directly affected, indicating support for the additional measures. If the measures are proposed on a through street, then "directly affected" shall mean those residents that can reasonably be expected to use that street. If the measures are proposed on a crescent street, then "directly affected" shall mean those residents on that street. The Engineering Department shall ultimately determine what area is to be included in the petition.

   If major changes are requested, then a further public meeting to vote on these changes and Council approval is required. Should a request for additional traffic calming measures be made after the Plan has been implemented then a further public meeting, with public notification, and Council approval are required.

8. Evaluating the Plan: The Engineering Department shall report to the Committee of the Whole approximately one year after the implementation of the Plan. Several Plans may be reported on at once. The report shall describe any benefits and problems that have been identified or changes that may be required to improve the effectiveness of the Plan.

   If major changes are recommended then a further public meeting and Council approval is required before they can be implemented. Should a number of requests be received for additional traffic calming measures that are not part of the recommended changes, then it may be necessary to re-establish the Traffic Committee and hold further public meetings.

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The City Above Toronto

ATTACHMENT NO. 2

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NEIGHBOURHOOD TRAFFIC COMMITTEE POLICY AND PROCEDURE

REVISED JUNE 2007

APPLICABILITY

The Neighbourhood Traffic Committee Policy and Procedure applies to Neighbourhood Traffic Committees in place as of June 30, 2007. Under this policy and procedure, the Engineering Services Department staff will conduct/review/develop a Neighbourhood Traffic Calming Plan proposal. A community meeting will be held to obtain public input on the Plan proposal.

POLICY

1. Purpose: The goal of the Plan is to prepare a Neighbourhood Traffic Calming Plan (the "Plan"), which should be based on the use of traffic calming, enforcement or regulatory measures to satisfy as fully as practicable the following objectives:

   - Improve safety and convenience for pedestrians and cyclists;
   - Reduce the number and severity of collisions;
   - Reduce the speed and volume of motorized vehicles;
   - Reduce the volume of extraneous or non-local traffic;
   - Minimize traffic impacts on adjacent local residential streets;
   - Reduce motor vehicle emissions; and
   - Maintain access for local traffic and emergency vehicles.

2. Initial Step: A formal request must be received from the residents in the form of a petition by either the City Council staff or Engineering Services Department staff.

3. The Plan: The area of the Neighbourhood Traffic Calming Plan should be bounded by collector or arterial roadways, and should correspond as closely as possible to that of the local ratepayers association, if applicable. An individual roadway can be requested and all procedures will be followed accordingly.

   The Plan should incorporate traffic calming measures in accordance with the City's Warrants for the Use of Traffic Calming Measures, and as specified in City of Vaughan Standard Drawings J-1 to J-10 and the *Canadian Guide to Neighbourhood Traffic Calming* (Transportation Association of Canada, 1998). Variations in the design of these traffic calming measures may be incorporated into the Plan if approved by the Engineering Department.

4. Community Meetings: A community meeting is to be held to discuss the Plan but the meeting shall not be held during the summer vacation months of June, July and August. It may not be appropriate to hold public meetings at other times, such as during religious holidays. All public meetings shall begin no later than 6:00 pm.

PROCEDURE

1. Establishing the Plan: If a local ratepayer's association exists in the area, then its executive may contact their Councillor's office in writing or the Engineering Services Department and request a review for traffic calming. If no such association exists, then an area resident must circulate a petition, signed by at least two-thirds (66.7%) of other such residents, requesting a review for traffic calming. In either case, the request shall be brought to the attention of the Ward Sub-committee and the Local Councillor. A single deputant may appear before Committee of the Whole shall be sufficient to request a review for traffic calming with the approval of City Council.

2. Developing the Plan: The Petition shall identify any neighbourhood traffic concerns, identify preferences for various traffic calming measures in order to develop a Neighbourhood Traffic Calming Plan. The Engineering Services Department shall conduct supporting traffic studies as required and review in the field as necessary to develop the Plan.

   The Plan will submitted to the Local Councillor for review and comment of its feasibility and appropriateness prior to the community meeting.

3. The Community Meeting: The Engineering Services Department shall arrange the time and place of the community meeting. The Engineering Services Department shall prepare notices for the meeting and a map of the Plan proposal, and mail them to all residents in the area no less than two weeks in advance of the meeting date. The notices shall also be sent to any institutional and commercial land uses within the study area. A copy of the meeting notice shall be sent to the members of the Ward Sub-committee, the Fire Department, York Region Transit, and the School Boards.

   The purpose of the community meeting is to obtain public input on the Plan proposal. This meeting must be attended by Engineering Services Department staff and the Local Councillor. Minutes of the meeting shall be forwarded to the members of the Ward Sub-committee. The Plan must have the support of at least two-thirds (66.7 percent) of the residents at the meeting. A formal vote may be held to determine this level of support. Residents may provide input on the Plan to the Engineering Services Department in advance of the meeting that will be included in the vote. Signatures on a petition may be considered, but shall not be counted numerically in a formal vote.

   If minor changes are requested to the Plan, and these changes are acceptable to the Engineering Services Department, then these changes may be incorporated provided they have the support of at least two-thirds (66.7 percent) of the residents present. If major changes are requested, then a further community meeting is required.

4. Approving the Plan: The Plan will be submitted at a Committee of the Whole meeting. The report shall include comments on the feasibility, impacts and estimated costs of the Plan, and the concerns of other agencies. The Plan shall be circulated to the following agencies:

   - City of Vaughan Fire Department;
   - City of Vaughan Public Works Department;
   - York Regional Police;
   - York Region EMS;
   - York Region Transit;
   - York Region Transportation and Works Department;
   - York District School Board; and
   - York Catholic District School Board.

   The Committee of the Whole shall consider the Plan and Engineering Services Department report, hear deputations from the public and interested parties, consider the public support demonstrated at the community meeting, and make a recommendation to City Council.

5. Dealing with Additional Requests: Should a request for additional traffic calming measures be made after the Plan has been approved by Council, but before the Plan is implemented, then the resident making the request shall circulate a petition, signed by at least two-thirds (66.7 percent) of the residents directly affected, indicating support for the additional measures. The "directly affected" shall mean those residents that can reasonably be expected to use that street. The Engineering Services Department shall ultimately determine what area is to be included in the petition.

   If major changes are requested, then a further community meeting to vote on these changes and Council approval is required. Should a request for additional traffic calming measures be made after the Plan has been implemented then a further community meeting, with public notification, and Council approval are required.

6. Evaluating the Plan: The Engineering Services Department shall report to the Committee of the Whole between one and two years after the implementation of the Plan. Several Plans may be reported on at once. The report shall describe any benefits and problems that have been identified or changes that may be required to improve the effectiveness of the Plan.

   If major changes are recommended then a further community meeting and Council approval is required before they can be implemented. Should a number of requests be received for additional traffic calming measures that are not part of the recommended changes, then it may be necessary to hold further community meetings.

ATTACHMENT NO. 3

City of Brampton Traffic Calming Policy
Traffic Calming Practices – Results of Questionnaire

QUESTION	SURVEY RESPONSE										
	Markham	**Waterloo**	**Kitchener**	**Ottawa**	**Guelph**	**Vaughan**	**Burlington**	**Richmond Hill**	**Oakville**	**Toronto**	**Caledon**
1 ***How does your Municipality determine the extent of Study Limits when initiating the traffic calming process?***	Study Area is to include adjacent streets	Study Area is to include adjacent streets	Study Area is to include adjacent streets	Study Area is to include adjacent streets	Study Area is bounded by nearest arterial roadways or natural boundaries	Affected roadway / neighbourhood only	Generally we limit the Study Area to the affected roadway / neighbourhood only but we do consult with the ward councillor to determine if the area should be expanded	Study Area is to include adjacent streets	Affected Roadway / Neighbourhood only	Affected Roadway / Neighbourhood only	Study Area is to include adjacent streets
2 ***How do you measure community support for traffic calming initiatives?***	We require a minimum of 60% resident support	2/3rds resident support must be achieved	We require at least 60% response to a survey and at least 51% of respondent to be in favour	We try to gain consensus within the community, if we cannot, we may not implement anything or we may recommend a "less effective" measure that people can agree upon	N/A	2/3rds support required	Minimum 30% response required, of that, 75% must be in favour of the Traffic Calming proposal	51% support required	51% support required	We require 50% + 1 household response rate. 60% (min) of households responding must be in favour	2/3rds support required
3 ***What are your practices with respect to Public Notification?***											
• Notification Area	Affected street plus any adjacent streets	Same limits as Study Area	Study Area plus any other interested parties	Same limits as Study Area	Same limits as Study Area	Same limits as Study Area	Same as Study Area	Same limits as Study Area.	Immediate street and captive area (i.e. adjacent street with no other access)	N/A	Affected streets
• Methods of Notification	Mail out notices plus run an ad in the local newspaper	Newspaper ads, signs installed adjacent to the study area, City website, etc.	2 public meetings are held during the study with sign boards placed at the study limits. Residents of the street are provided with a letter. Newspaper ads are also run.	Ads in local newspapers and in the dailies, contact with community associations and sometimes flyers	Letter, website, local newspaper	Newspaper ads and notices which are sent to all homes within the Study Area	Hand deliver letters to residences within the Study Area	Resident letter, local newspaper	Mail a letter survey to the residents within the notification area.	Schedule B Class EA Notices in the Community newspaper (ad to be ran twice)	Hand delivered notices and newspaper ad ran for two consecutive weeks
• Return of Survey	Via telephone or email	Mail back to City or fill out on website	Surveys can be filled out by any interested party but more consideration is give to those directly on the street being reviewed	N/A	E-mail, hand-deliver, snail mail or fax	N/A	Surveys can be returned via mail, e-mail or fax	No survey distributed	Mail, e-mail or fax	Business reply envelope	E-mail, fax, mail or drop-off
4 ***Describe your method of evaluating potential locations for traffic calming installations.***	Evaluate using a point system which is primarily based on thresholds of traffic volume, compliance and collision experience. Other factors such as schools, parks, road with, sidewalks, etc. are also considered.	Use of our traffic calming policy which includes a warrant system	All requests for traffic calming are reviewed on a yearly basis based on a point system (points are awarded for speeds, volume, etc.). We then choose the top 3 locations and conduct those studies the following year.	Refer to our website	A concern is initiated by a resident of the street. Data is collected to determine if criteria is met. Petition to proceed is also required.	Based on a resident complaint basis. Traffic staff undertake radar studies to determine operating speeds. We then respond back to the resident/local Councilor if the speeds are found to be > 10 km/h over the posted speed limit. We then proceed as per our Policy & Procedure.	After a petition (signed by a minimum of 10 residents) is received, a 7 day ATR study is conducted. A minimum of 2 criteria must be met in order to set-up a Neighbourhood Traffic Calming Committee (NTC)	We don't get many petitions per year so there isn't a need to rank them. The petitions are submitted to Council to determine if a road audit should take place.	Priority ranking based on the relative magnitude of the speeding problem, exposure to the community and safety history.	• Continuous sidewalk on one side; • Road grade; • Approval by Emergency Services and TTC; • 85th %ile speed (>15 km/h over) • Volume warrants	Speed & volume study – if 85th %ile speeds are 10 – 15 km/h over posted we implement "soft" measures (signs, markings, etc.). If the 85th %ile is 15 km/h over posted – we proceed with the Class EA Planning Process.

ATTACHMENT NO. 4

City of Brampton Traffic Calming Policy
Traffic Calming Practices – Results of Questionnaire

QUESTION	SURVEY RESPONSE										
	Markham	**Waterloo**	**Kitchener**	**Ottawa**	**Guelph**	**Vaughan**	**Burlington**	**Richmond Hill**	**Oakville**	**Toronto**	**Caledon**
5 What was your 2005 annual budget for Traffic Calming? Are there additional funding programs available?	• 2005 budget was $300,000; • No additional funding is available.	• 2005 budget was $100,000; • No additional funding is available.	• 2005 budget was $100,000; • There is no additional funding however, if we can fit a study in with our capital works program than we will do so to save budget.	• Budget typically varies depending on Council. Over the past 4 years it has varied between $300,000 and $900,000; • No additional funding is available unless we can combine our resources with another program.	• 2005 budget was $70,000; • No additional funding is available.	• 2005 budget was $320,000; • No additional funding is available.	• 2005 budget was $60,000; • No additional funding is available.	• Each EA costs approximately $20,000 - $30,000.	• 2005 budget was $150,000; • No additional funding is available.	• 2005 budget was $750,000; • No additional funding is available.	• 2005 budget was $50,000; • No additional funding is available.
6 What is the involvement level of each agency (Emergency Services, Transit and Maintenance), and when do you consult with them?	Agencies are advised of potential locations and circulated for comment	All agencies are involved and consulted with throughout the process	All agencies are included in the circulation and involved throughout the process	All agencies have low involvement and are consulted with during the planning stages. Note that all turning requirements are met and speed humps are avoided on bus routes.	All stakeholders may comment on the plans. They are consulted with once the plans have been created by Traffic Services.	All agencies are requested to provide comment based on the recommended "plan" by Traffic Staff and the Traffic Calming Committee members	Affected agencies are asked to participate in the NTC. They are consulted when the draft plan is decided upon.	All agencies are sent drawings prior to construction and are asked to provide comment	All agencies have a high level of involvement and are consulted with prior to the generation of design alternatives	Emergency services and the Transit authority have a high level of involvement and are consulted early in the process	All agencies are circulated of the EA and interviewed. Consulted prior to the PIC.
7 Do you survey the affected residents to determine their level of satisfaction with the implemented measure?	No	No	Yes	No	Yes	Yes	No	No	No	No	No
8 Additional Comments.				Our full Area Traffic Management Guide is on our website at: http://ottawa.ca/city_services/traffic/area_traffic_management/index_en.shtml	You can view our policy on-line at: www.guelph.ca	Further to Q7: We also request feedback from the most directly affected residents. Monitor the installation between 1 ½ to 2 years post implementation.	We are presently renewing our process to revise our approval criteria. We are also reviewing implementation of split humps due to concern from our Fire Department regarding the cumulative effect of vertical deflection measures.	Further to Q7: This is something we should be working on. Right now, if residents want to express their disapproval they go through Council to have it removed (requiring another EA) or get in touch with the traffic dept. to express concerns.	We are currently revisiting our 2005 locations and proposing more intrusive measures.	Please visit our website for additional information: www.toronto.ca/transportation/traffic/traffic_calming.htm	To better understand our polices please refer to our website.

Flower City
brampton.ca

TSH

City of Vaughan
The City Above Toronto

The City of Vaughan
2141 Major Mackenzie Drive
Vaughan, Ontario
Canada L6A 1T1
Tel (905) 832-2281

ATTACHMENT NO. 5

WARRANTS FOR THE USE OF TRAFFIC CALMING MEASURES

JUNE 2007

TYPES OF MEASURES

City Standard Drawings J-1 to J-10 detail the traffic calming measures that shall be considered acceptable for installation on City streets. Other measures that shall be considered appropriate for traffic calming purposes include contrasting materials, pavement markings and warning signage. Their applicability in existing areas and new developments is summarized in Table 1.

Table 1 – Accepted Traffic Calming Measures and their Applicability

Traffic Calming Measure	Through Traffic Committee Process (Existing Areas)	Through Traffic Management Plan (New Developments)
Speed Hump	Subject to Warrant 1	No
Raised Crosswalk	Subject to Warrant 1	With Pedestrian Signal Only on Primary Roads
Raised Intersection	Where Possible	Yes
Roundabout	Yes	Yes
Median	Subject to Warrant 2	Yes
Curb Extension/Road Narrowing	Subject to Warrant 2	Yes
Chicane	Subject to Warrant 2	Yes
Contrasting Materials	Yes	Yes
Pavement Markings	Yes	Yes
Warning Signage	Yes	Yes

WARRANTS FOR INSTALLATION

Warrant 1 – Speed Humps and Raised Crosswalks

Speed humps and raised crosswalks shall be considered in existing residential areas, through the Neighbourhood Traffic Committee process, only where the following three warrants are met:

1. The street is not a primary emergency response route. The determination of whether a street is a primary emergency response route shall be made in consultation with the Engineering and Fire Departments.

2. The speed limit is 50 km/h or less.

3. The average speed on the street is measured to be 10 km/h greater than the speed limit.

Speed humps may not be integrated into streets in new developments through a Transportation Management Plan. Raised crosswalks may only be installed with a pedestrian signal.

Warrant 2 – Medians, Curb Extensions or Road Narrowings and Chicanes

Medians, curb extensions or road narrowings and chicanes shall be considered in existing areas, through the Neighbourhood Traffic Committee process, only where the following two warrants are met:

1. The speed limit is 50 km/h or less.

2. The average speed on the street is measured to be 10 km/h greater than the speed limit.

Medians, curb extensions or road narrowings and chicanes may also be integrated into streets in new developments through a block Transportation Management Plan.

Raised Intersections and Roundabouts

Raised intersections may be integrated into intersections in new developments, as specified in an approved block Transportation Management Plan. They may be retrofitted into existing intersections provided that drainage issues can be satisfactorily resolved.

Roundabouts may be installed at intersections in existing areas through the Neighbourhood Traffic Committee process, and integrated into intersections in new developments as specified in an approved block Transportation Management Plan. In all cases the installation of roundabouts may be subject to right-of-way constraints.

Contrasting Materials, Pavement Markings and Warning Signage

Contrasting materials (i.e. textured concrete crosswalks and parking lay-bys) and pavement markings (i.e. painted road narrowings) may be installed through the Neighbourhood Traffic Committee process, and integrated into streets in new developments as specified in an approved block Transportation Management Plan. Warning signs (i.e. Curve Warning, Children Playing, Park Area, etc.) may be installed by staff in new or existing areas.

ATTACHMENT No. 6

PRIMARY RESPONSE ROUTES - NW QUADRANT

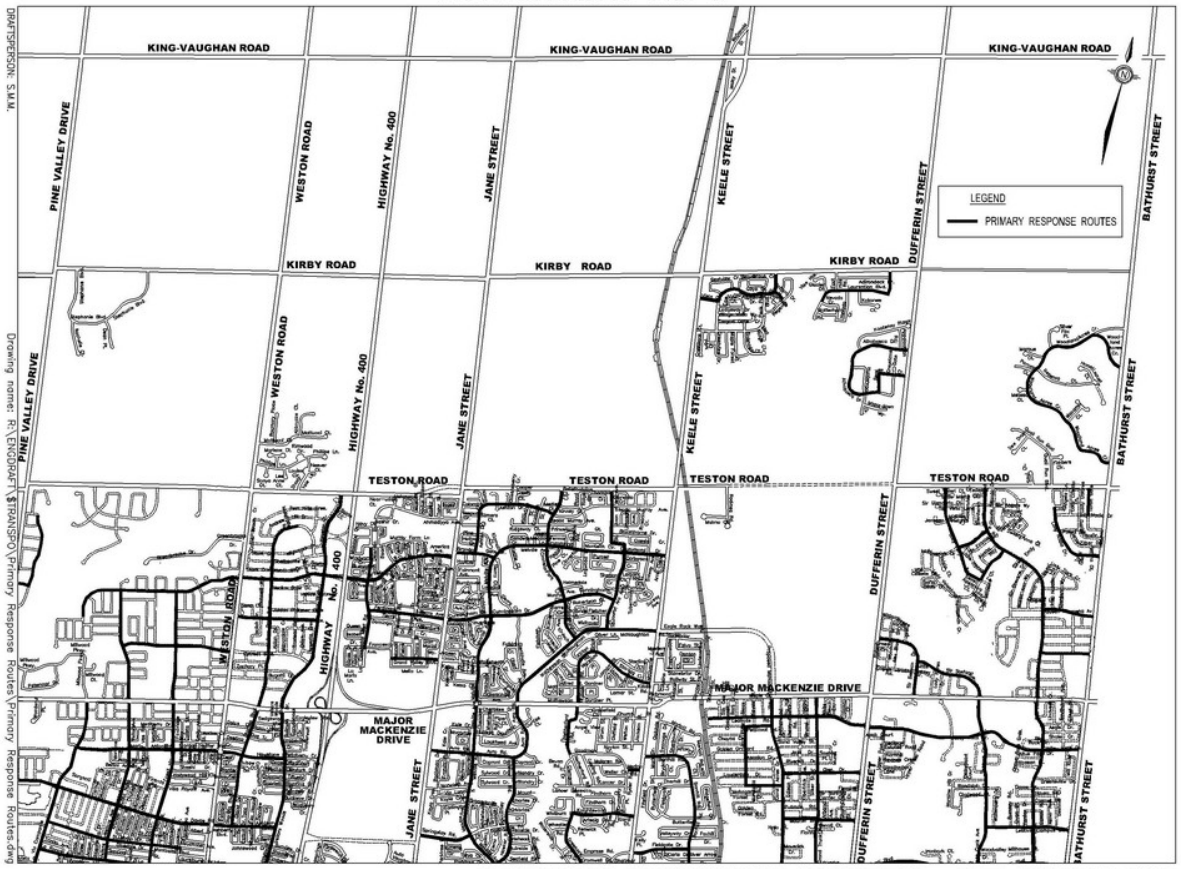
DRAFTSPERSON: S.M.M.

Drawing name: R:\ENGDRAFT\$TRANSPO\Primary Response Routes\Primary Response Routes.dwg

ATTACHMENT No. 7

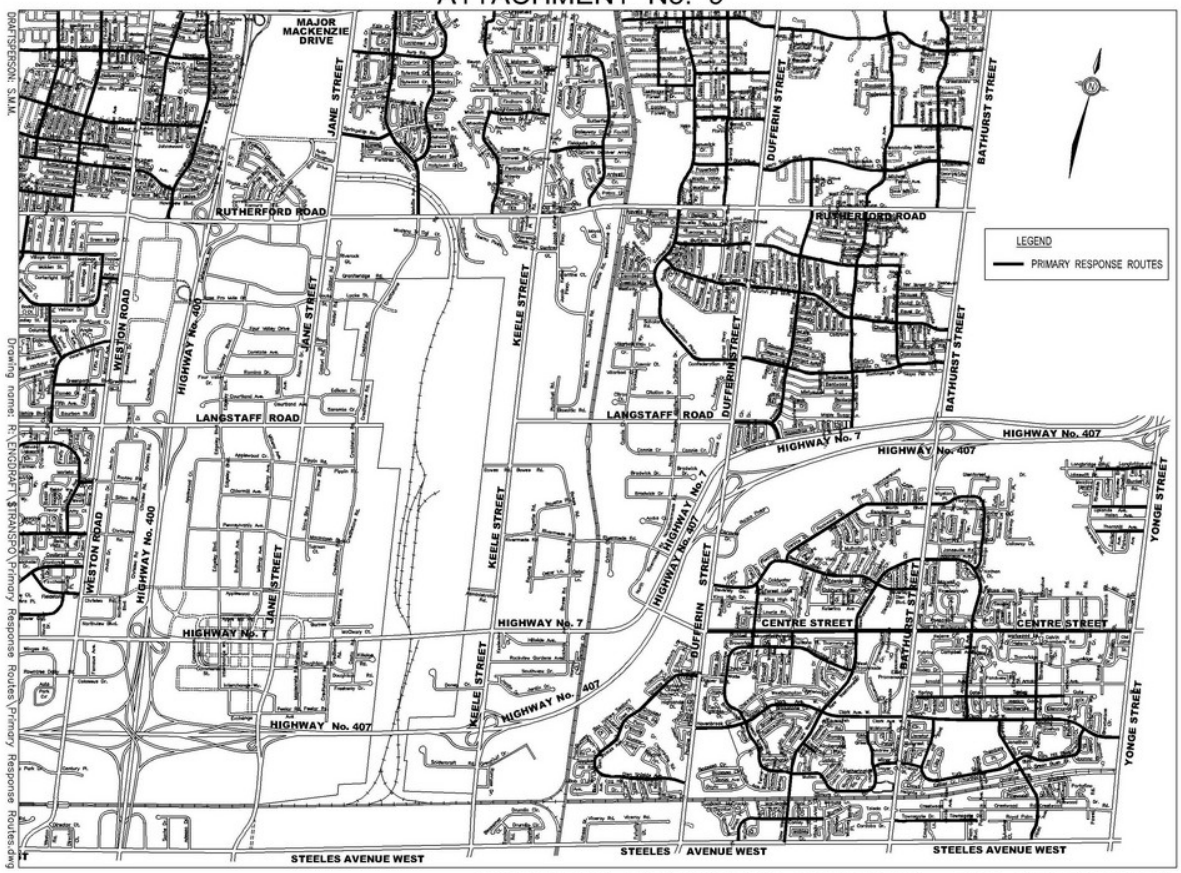
PRIMARY RESPONSE ROUTES - SW QUADRANT

ATTACHMENT No. 8



PRIMARY RESPONSE ROUTES - NE QUADRANT

ATTACHMENT No. 9



PRIMARY RESPONSE ROUTES - SE QUADRANT

ATTACHMENT NO. 10

Report No. 6 of the Transit Committee

1

YORK REGION TRANSIT
POLICY FOR TRAFFIC CALMING ON PUBLIC TRANSIT ROUTES

(Please refer to Minute No. 150 of the Regional Council Minutes for recorded vote on the adoption of the recommendations in the foregoing Clause.)

The Transit Committee recommends that:

1. **The presentation from Rick Tagaki and Ann Marie Carroll regarding Traffic Calming Policy on Public Transit Routes be received.**
2. **The policy regarding "Traffic Calming on Public Transit Routes" be amended as follows:**

   a) **The last sentence of the "Description" section be deleted and replaced with the following:**

   "It is recognized that both the installation and removal of traffic calming devices requires an Environmental Assessment process. The Region will work with the local municipality to identify options and possible alternative traffic calming devices to mitigate the impacts to York Region Transit."

3. **That recommendation contained in the following report, June 4, 2004, from the Commissioner of Transportation and Works be adopted, as amended above.**

1. RECOMMENDATION

It is recommended that:

1. The policy entitled "Traffic Calming on Public Transit Routes" be adopted and that, York Region staff be authorized to communicate the policy to the local municipalities and the public *(see Attachment 1)*.

2. PURPOSE

The purpose of this report is to update Transit Committee and Regional Council on the proposed York Region Transit (YRT) policy for traffic calming on public transit routes, and to seek adoption of the policy.

This policy will serve to identify issues surrounding the effects of traffic calming devices on public transit services. It will establish guidelines for the Region and the local municipalities when considering the implementation of traffic calming devices on streets

where transit buses currently operate and those where transit buses may operate in the future.

3. BACKGROUND

YRT staff submitted a proposed policy entitled "Traffic Calming Devices on Transit Routes" to the August 22, 2003 Transit Committee meeting. The following resolution was subsequently passed by Regional Council at its meeting on September 18, 2003.

1. *The following report, August 22, 2003, from the Commissioner of Transportation and Works be received.*
2. *This matter be referred to York Region Transit staff to establish a working group to include local municipalities, Regional Transportation and Works, Fire and EMS Departments, for the purpose of drafting a policy for region-wide traffic calming measures on public transit routes.*
3. *Local municipalities be encouraged not to implement traffic claming measures on existing and/or anticipated York Region Transit routes until policy has been adopted.*

The list of working group members has been expanded to also include York Region Police (YRP).

4. ANALYSIS AND OPTIONS

YRT staff assembled the working group as directed. The group's objectives were to:

- Determine whether the framework of YRT's existing draft policy could be further developed.
- Identify preferred traffic calming solutions to be used on transit routes.

The goals of the working group were to:

- Remedy operating concerns.
- Reach consensus on types of traffic devices acceptable on transit routes.
- Develop a communications strategy.
- Prepare a Transit Traffic Calming Policy to be submitted to Regional Council.

It has been determined that the Town of Markham and the City of Vaughan are the only two municipalities that currently install speed humps/bumps along transit routes.

The Town of Markham began installing speed humps/bumps in 1999. Since 1999, Markham has designated 42 municipal streets to receive speed humps/bumps, 22 of which are streets where transit operates.

The Town of Vaughan has installed speed humps/bumps on 7 municipal streets where transit operates.

A critical issue with speed humps/bumps is the travel time delay they cause. The investigation into this indicated that for every speed hump/bump installed, there is the potential to reduce travel time by 10 seconds. An example of this is Route 40 (Markham-Unionville Local).

Table 1
Route 40 Time Delay

Route	No. of Speed Humps	Current Service	Time Delay
40	35	30min. peak hours 1 hr. off peak	12 min. round trip

The proposed policy submitted to Regional Council in September, 2003 was reviewed and discussed by the group members. Overall the members supported the intent of the policy. YRT was asked to include a grandfather clause in the policy exempting existing and approved locations having vertical traffic measures, inclusive of 2002/2003 projects. YRT staff has agreed to include a grandfather clause; however, if it is found that the vertical devices interfere with YRT's operation, YRT reserves the right to request the removal of the devices.

Speed humps/bumps are the most common type of traffic calming device being installed by local municipalities at this time and are the primary concern for both municipal and Regional staff. The pros and cons of this type of device are as follows:

Pros:
- Economical.
- Easy to install.
- Effective.

Cons:
- Reduced operating speeds (response time).
- Damage to vehicle and associated costs.
- Downtime of vehicles.
- Operator and customer discomfort.
- Liability.
- Street aesthetics.
- Road maintenance and construction works.
- Repairs to the devices and costs associated with the repairs.
- Traffic diversion. Redirecting traffic from one street to another.

Staff then considered other traffic calming devices to determine if there are in fact better solutions.

4.1 Traffic Calming Devices

There are four main categories of traffic calming devices to be considered as outlined in Table 2.

Table 2
Traffic Calming Device Options

	Type	Description	Sample
1.	Non-Physical	Do not alter the physical path of travel.	Speed Enforcement Photo Radar Radar Trailers Signage Pavement Markings Streetscaping
2.	Horizontal	Decrease width of roadway through physical measure.	Traffic Circles/Roundabouts Chicanes Medians Centre Islands Choke points Realigning Intersections On-street parking
3.	Vertical	Form road surface with varying heights and/or textures.	Speed humps/bumps Speed tables Textured pavement Raised crosswalks and intersections
4.	Diversion	Restricts traffic flow. (Not considered as part of analysis).	Street closures Turning prohibitions and other restrictions One-way to two-way streets Cul-de-sacs

Each of the four categories were discussed and then evaluated by each working group member. The categories were ranked based on an agree/disagree format, with non-physical devices being most preferred, and diversion devices the least preferred.

Non-physical devices were preferred as there were no concerns relating to municipal operations, transit and emergency services. Police enforcement was thought to be the most effective method of non-physical traffic calming. The representative from York Regional Police stated that they are currently planning for an increase in traffic enforcement resources in 2004.

Horizontal devices were thought to be more expensive and less effective, however, they do address the issues noted in the groups list of cons.

Group members agreed that vertical measures should be considered as the last resort.Diversion devices where not discussed as they do not relate to transit.

4.2 Plan of Action

The group identified the need for an integrated plan for traffic safety, taking into account the community as a whole. The following actions are suggested:

- Invest in public education to change perceptions, behaviours and attitudes that lead to collisions.
- Provide visible police enforcement where resources permit.
- Address specific traffic problems with intelligent, cost effective solutions that will not compromise safety or penalize law-abiding citizens.
- Educate community that instead of turning streets into playgrounds, there is a need to develop recreational grounds and facilities where children can play safely away from traffic.

Building obstacles to impede traffic is not the answer to the problem of aggressive drivers. It has been determined that police enforcement and public education should be the first steps to traffic calming.

The Town of Markham has recently coordinated a "Street Safe Task Force" that is addressing the issue of traffic calming specifically. Their staff is preparing a scheme that would serve the residents of a community, YRT and emergency service providers.

4.3 Communication

To improve communications with the local municipalities, YRT staff agreed to:

- Provide group members with one point of contact.
- Provide current transit information through its web site.
- Circulate a summary of its annual service plan each year to group members.
- Produce mapping identifying roads selected for future transit services through the subdivision plan approval process.

4.4 Relationship to Vision 2026

YRT will work with the local municipalities and other partners to support the goals stated in York Region's Vision 2026 and will focus on the following areas:

"Housing Choices for Our Residents"

- Planning for Strong Lives, Work, Play and Learn Connections.
- Creating Well-Designed and Liveable Communities.

"Infrastructure for a Growing Region"

- Ensuring that our transportation network co-ordinates with development.
- Continuing to improve service and infrastructure for successfully integrated transit service.
- Promoting transit usage as a practical and wise alternative to private vehicle use.

5. FINANCIAL IMPLICATIONS

An overall financial impact caused by the installation of vertical traffic calming measures is unknown. It is certain that if vertical traffic calming devices continue to be installed along transit routes, the Region will incur costs as a direct result.

A twelve minute round trip time delay as shown in Table 1(Route 40 example) alone could cost the Region $73,000 annually. Other areas identified as potential costs would be vehicle damage to the lower side panels, liability claims due to bumps and falls, and customer dissatisfaction due to extended travelling times.

6. LOCAL MUNICIPAL IMPACT

Local planners and engineers will have to consider the impact on public transit when designing and/or approving traffic calming devices. Increased noise levels and pollution may occur as a result of the increase in the number of vertical devices being installed. Where vertical traffic calming measures are used, public transit will not be provided.

The working group determined that the local municipalities prefer vertical devices because they consider them to be economical, simple to install and effective, however the total cost associated with vertical devices has not yet been investigated by most municipalities. The local municipalities may or may not incur higher costs to install other types of devices in order to accommodate public transit service.

7. CONCLUSION

Regional Council endorsement is being sought for YRT's policy entitled "Policy for Traffic Calming on Public Transit Routes".

YRT supports municipal introduction of well-planned traffic calming measures into the municipal landscape and will assist local municipal staff to develop their plan. It is, however, necessary to continue to provide transit services to all areas of York Region while maintaining a safe and comfortable environment for the general public, transit customers and bus operators.

The cities of Toronto and Hamilton both have similar policies in place. Other jurisdictions such as Mississauga, Brampton and Waterloo are in the process of developing policies.

The Senior Management Group has reviewed this report.

(A copy of the attachment referred to in the foregoing is included with this report and is also on file in the Regional Clerk's Office.)

York Region

STATUS		
Council Approved	Y	N
CAO Approved:	Y	N

TITLE: Traffic Calming on Public Transit Routes	NO.: Approval Date: Last Updated:

POLICY STATEMENT:

The Regional Municipality of York supports municipal introduction of well-planned traffic calming measures into the municipal landscape. It is, however, necessary to continue to provide bus services to all areas of York Region while maintaining a safe and comfortable environment for the general public, transit customers and bus operators.

APPLICATION:

This policy shall be applicable where traffic calming measures and public transit are to coexist.

PURPOSE:

The Region wishes to ensure that buses can negotiate traffic calming schemes in a satisfactory manner without damage to the buses and to maintain a safe and comfortable environment for both our customers and bus operators.

DEFINITIONS:

The definition of traffic calming is:

"The implementation of physical and visual measures that are intended to reduce vehicle speeds and subdue aggressive driving behaviour to improve road safety and create an environment where the needs of all road space users, not just motor vehicles, are enhanced."

DESCRIPTION:

The Region supports non-physical and selected horizontal traffic calming devices and opposes the installation of vertical traffic calming devices on roads designated for transit.

The Region approves of non-physical type traffic calming devices. Where horizontal measures are to be installed, the Region requests that the local municipality work with Region to ensure the device design allows buses to negotiate through the scheme without damage to the buses or discomfort to our customers and bus operators.

The Region does not agree with the installation of vertical traffic calming devices on designated transit routes including roads that are deemed future transit routes.

As requested by the Town of Markham, the Region agrees to continue operating transit services on streets with vertical devices (speed humps/bumps) that were installed or approved prior to December 31, 2003. This is inclusive of all the local municipalities in the Region of York. If it is determined, however, that the vertical devices are causing significant service delays, damage to buses or operator and/or customer dissatisfaction, the Region reserves the right to request the removal of the devices. Refusal to remove the devices will result in the discontinuation of public transit service from the affected roadway.

RESPONSIBILITIES:

Local Municipality:

- At the earliest stage of development of a traffic calming scheme, YRT should be notified of the intent to introduce traffic calming on a particular road and where concerned, YRT should be consulted and be allowed to participate in the design of the scheme.

- Must ensure that vertical measures are not installed on roads where transit services exist and on roads designated for transit.

York Region Transit:

- YRT will make every effort to respond to the Region's and/or municipalities requests for comments within a reasonable amount of time so as not to delay the design and/or approval process.

- Will put in place a tool to assist municipal staff in predetermining roads that are designated transit roads.

NON-COMPLIANCE WITH POLICY:

Non-compliance with this policy will result in the removal of public transit service from the affected roadway.

REFERENCE:

City of Toronto Staff Report,
Subject: Traffic Calming Policy
City of Brampton
Traffic Calming Program
International Association of Public Transport

Traffic Calming Measures and Bus Traffic.

Victoria Transport Policy Institute
Traffic Calming Benefits, Costs and Equity Impacts.

City of West Sacramento
Community Development Department,
Residential Traffic Calming Program

Canada Safety Council
Traffic Calming Versus Safety

CONTACT:

Mr. Rick Takagi, C.E.T.
Manager of Operations
York Region Transit
Rick.Takagi@region.york.on.ca
Tel: 905-762-1282
Fax: 905-762-2113

APPROVAL INFORMATION

CAO Approval Date:

Committee: **Clause:** **Report No:**

Council Approval: **Minute No.** **Page:** **Date:**

Schedule 'A'

The Region's preferred list of traffic calming measures:

Non-physical

Non-physical type traffic calming devices are the preferred methods of traffic calming on roads where transit operates service.

These devices do not alter the physical path of travel and do not require significant construction on the roadway. Examples of non-physical types:

- Speed Enforcement
- Photo Radar
- Radar Trailers
- Signage
- Pavement Markings
- Streetscaping
- Reduced Speeds
- High visibility crosswalks
- Gateway/Entryways
- Neighbourhood Watch

Horizontal

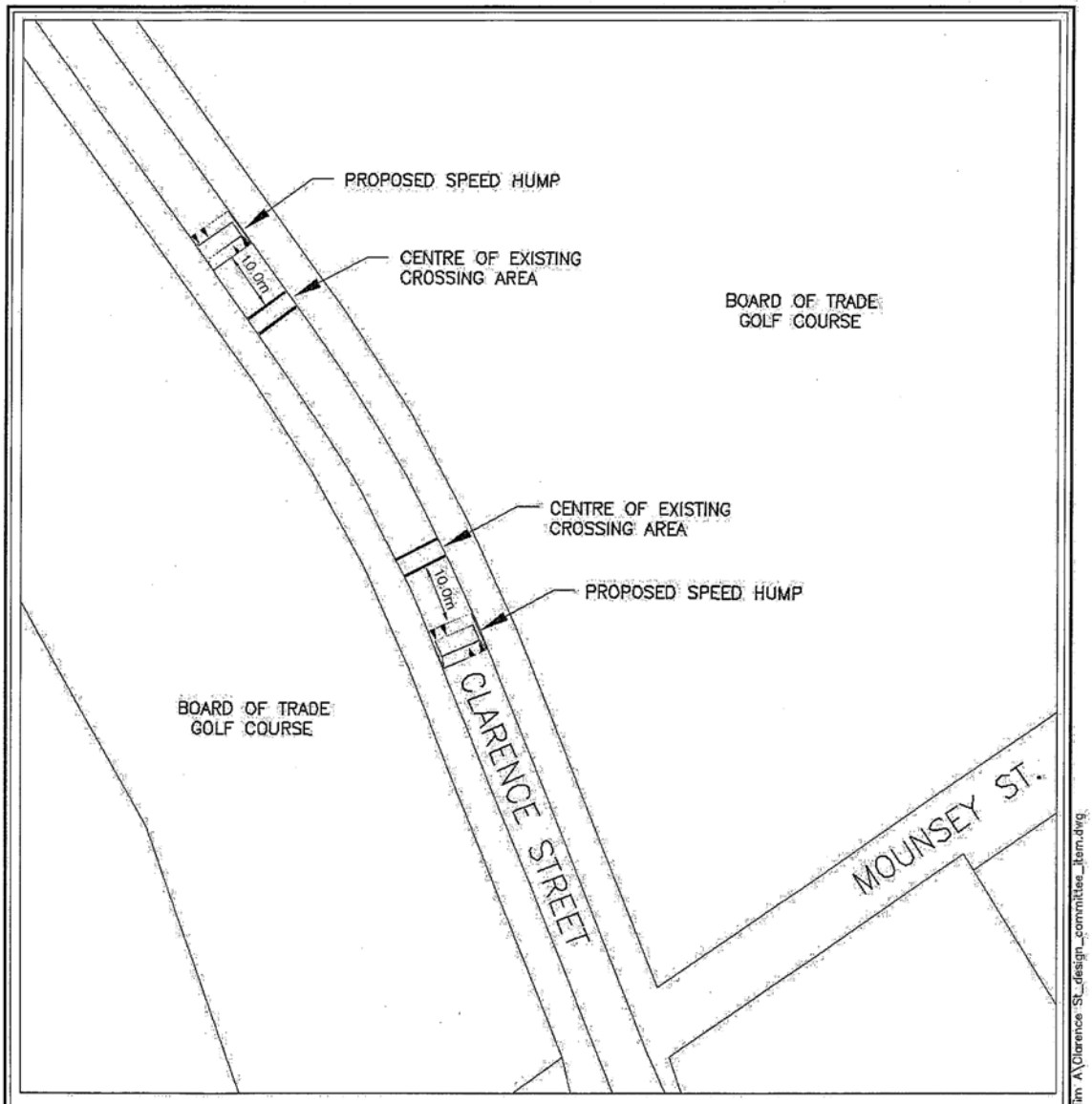
Select horizontal type devices are acceptable to transit. Lane widths and turning radii must be considered in the design of these devices. On-street parking would not be ideal for transit routes.

These devices decrease the width of the roadway through the use of physical measures and may not allow for straight-line travel. Examples of horizontal devices:

- Traffic Circles/Roundabouts*
- Chicanes
- Medians
- Centre Islands
- Choke points
- Realigning Intersections
- On-street parking

*Roundabout intersections may be more difficult for visually impaired pedestrians because they do not have straight traffic or regular breaks in traffic flow.

ATTACHMENT No. 11



PROPOSED SPEED HUMPS

NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING DEPARTMENT

DRAFTSPERSON: G.S.

Drawing name: R:\ENGDRAFT\$TRANSPO\Tim A\Clarence St_design_committee_item.dwg

ATTACHMENT NO. 12

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF SEPTEMBER 27, 2004

Item 17, Report No. 63, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on September 27, 2004.

17 CLARENCE STREET BETWEEN MEETING HOUSE ROAD AND RUTHERFORD ROAD TRAFFIC SAFETY REVIEW

(Referred from the Council meeting of September 13, 2004)

The Committee of the Whole recommends:

1) That this matter be deferred until Fire Station No. 79 is constructed; and

2) That the memorandum of the Deputy Fire Chief, dated September 16, 2004, be received.

Council, at its meeting of September 13, 2004, adopted the following:

The Committee of the Whole recommends that this matter be referred to the Committee of the Whole Meeting of September 20, 2004, and that the Fire and Rescue Department provide a comprehensive report.

Council, at its meeting of June 28, 2004, adopted the following:

That this matter be referred to the Committee of the Whole meeting of September 7, 2004.

Report of the Commissioner of Engineering and Public Works dated June 21, 2004.

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That an asphalt speed hump be installed on Clarence Street approximately 60 metres north of pathway #4/#5 of the Board of Trade Golf Course;
2. That an asphalt speed hump be installed on Clarence Street approximately 60 metres north of Mounsey Street;
3. That funds in the amount of $6,000 for the implementation of the proposed speed humps be set aside from the 2004 Capital Budget (Project No. 1204.0) to implement the proposed works; and
4. That this report on staff's findings regarding traffic safety review on Clarence Street be received.

Purpose

To report on the results of a traffic safety review for Clarence Street between Meeting House Road and Rutherford Road.

Background

At it's meeting on March 8, 2004, Council directed staff to:

"1. Investigate and report on the extent to which traffic safety is an issue on Clarence Street between Meeting House Road and Rutherford Road; and

.../2

2. If such concerns are warranted, recommend steps, which the City may take to improve traffic safety in this portion of Clarence Street."

Clarence Street is classified in OPA 600 as a minor arterial road. The existing speed limit on Clarence Street is 40 km/h from Woodbridge Avenue to approximately 540 metres north of Mounsey Street and the speed limit is 50 km/h from that point to Rutherford Road. Existing all-way stop controls are on Clarence Street at the intersections of Meeting House Road, Modesto Gardens, Wycliffe Avenue, Thomson Creek Boulevard/Woburn Drive, and Avdell Avenue/Crofters Road.

There is an existing speed hump on Clarence Street between Meeting House Road and Rutherford Road located approximately 100 metres south of Mounsey Street. The speed hump was installed as part of the Woodbridge Core Traffic Committee.

Speed and Volume Data

Staff collected speed and volume data from March 29, 2004 to April 2, 2004. The data covered a 24-hour time period and is summarized below.

DATE	LOCATION	DIRECTION	AVERAGE SPEED	HIGHEST 24 HOUR VOLUME
March 29 - April 2, 2004	North of Mounsey St.	Northbound	59 km/h	2,563
March 29 - April 2, 2004	North of Mounsey St.	Southbound	60 km/h	2,778
March 29 - April 2, 2004	Between Modesto Gdns. And Wycliffe Ave.	Northbound	53 km/h	2,552
March 29 - April 2, 2004	Between Modesto Gdns. And Wycliffe Ave.	Southbound	53 km/h	2,777
March 29 - April 2, 2004	Between Wycliffe Ave. and Thomson Creek Blvd./Woburn Dr.	Northbound	55 km/h	2,795
March 29 - April 2, 2004	Between Wycliffe Ave. and Thomson Creek Blvd./Woburn Dr.	Southbound	61 km/h	2,930
March 29 - April 2, 2004	Between Thomson Creek Blvd./Woburn Dr. and Avdell Ave./Crofters Rd.	Northbound	56 km/h	2,704
March 29 - April 2, 2004	Between Thomson Creek Blvd./Woburn Dr. and Avdell Ave./Crofters Rd.	Southbound	59 km/h	2,965

Clarence Street functions as a minor arterial roadway with a limited number of residential frontages. The roadway represents the main north-south link for the residential developments between Woodbridge Avenue and Rutherford Road. The Board of Trade Golf Course is located on the east side of the roadway, north of Mounsey Street. The residential frontages on Clarence Street are located north of Modesto Gardens.

.../3

The average speeds on Clarence Street range from 53 km/h to 61 km/h indicating a low level of compliance with the posted speeds. In particular, a low level of compliance to the posted speed limit occurs from Mounsey Street to 540 metres northerly where the posted speed limit is 40 km/h. The collected speed data north of Mounsey Street indicate that the average speed exceeds the speed limit by approximately 10 km/h. Based on the above information, a warrant for the installation of speed humps on this section of Clarence Street is met. Based on Council's Neighbourhood Traffic Committee Policy and Procedure, traffic calming is warranted as the average speeds exceed the posted speed limit by 10 km/h or more, where the speed limit is 40 km/h.

The average speed collected between Modesto Gardens and Wycliffe Avenue is 53 km/h in the northbound and southbound direction, indicating the highest level of compliance with the posted speed of 50 km/h. This is due to the number of residential driveways located in this area on both sides of Clarence Street as well as a reverse curve located south of Modesto Gardens.

The highest volumes collected on Clarence Street over a 24-hour period from March 29, 2004 to April 2, 2004 range from 5,300 to 5,700 vehicles for both the northbound and southbound directions. The volumes are well within the designed capacity for a residential minor arterial road of 8,000 vehicles per day.

Traffic Counts

Staff conducted turning movement counts at Clarence Street and Wycliffe Avenue on April 27, 2004, at Clarence Street and Thomson Boulevard/Woburn Drive on April 1, 2004, and at Clarence Street and Avdell Avenue/Crofters Road on April 22, 2004 during the highest eight-hour peak travel periods. The times the counts were conducted were from 7:00 am to 9:00 am, from 11:00 am to 2:00 pm and from 3:00 pm to 6:00 pm. The results of the study are outlined below.

Clarence Street and Wycliffe Avenue

Warrant 1 Minimum Vehicular Volumes	Part A - All Approaches – 69% Part B – Minor Street Approaches – 62% Overall Percent Met – 62%
Warrant 2 Delay To Cross Traffic	Part A – Major Street Both Approaches – 55% Part B – Traffic Crossing Major Street – 63% Overall Percent Met – 55%
Warrant 3 Accident Experience	There were 0 vehicle collisions over a 3-year time period that would be susceptible to correction by the installation of a traffic signal. The fulfilled warrant percent is 0%.

Clarence Street and Thomson Creek Boulevard/Woburn Drive

Warrant 1 Minimum Vehicular Volumes	Part A - All Approaches – 71% Part B – Minor Street Approaches – 77% Overall Percent Met – 71%
Warrant 2 Delay To Cross Traffic	Part A – Major Street Both Approaches – 54% Part B – Traffic Crossing Major Street – 80% Overall Percent Met – 54%
Warrant 3 Accident Experience	There were 0 vehicle collisions over a 3-year time period that would be susceptible to correction by the installation of a traffic signal. The fulfilled warrant percent is 0%.

Clarence Street and Avdell Avenue/Crofters Road

Warrant 1 Minimum Vehicular Volumes	Part A - All Approaches – 84% Part B – Minor Street Approaches – 82% Overall Percent Met – 82%
Warrant 2 Delay To Cross Traffic	Part A – Major Street Both Approaches – 67% Part B – Traffic Crossing Major Street – 90% Overall Percent Met – 67%
Warrant 3 Accident Experience	There were 2 vehicle collisions over a 3-year time period that would be susceptible to correction by the installation of a traffic signal. The fulfilled warrant percent is 14%.

Based on the technical requirements of the Provincial Traffic Signal Warrant, the warrants for the installation of a traffic signal at the above noted intersections are not met. Two or more of the above Warrants 1, 2, and 3 are not satisfied at 80% or more and none of the individual warrants are satisfied at 100%.

There are no sight distance restrictions noted at the above intersections.

Accident History

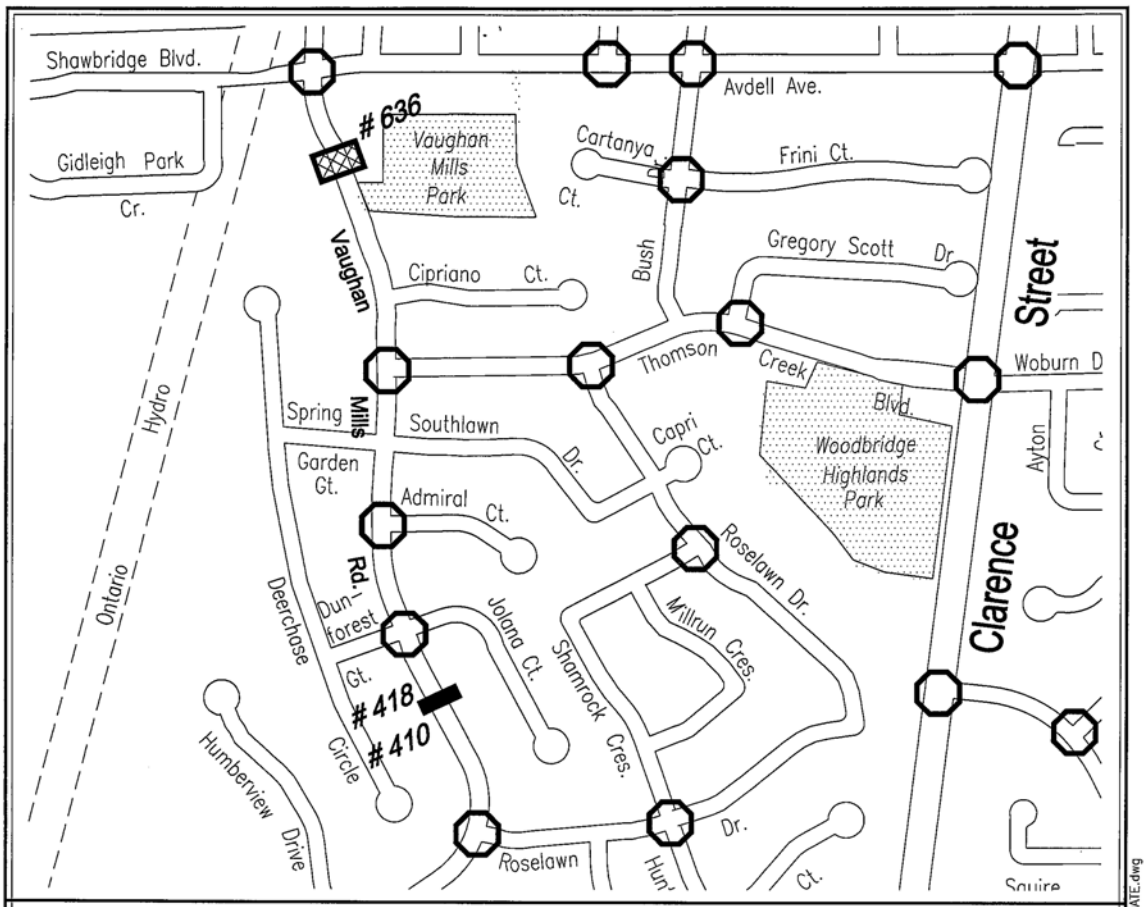
Staff reviewed the collision history on Clarence Street from Meeting House Road to Rutherford Road. There have been eighteen reportable accidents from 1999 to 2003. There was one accident at the intersection of Clarence Street and Modesto Gardens and one at the intersection of Clarence Street and Mounsey Street. Three accidents occurred at the intersection of Clarence Street and Avdell Avenue/Crofters Road. The remaining thirteen accidents were not intersection related. A total of eight reported accidents were a result of poor weather conditions and ten accidents involved single vehicle collisions.

Sign Investigation

Staff conducted a sign inventory on Clarence Street between Meeting House Road and Rutherford Road and found that the proper signage has been installed on the roadway.

.../5

ATTACHMENT No. 13



WOODBRIDGE HIGHLANDS AND AREA NEIGHBOURHOOD TRAFFIC COMMITTEE UPDATE

LEGEND

- PROPOSED SPEED HUMP
- PROPOSED RAISED CROSSWALK
- EXISTING ALL-WAY STOP CONTROL

NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING DEPARTMENT

DRAFTSPERSON: SMM

Drawing name: R:\ENGDRAFT\$TRANSPO\MIKE\Vaughan Mills Study Area_UPDATE.dwg

ATTACHMENT NO. 14

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 15, 2003

Item 8, Report No. 72, of the Committee of the Whole, which was adopted, as amended, by the Council of the City of Vaughan on December 15, 2003, as follows:

By amending Clause 1 of the Committee of the Whole recommendation to read as follows:

> ***That the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated December 8, 2003, be approved subject to deferring clause 1. i) until such time as the construction of the proposed fire station, and by approving the installation of a raised centre landscape median on Vaughan Mills Road on the north and south sides of the intersection at Southlawn Drive and Spring Garden Gate;***

By receiving the confidential memorandum from the Commissioner of Engineering and Public Works, dated December 12, 2003; and

By receiving the written submission of Ms. Frances D'Aversa, President, Belvedere Estates Ratepayers Association, 128 Gidleigh Park Crescent, Woodbridge, L4H 1H9, dated December 11, 2003.

---

8 WOODBRIDGE HIGHLANDS AND AREA TRAFFIC COMMITTEE
NEIGHBOURHOOD TRAFFIC COMMITTEE PLAN

The Committee of the Whole recommends:

1) That the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated December 8, 2003, be approved, subject to amending clause 1.i) by approving the proposed raised crosswalk on Vaughan Mills Road in front of Vaughan Mills Park and deferring clause 1.iii) to the Council meeting of December 15, 2003; and

3) That the proposed speed humps be constructed of asphalt.

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That the Woodbridge Highlands and Area Traffic Committee plan proposal be approved, with the exception of the following:
   - the proposed raised crosswalk on Vaughan Mills Road in front of Vaughan Mills Park;
   - the proposed speed hump on Vaughan Mills Road between Jolana Court/Dunforest Gate and Roselawn Drive; and
   - the proposed raised centre medians on Avdell Avenue west of Bush Drive.
2. That two additional speed humps to be located between # 71 and # 79 Shamrock Crescent and between #102 and #110 Shamrock Crescent be approved; and
3. That funds in the amount of $80,000 for the implementation of the plan proposal be drawn from the 2001 Capital Budget (Traffic Calming Project No. 1203-2).

Purpose

To report on the Woodbridge Highlands and Area Traffic Committee Plan proposal.

.../2

- Roselawn Drive and Shamrock Crescent; and
- Roselawn Drive and Shamrock Crescent/Huntingwood Court.

The existing posted speed limit on Vaughan Mills Road, Thomson Creek Boulevard, Avdell Avenue and Roselawn Drive is 40 km/h. The remaining roadways within the subdivision have a statutory 50 km/h speed limit.

There is an existing raised crosswalk on Thomson Creek Boulevard in front of Woodbridge Highlands Park.

Staff undertook field reviews to determine locations that would be feasible for the additional traffic calming measures proposed.

Speed humps can be placed at the following locations:

- Avdell Avenue, between properties #78/#82;
- Roselawn Drive, between #129/#137; and
- Roselawn Drive, between #169/#175.

Raised crosswalks can be placed at the following locations:

- Vaughan Mills Road, south of #636 in front of Vaughan Mills Park;
- Avdell Avenue, in front of Vaughan Mills Park;
- Thomson Creek Boulevard/Bush Drive intersection, west side; and
- Roselawn Drive/Shamrock Crescent, north side.

It is proposed that the four speed humps be constructed completely of asphalt and the three raised crosswalks have coloured impressed concrete tops. If the four speed humps are constructed with coloured impressed concrete tops as well, then the estimated cost of this plan would increase by $12,000. However, it is recommended that the speed humps be asphalt to distinguish them from raised crosswalks.

Raised centre medians can be placed at the following locations:

- On Thomson Creek Boulevard at Vaughan Mills Road, east side;
- On Thomson Creek Boulevard at Roselawn Drive, east/west sides;
- On Roselawn Drive at Thomson Creek Boulevard, south side; and
- On Avdell Avenue at Bush Drive, west side.

Painted road markings are proposed on Vaughan Mills Road from Roselawn Drive to Rutherford Road and on Avdell Avenue from Vaughan Mills Road to Clarence Street.

Additional Requests

At the meeting, the residents voted not to install a traffic circle at the intersection of Vaughan Mills Road and Southlawn Drive/Spring Garden Gate. Transportation Staff were requested to review an alternative traffic calming measure at the intersection. Transportation Staff reviewed the request and the installation of raised centre medians can be accommodated on Vaughan Mills Road (north/south sides of the intersection).

Transportation Staff reviewed the feasibility of installing an additional speed hump on Vaughan Mills Road between Jolana Ct and Roselawn Drive. A speed hump can be placed between properties #410 and #418. However, Engineering Staff advised those in attendance that the Fire

Department did not want to have any speed hump measures on Vaughan Mills Road at this time

since this is their primary response route or at least be deferred until the new Fire Station is built in the Woodbridge Expansion Area.

A petition was received at the meeting from the residents of Shamrock Crescent to install a speed hump on either side of the curve. Transportation Staff reviewed the feasibility of installing two additional speed humps in this area. A speed hump can be placed between properties #71 and #79 and between properties #102 and #110.

Transportation Staff reviewed the proposed raised centre medians on Avdell Avenue at Bush Drive to determine whether any residential driveways would be affected. There is insufficient space between driveways to properly locate the series of medians.

Neighbourhood Traffic Committee Summary

On December 18, 2001, Council approved a moratorium on the implementation of traffic calming measures, with the exception of those in areas having existing traffic committees. As the original Vaughan Mills Road/Thomson Creek Boulevard Traffic Committee was formed in 2001, it is exempt from the moratorium.

The Year 2001 Capital Budget has $1,700,000 remaining for the implementation of traffic calming projects. To date, the following Traffic Management Plans and projects that will be funded from the $1,700,000 have been approved and total approximately $1,609,000:

- Alberta Drive Traffic Committee, estimated cost of $9,600;
- Arnold Avenue Traffic Committee, estimated cost $48,050;
- Airdrie Drive Traffic Committee, estimated cost $35,600;
- Belview Avenue – Speed Hump near Fiori Drive, estimated cost $8,900;
- Brownridge Drive Neighbourhood Traffic Committee, estimated cost $138,900;
- Crossroads Neighbourhood Traffic Committee, estimated cost $27,150;
- Flamingo Road Traffic Committee; estimated cost $34,720;
- Forest Drive / Bainbridge Avenue Traffic Committee, estimated cost $10,420;
- Glen Shields Speed Humps, estimated cost $7,400;
- Hilda Avenue / Pinewood Drive, estimated cost $113,610;
- Historic Maple Traffic Committee, estimated cost $86,300;
- Joseph Aaron Area, estimated cost $28,000;
- Kleinburg Area, estimated cost $35,850;
- Maple Landings Area, estimated cost $92,630;
- Maple Springs – Cunningham Drive / Melville Avenue, estimated cost $33,700;
- Maple Springs Phase I Traffic Committee, estimated cost $161,300;
- Morning Star / Mapes Avenue, estimated cost $58,950;
- Mullen Drive Traffic Committee, estimated cost $52,990;
- Pinewood / Crestwood Area, estimated cost $52,900;
- Rosedale Heights Neighbourhood, estimated cost $22,320;
- Thompson Creek Neighbourhood, estimated cost $11,780;
- Torii Street Speed Hump, estimated cost $4,500;
- Thornhill Woods (Westmount / Wilshire), estimated cost $151,000;
- Vaughanwood South, estimated cost $21,900;
- Weston Downs: Phase 1, estimated cost $85,380;
- Weston Downs: North Neighbourhood, estimated cost $75,050;
- Woodbridge Core Area, estimated cost $73,650;
- York Hill Boulevard, estimated cost $64,420;
- Miscellaneous Traffic Calming, estimated cost $61,750.

Environmental Assessment Act Requirements

As now required under the Environmental Assessment Act, whenever traffic calming measures are installed or removed a Schedule B Environmental Assessment process must be followed. This process requires public notification and consultation, the identification of alternates, and the filing of a Notice of Completion with the Ontario Ministry of the Environment and publication in local media.

Should traffic calming measures be approved by Council for installation on the Woodbridge Highlands and Area Traffic Committee, then the City would be required to publish a Notice of Commencement, develop a plan for review by the public and publish a Notice of Completion. The notices would also have to be filed with the Ministry of the Environment and published in two separate editions of the Vaughan Citizen. Prior to construction, the City's normal practice is to mail letters to the affected residents should traffic calming measures be approved informing them of their installation.

Conclusion

The Engineering Department recommends for approval the Woodbridge Highlands and Area Traffic Committee plan proposal, with the exceptions noted in the recommendation. The estimated cost of $80,000 includes taxes, contingency allowance and associated traffic signs and pavement markings.

Attachments

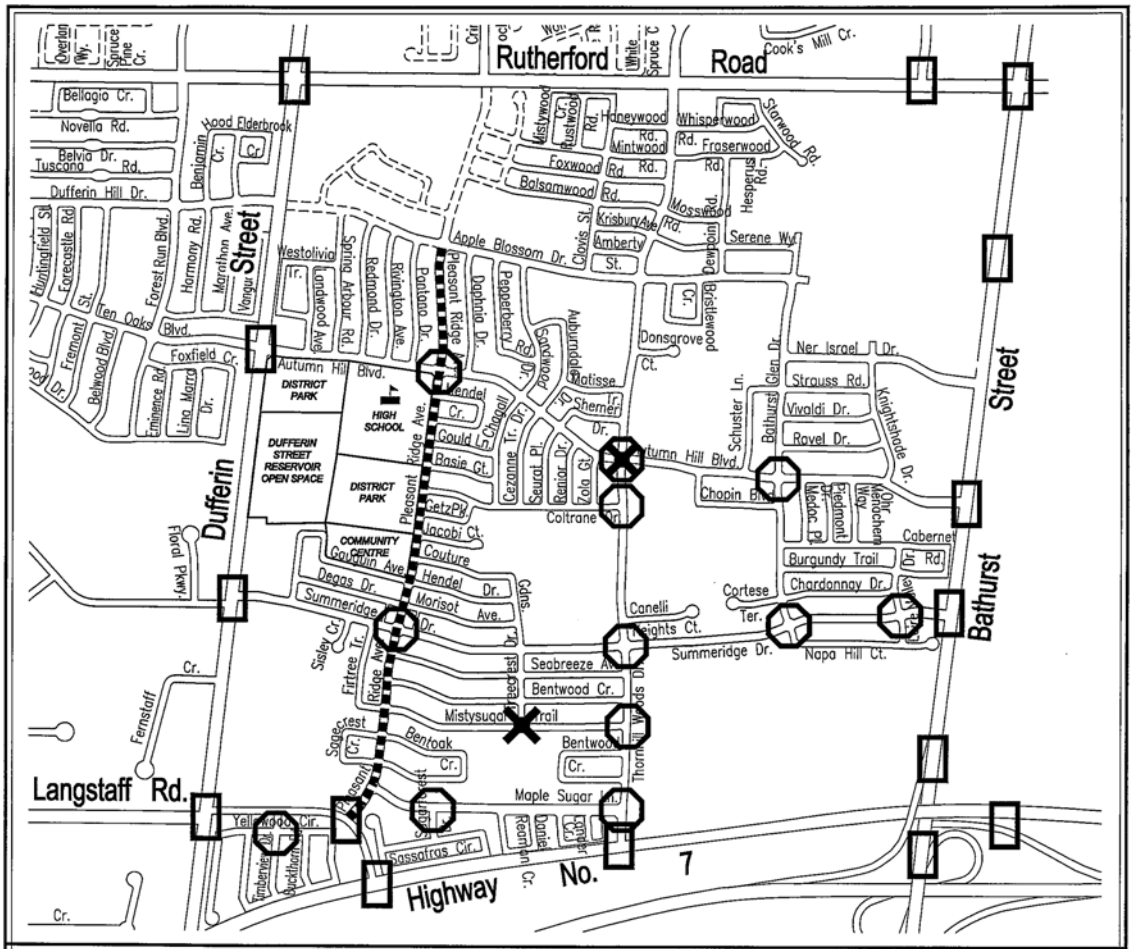
1. Location Map
2. Shamrock Crescent – Petition

Report prepared by

Mike Dokman, Acting Transportation Supervisor, ext. 8031

(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.)

ATTACHMENT No. 15



PLEASANT RIDGE AVENUE
TRAFFIC CALMING

LEGEND

- ROADWAY UNDER REVIEW
- EXISTING TRAFFIC SIGNALS
- EXISTING ALL-WAY STOP CONTROL
- EXISTING SCHOOL CROSSING GUARD

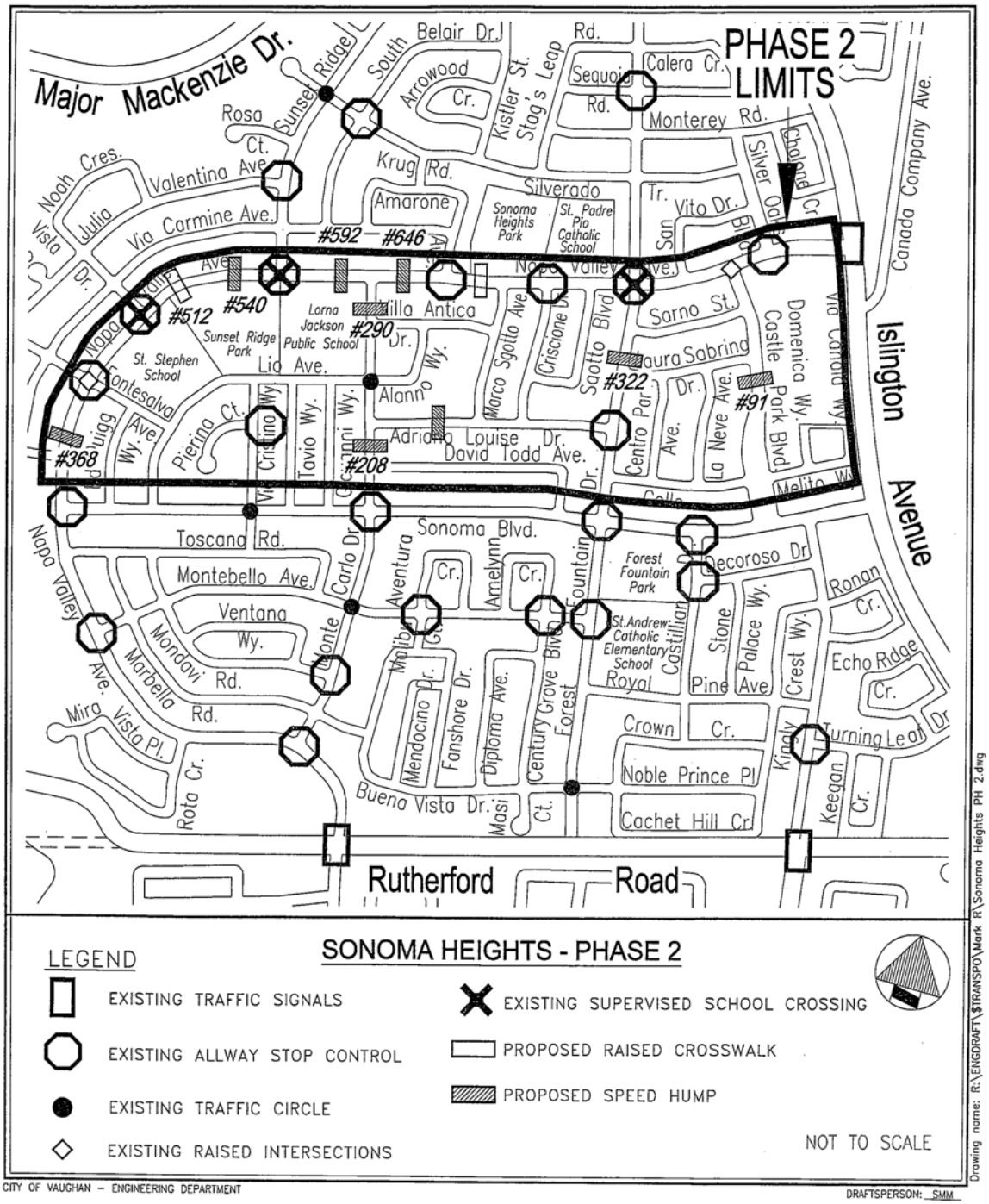
NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING DEPARTMENT

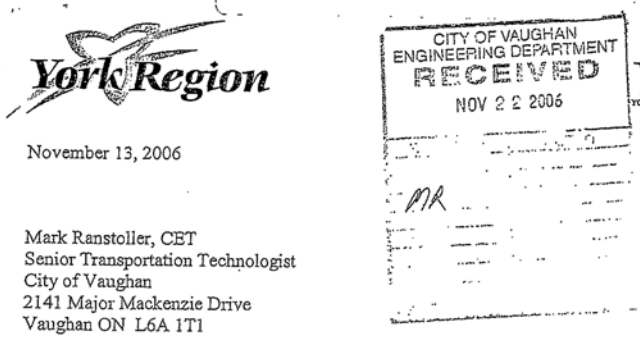
DRAFTSPERSON: SMM

Drawing name: R:\ENGDRAFT\$TRANSPO\Leslie W\Pleasant Ridge.dwg

ATTACHMENT No. 16



ATTACHMENT NO. 17



November 13, 2006

Mark Ranstoller, CET
Senior Transportation Technologist
City of Vaughan
2141 Major Mackenzie Drive
Vaughan ON L6A 1T1

Dear Mr. Ranstoller:

Re: Sonoma Heights Phase 2
Proposed Neighbourhood Traffic Management Plan
Comments from YRT

This is in response to your October 23, 2006 letter, regarding a plan developed by the Sonoma Heights Phase 2 Traffic Calming Committee with review and assistance from City of Vaughan Engineering staff which includes traffic calming measures for Napa Valley Avenue in Vaughan.

In accordance with the Region's "Traffic Calming on Public Transit Routes" policy (copy attached) prepared in consultation with the local municipalities and emergency service agencies, and adopted by Regional Council on June 24, 2004, the Region supports the use of non-physical and select horizontal traffic calming devices. The Region however does not agree with the installation of vertical traffic calming devices (speed humps/bumps) on designated transit routes including roads deemed to be future transit routes. The responsibility of the local municipality under the policy is to ensure that vertical measures are not installed on these roads.

As the result of the Town of Markham's request to the Region to continue operating transit services on streets with vertical devices that were installed or approved prior to December 31, 2003, the existing speed humps/bumps, although not desirable for transit services, were "grandfathered" with provisions.

Napa Valley Avenue is an important segment of our existing Route 85, Rutherford-16th Avenue service and our existing Route 13, Islington service. Along Napa Valley Avenue there are approximately 92 customers boarding YRT buses daily. Route 13 services high schools, City of Vaughan Community Centres and Libraries, and the Islington & Steeles bus loop for connection with TTC services. Route 85 services high schools, Community Centres and Libraries throughout Vaughan, Richmond Hill, and Markham as well as Vaughan Mills Mall, Rutherford GO Station, Markham-Stouffville Hospital, and our Yonge Street VIVA service. The operational benefit of Napa Valley Avenue is that it provides an on-street bus looping sequence which is required to turn the buses around.

The Regional Municipality of York, York Region Transit, 50 High Tech Road, 5th Floor, Richmond Hill, Ontario L4B 4N7
Tel: 905-762-1282, Toll Free: 1-866-758-0749, Fax: 905-762-2113, Mobility Plus Fax: 905-762-2110
Internet: www.yorkregiontransit.com

In conclusion, the Region does not support the installation of the proposed traffic calming devices. The installation of the proposed speed humps/bumps on Napa Valley Avenue would be in contravention of the "Traffic Calming on Public Transit Routes" policy. Non compliance with the policy will result in the removal of public transit services from affected roadways.

Should you have any questions regarding this matter do not hesitate to contact Joshua Scholten, Facilities Supervisor, at (905) 762-1282, extension 5696 or by e-mail at joshua.scholten@york.ca.

Sincerely,

Rick Takagi
Manager, Operations

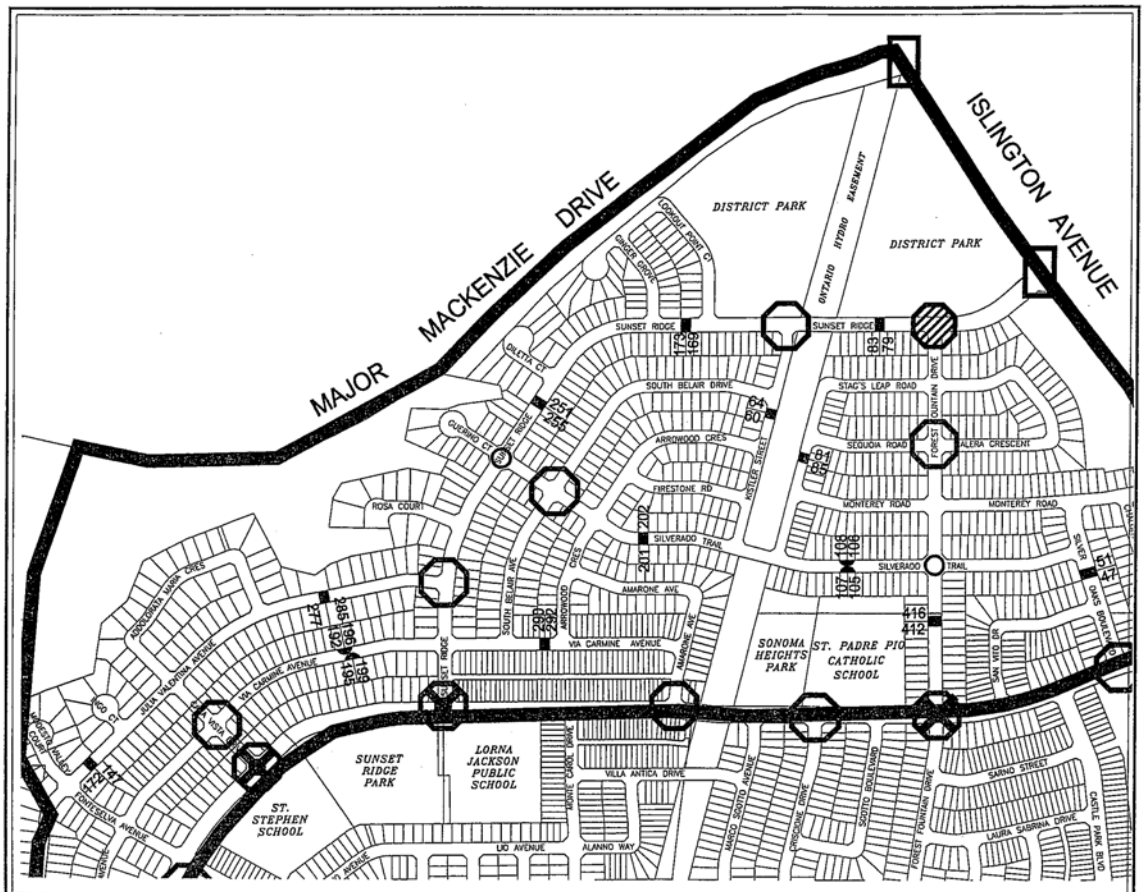
RT/JS/js

Attachments (1)

Copy to: Donald F. Gordon, YRT General Manager
Mike Dokman, Supervisor Traffic Engineering, City of Vaughan

G:\TI5 - Traffic Control Devices - Other\Traffic Calming\Vaughan\Sonoma Heigths Phase 2_Mark Ranstoller_Engineering Dept.doc

ATTACHMENT No. 18



SONOMA HEIGHTS PHASE 3 FINAL PLAN
PROPOSED SPEED HUMPS and CURB BUMP-OUTS

LEGEND

- PROPOSED SPEED HUMP
- PROPOSED CURB BUMP-OUT
- EXISTING TRAFFIC CIRCLE
- EXISTING TRAFFIC SIGNAL
- EXISTING ALL-WAY STOP CONTROL
- EXISTING SCHOOL CROSSING GUARD
- FUTURE ALL-WAY STOP CONTROL

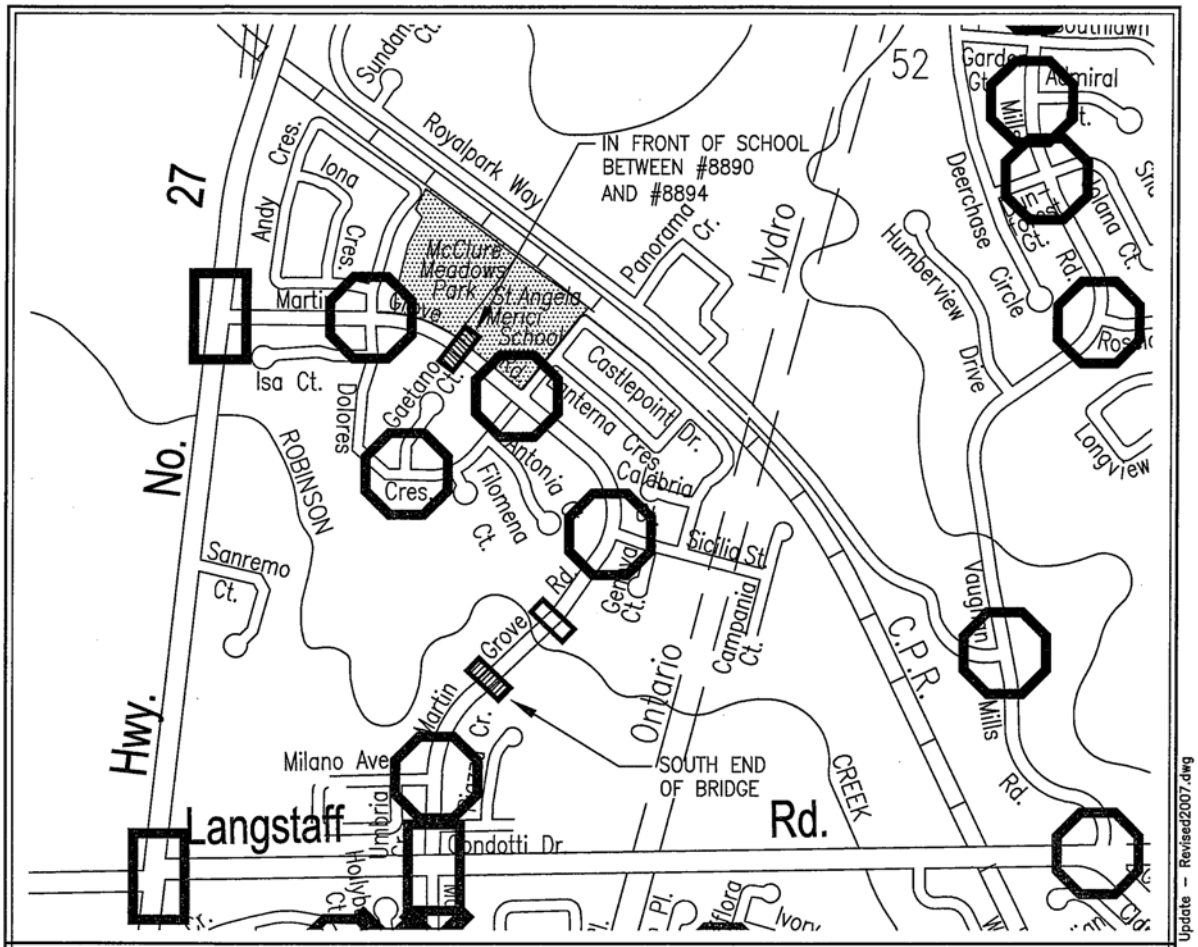
NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING DEPARTMENT

DRAFTSPERSON: SMM

Drawing name: R:\ENGDRAFT\$TRANSPO\Mark R\Sonoma Phase 3 Final 3.dwg

ATTACHMENT No. 19



WOODBRIDGE MEADOWS NEIGHBOURHOOD
TRAFFIC COMMITTEE - UPDATE

LEGEND

- EXISTING TRAFFIC SIGNALS
- EXISTING ALLWAY STOP CONTROL
- PROPOSED SPEED HUMP
- EXISTING SPEED HUMP

NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING DEPARTMENT

DRAFTSPERSON: G.S.

Drawing name: R:\ENGDRAFT\$TRANSPO\MIKE-G\Woodbridge Meadows NC3 - Update - Revised2007.dwg

ATTACHMENT NO. 20

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF SEPTEMBER 13, 2004

Item 18, Report No. 59, of the Committee of the Whole, which was adopted, as amended, by the Council of the City of Vaughan on September 13, 2004, as follows:

By approving that the feasibility of the proposed speed hump at the north end of the Humber River/Robinson Creek Bridge be deferred until the new fire hall has been constructed in West Vaughan;

By receiving the report of the Commissioner of Engineering and Public Works, dated September 7, 2004; and

By receiving the written submission from Mr. Don Gordon, General Manager, York Region Transit, dated September 8, 2004.

18 **WOODBRIDGE MEADOWS NEIGHBOURHOOD TRAFFIC COMMITTEE PLAN - UPDATE**

The Committee of the Whole recommends that this matter be referred to the Council meeting of September 13, 2004, to allow Regional Councillor Jackson to provide information with respect to York Region Transit.

Recommendation

The Commissioner of Engineering and Public Works recommends:

That the proposed speed hump at the north end of the Humber River/Robinson Creek Bridge not be installed on Martin Grove Road.

Purpose

To report on the feasibility of installing an additional speed hump on Martin Grove Road for the Woodbridge Meadows Neighbourhood Traffic Committee Plan.

Background - Analysis and Options

At its meeting of September 8, 2003 Council adopted the following:

> **"That staff review the feasibility of installing a speed hump at the north end of the Humber River / Robinson Creek Bridge in one year".**

The initial Woodbridge Meadows Neighbourhood Traffic Calming Plan proposed three speed humps on Martin Grove Road between Langstaff Road and Highway No. 27. The proposed speed humps were located at the north and south ends of the Humber River/Robinson Creek Bridge and in front of the St. Angela Merici School between properties #8890 and #8894 Martin Grove Road. Please refer to Attachment No. 1 for area street network.

Staff recommended not to install the three speed humps for the following reasons; Martin Grove Road is a major collector roadway and a primary emergency response route and speed humps are not intended to be installed on four-lane roadways. The average speed of traffic on this thoroughfare was not measured to be 10 km/h greater than the 50 km/h speed limit.

At the September 8, 2003 Council adopted that two of the speed humps be installed on Martin Grove Road, between properties #8890 and #8894 Martin Grove Road and at the south end of the Humber River/Robinson Creek Bridge. The subject two speed humps will be installed in the Fall of 2004.

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Fire & Rescue Service Comments

The Vaughan Fire and Rescue Service are opposed to any additional speed humps on Martin Grove Road. The roadway is a primary emergency response route that provides timely emergency vehicle access to numerous homes in this neighbourhood area and surroundings.

York Region Transit Comments

Martin Grove Road is a public transit route. York Region Transit advised they can not continue to operate public transit on roads where speed humps exist or are to be installed. A number of their transit buses and all new buses are designed with low-floor entry, thereby reducing ground clearance. This vehicle design assists the elderly and handicapped users of public transit. The low-floor buses are experiencing damage on existing routes where speed humps have been installed.

Environmental Assessment Act Requirements

As required under the Environmental Assessment Act, whenever traffic calming measures are installed or removed a Schedule B Environmental Assessment process must be followed. This process requires public notification and consultation, the identification of alternates, and the filing of a Notice of Completion with the Ontario Ministry of the Environment and publication in local media.

Should the additional speed hump be approved by Council and installed on Martin Grove Road, then the City would be required to publish a Notice of Commencement, develop a plan for review by the public and publish a Notice of Completion. The notices would also have to be filed with the Ministry of the Environment and published in editions of the Vaughan Citizen, Lo Specchio and Vaughan Weekly newspapers. Prior to construction, the City's normal practice is to mail letters to the residents of Martin Grove Road should traffic calming measures be approved informing them of their installation.

Conclusion

Based on staff's further review, it is recommended that the additional speed hump on Martin Grove Road at the north end of the Humber River/Robinson Creek Bridge not be installed.

Attachments

1. Location Map

Report prepared by

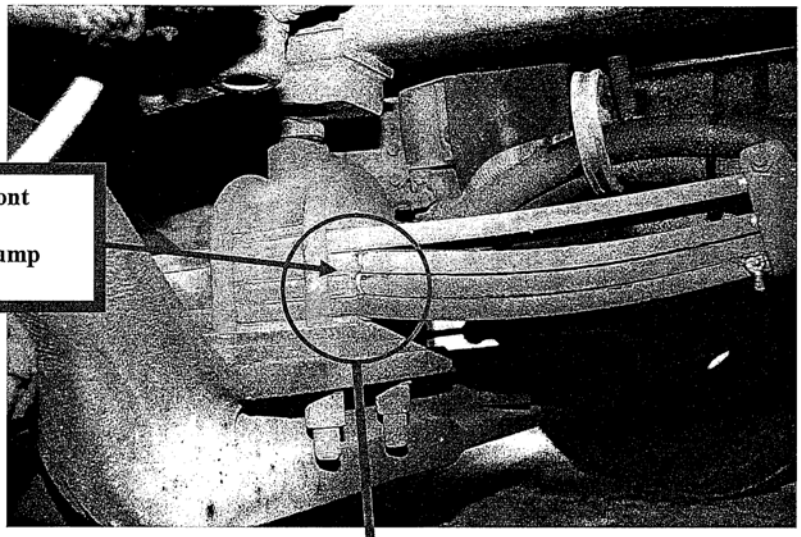
Mike Gough, Senior Transportation Technologist, ext. 8784
Mike Dokman, Supervisor, Traffic Engineering ext. 8031

(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.)

City of Vaughan
The City Above Toronto

ATTACHMENT NO. 21

Damage to leaf springs from speed bump



Leaf spring from the front driver's side of truck. After hitting a speed bump