

COMMITTEE OF THE WHOLE – FEBRUARY 2, 2010

NAYLON STREET ONE-WAY REVIEW WARD 1

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That this report be received for information purposes;
2. That York Regional Police be requested to enforce the eastbound one-way prohibition on Church Street;
3. That York Regional Police be requested to enforce the existing statutory 50 km/h speed limit on Naylon Street and Merino Road; and
4. That staff hold a follow-up community meeting to discuss the results of the traffic study in the expanded study area and advise the residents of the following recommendations:
 - i) That Naylon Street remain as a two-way operation.
 - ii) That "Local Traffic Only" signs not be installed as these are not an identified regulatory traffic sign in the Ontario Traffic Manual.
 - iii) That Turning Prohibitions not be installed at any of the entry roads to the Historic Maple subdivision.

Contribution to Sustainability

Not Applicable.

Economic Impact

There is no economic impact.

Communications Plan

Staff will communicate the results of this report at the follow-up community meeting in the Spring 2010. Staff have requested increased enforcement from York Regional Police of the stop signs on both Naylon Street and Church Street. There was a community meeting held on September 22, 2009, to discuss the results from the study conducted in the Spring 2009.

Purpose

To provide an update on the expanded study area for the Historic Maple traffic infiltration review.

Background - Analysis and Options

At its meeting on October 13, 2009, Council approved:

- “1. That Engineering Services staff be directed to conduct further traffic studies to determine infiltration rates in historic Maple in the area bounded by Major Mackenzie Drive, Keele Street, Lancer Drive, and the ravine;**
- 2. That staff provide a report to a future Committee of the Whole meeting on the traffic study results;**

3. That a community meeting be held following the Committee of the Whole meeting;
4. That signage indicating “Local Traffic Only’ be considered as part of the strategy of mitigating measures; and
5. That York Regional Police be requested to strictly and frequently enforce the all-way stop controls in the Historic Maple subdivision.”

The area network is shown in Attachment No. 1.

Traffic Volumes

Staff installed Automatic Traffic Recorders on Naylon Street east of Jackson Street and Naylon Street west of Jackson Street the week of May 25, 2009. The results of the data collection are summarized below:

Location	Direction	Average Speed	85th Percentile Speed	Highest Speed	Average Daily Traffic
Naylon Street east of Jackson Street	Eastbound	31 km/h	41 km/h	53 km/h	724 vehicles
	Westbound	36 km/h	46 km/h	89 km/h	526 vehicles
Naylon Street west of Jackson Street	Eastbound	35 km/h	45 km/h	65 km/h	338 vehicles
	Westbound	39 km/h	48 km/h	77 km/h	540 vehicles

Naylon Street is a local roadway with a statutory speed limit of 50 km/h. The collected average speeds along Naylon Street range from 31 km/h to 39 km/h. The collected average speeds are all within 10 km/h hour of the statutory speed limit, which suggests an acceptable level of driver compliance to the statutory 50 km/h speed limit. The 85th percentile speeds (the speed at which 85% of the vehicles are travelling at or below) range from 41 km/h to 48 km/h.

Naylon Street is a local roadway which can accommodate up to 3000 vehicles per day (Source: Geometric Design Guide for Canadian Roads, 1999). The Average Daily Traffic along Naylon Street is well within a local roadways capacity.

Staff also installed Automatic Traffic Recorders on Church Street east of Jackson Street the week of October 6, 2009. Church Street is a one-way eastbound operation. The results of the data collection are below:

Location	Direction	Average Speed	85th Percentile Speed	Highest Speed	Average Daily Traffic
Church Street east of Jackson Street	Eastbound	36 km/h	44 km/h	61 km/h	783 vehicles
	Westbound	24 km/h	40 km/h	49 km/h	15 vehicles

Church Street is a local roadway with a statutory speed limit of 50 km/h. The collected average speeds along Church Street range from 24 km/h to 36 km/h. The collected average speeds are all lower than the statutory speed limit, which suggests an acceptable level of driver compliance

to the statutory 50 km/h speed limit. The 85th percentile speeds (the speed at which 85% of the vehicles are travelling at or below) range from 40 km/h to 44 km/h.

Church Street is a local roadway which can accommodate up to 3000 vehicles per day (Source: Geometric Design Guide for Canadian Roads, 1999). The Average Daily Traffic along Church Street is well within the capacity of a local roadway.

Church Street is a one-way eastbound street. As the data shows, there are an average of fifteen drivers daily that are not obeying the one-way traffic restriction as posted at the Keele Street and Church Street intersection. York Regional Police should be formally requested to strictly enforce the one-way restriction.

Staff also installed follow-up Automatic Traffic Recorders on Netherford Road, Naylor Street, Merino Road, Jackson Street, and Gram Street the week of October 19, 2009. The results of the data collection are summarized below:

Location	Direction	Average Speed	85th Percentile Speed	Highest Speed	Average Daily Traffic
Jackson Street north of Church Street	Northbound	24 km/h	37 km/h	49 km/h	153 vehicles
	Southbound	32 km/h	39 km/h	53 km/h	686 vehicles
Merino Road east of Goodman Crescent	Eastbound	35 km/h	44 km/h	81 km/h	809 vehicles
	Westbound	36 km/h	45 km/h	81 km/h	784 vehicles
Naylor Street east of Jackson Street	Eastbound	36 km/h	43 km/h	57 km/h	559 vehicles
	Westbound	36 km/h	42 km/h	89 km/h	578 vehicles
Netherford Road north of Church Street	Northbound	28 km/h	38 km/h	61 km/h	2041 vehicles
	Southbound	30 km/h	41 km/h	69 km/h	1514 vehicles
Gram Street north of Church Street	Eastbound	34 km/h	41 km/h	57 km/h	198 vehicles
	Westbound	34 km/h	40 km/h	49 km/h	434 vehicles

Each of these roadways has a statutory 50 km/h speed limit.

Infiltration Study

Staff conducted an infiltration study on Naylon Street, Netherford Road, Gram Street and Jackson Street during the AM and PM peak periods on June 4 (AM) and 5 (PM), 2009 in order to determine the amount of “cut-through traffic”. The following table summarizes the results of this investigation.

<u>Infiltration Pattern</u>	7:00 – 9:00 AM		4:00-6:00 PM	
	<u>Inbound Volume</u>	(# of Vehicles) % of Entering Traffic	<u>Inbound Volume</u>	(# of Vehicles) % of Entering Traffic
Netherford Road to Keele Street southbound	182	(12) 7%	n/a	n/a
Gram Street to Keele Street southbound	52	(5) 10%	n/a	n/a
Jackson Street to Keele Street southbound	113	(23) 23%	n/a	n/a
Naylon Street to Major Mackenzie Drive via Netherford Road	n/a	n/a	115	(41) 36%
Naylon Street to Major Mackenzie Drive via Gram Street	n/a	n/a		(5) 4%
Naylon Street to Major Mackenzie Drive via Jackson Street	n/a	n/a		(0) 0%

Generally, the threshold values above which through traffic is defined as infiltration is 30%. As the study shows, during the hours of 4 pm – 6 pm of the 115 vehicles that entered the subdivision, 41 of them exited at Netherford Road and 5 of them exited at Gram Street, for an overall evening infiltration rate of 40%.

As a result of the 40% infiltration rate identified in the June 2009 study, staff conducted a follow-up infiltration study on Naylon Street, Netherford Road, Gram Street, Jackson Street, and Merino Road during the AM and PM peak periods on Thursday November 5, 2009 (AM) and Tuesday October 20, 2009 (PM) in order to determine the amount of “cut-through traffic”. Due to the need for daylight to conduct the infiltration study, the morning portion was conducted after daylight savings time ended in November. The following table summarizes the results of this investigation.

<u>Infiltration Pattern</u>	7:00 – 9:00 AM		4:00-6:00 PM	
	<u>Inbound Volume</u>	(# of Vehicles) % of Entering Traffic	<u>Inbound Volume</u>	(# of Vehicles) % of Entering Traffic
Netherford Road to Keele Street southbound via Naylon Street	142	(6) 4%	n/a	n/a
Netherford Road to Keele Street southbound via Merino Road		(8) 6%	n/a	n/a
Jackson Street to Keele Street southbound via Naylon Street	109	(21) 19%	n/a	n/a
Gram Street to Keele Street southbound via Naylon Street	46	(2) 4 %	n/a	n/a

Gram Street to Keele Street southbound via Merino Road		(8) 17%	n/a	n/a
Naylon Street to Major Mackenzie Drive via Netherford Road	n/a	n/a	117	(17)15%
Naylon Street to Major Mackenzie Drive via Gram Street	n/a	n/a		(2) 2%
Naylon Street to Major Mackenzie Drive via Jackson Street	n/a	n/a		(1) 1%
Merino Road to Major Mackenzie Drive via Netherford Road	n/a	n/a	142	(9) 6%
Merino Road to Major Mackenzie Drive via Gram Street	n/a	n/a		(3) 2%
Merino Road to Major Mackenzie Drive via Jackson Street	n/a	n/a		(0) 0%

As the study shows, all infiltration rates in the fall study were below 30%.

If Naylon Street was changed to a one-way eastbound operation, during the PM peak, Merino Road would see an increase in cut-through traffic of 20 vehicles. Currently, 17 vehicles are entering Naylon Street and exiting at Netherford Road, 2 vehicles are entering Naylon Street and exiting at Gram Street, and 1 vehicle is entering Naylon Street and exiting at Jackson Street, for a total of 20 vehicles entering Naylon Street.

Local Traffic Only Signs

At the Public meeting held in September, 2009, several residents requested that “Local Traffic Only” signs be installed at the entrances to the Historic Maple subdivision. According to the Ontario Traffic Manual (OTM), these signs are no longer in use. City staff can request to have the signs manufactured and installed, however, these signs do not legally prevent motorists from using the subdivision. The signs are ‘courtesy’ signs, and have no legal authority.

Turning Prohibitions

Several residents at the Public Meeting requested that staff consider Turning Prohibitions into the Historic Maple Subdivision. Turning Prohibitions are not recommended, as everyone, including residents, would be required to abide by them. Residents requested a “No Left Turn 4 pm – 6 pm” prohibition on both Naylon Street and Merino Road. If this prohibition was implemented, residents would have to travel north on Keele Street to Major Mackenzie Drive, make their left turn there, and then turn at either Gram Street, Jackson Street, or Netherford Road to get into the subdivision. This would transfer the traffic to other roadways within the subdivision. However, the results of the Fall study do not indicate that there is a need to implement such a prohibition, as infiltration rates were low. The Region of York would also need to approve this prohibition, as Keele Street is a Regional Road.

There are existing traffic calming measures within the Historic Maple subdivision such as speed humps, raised crosswalks and patterned crosswalks. The locations of the traffic calming measures are shown in Attachment No. 1.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan 2020, the recommendations of this report will assist in:

- Pursue Excellence in Service Delivery;
- Enhance and Ensure Community Safety, Health and Wellness; and

- Lead and Promote to Environmental Sustainability.

This report is consistent with the priorities previously set by Council

Regional Implications

There would be an impact at the intersection of Keele Street and Major Mackenzie Drive if traffic is restricted from turning onto Naylon Street and/or Merino Road.

Conclusion

- i) York Regional Police should be formally requested to provide increased enforcement of the one-way prohibition on Church Street.
- ii) York Regional Police should be formally requested to provide enforcement of the existing statutory 50 km/h speed limit on Naylon Street and Merino Road, based on the highest recorded speed.
- iii) Staff does not recommend that Naylon Street become a one-way operation eastbound.
- iv) Staff does not recommend that "Local Traffic Only" signs be installed at the entrance point to the Historic Maple subdivision.
- v) Staff does not recommend turning prohibitions into the Historic Maple subdivision.
- vi) Staff have requested increased enforcement from York Regional Police of the stop signs on both Naylon Street and Church Street.

Attachments

1. Location Map
2. Report from April 14, 2009 Council Meeting
3. Report from October 13, 2009 Council Meeting

Report prepared by:

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Mike Dokman, Supervisor, Traffic Engineering, ext 3118

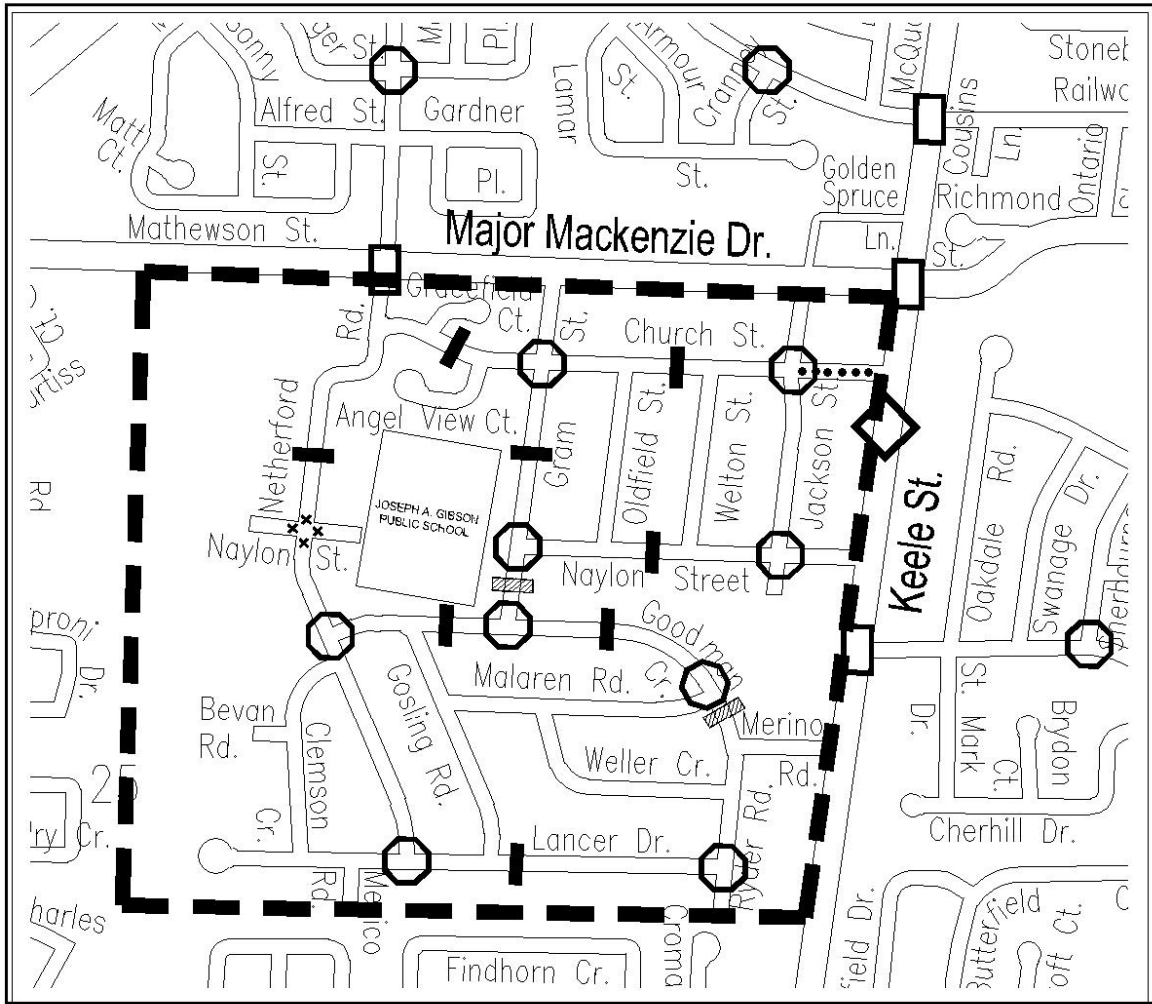
Respectfully submitted,

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

Jack Graziosi, P. Eng., M. Eng.
Director of Engineering Services









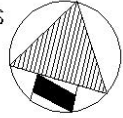
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ATTACHMENT No. 1



NAYLON STREET ONE WAY REVIEW

LEGEND

- | | | | |
|---|-------------------------------|---|----------------------------------|
|  | AREA UNDER REVIEW |  | EXISTING ONEWAY EASTBOUND TRAVEL |
|  | PEDESTRIAN SIGNAL |  | EXISTING PATTERNED CROSSWALKS |
|  | EXISTING TRAFFIC SIGNALS |  | EXISTING RAISED CROSSWALK |
|  | EXISTING ALL-WAY STOP CONTROL |  | EXISTING SPEED HUMP |
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NOT TO SCALE

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ATTACHMENT NO. 2

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 14, 2009

Item 3, Report No. 18, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on April 14, 2009.

3 **NAYLON STREET ONE-WAY REVIEW** **WARD 1**

The Committee of the Whole recommends approval of the recommendation contained in the following report of Regional Councillor Rosati, dated March 31, 2009:

Recommendation

Regional Councillor Gino Rosati recommends that:

1. Engineering Services Department staff conduct the necessary traffic infiltration, volume and speed studies to determine the need and justification of making Naylon Street between Jackson Street and Keele Street one-way eastbound in response to resident concerns about traffic infiltration through the community;
2. That following the completion of the engineering studies, a community meeting be convened to consult with the residents about the findings and recommendations; and;
3. That a report be brought to a future Committee of the Whole meeting regarding the results of the studies, community input and recommendations.

Economic Impact

There is no economic impact resulting from this report.

Communications Plan

Following approval of the recommendation of this report and when the study results are available, staff would co-ordinate a meeting of the area residents and the Ward 1 Sub-Committee and distribute notices of the meeting through door-to-door distribution, place an ad in the local papers and posting on the City's web site.

Purpose

To initiate the traffic studies necessary to determine the need and justification for prohibiting west bound traffic on Naylon Street between Keele Street and Jackson Street.

Background - Analysis and Options

Naylon Street is a local residential street intersecting with Keele Street in the Historic Maple Community. The area road network is illustrated in Attachment No. 1.

Northbound drivers on Keele Street wishing to travel west on Major Mackenzie Drive are faced with delays due to queues experienced on Keele Street. Residents on Naylon Street complain that impatient drivers turn left from Keele Street on Naylon Street and infiltrate the community to access Major Mackenzie Drive westbound. The volume of cars travelling through the community has increased and both volume and speeds are concerns to the residents.

Several years ago, Church Street between Jackson Street and Keele Street was converted to a one-way eastbound in order to deal with a problem identical to that being identified by the Naylon Street residents.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 14, 2009

Item 3, CW Report No. 18 – Page 2

In order to quantify the problem, the infiltration, speed and volume studies should be done to confirm the need for traffic controls. Once completed, the results of these studies and recommendations should be presented to the affected community for input and to obtain concurrence on recommendations.

Relationship to Vaughan Vision 2020

This report is consistent with Vaughan Vision 2020 as it deals with enhancing and ensuring community safety, health & wellness.

Regional Implications

As the elimination of westbound traffic on Naylon Street could impact traffic operations on Keele Street, Region of York approval would be required to implement the prohibition. Engineering Services Department staff will keep Regional Transportation and Works Department staff informed and involved in the necessary studies and will request the Region to review signal timing at the Keele/Major Mackenzie intersection.

Conclusion

Naylon Street residents have expressed concerns regarding traffic infiltration, volumes and speeds in their community resulting from drivers wishing to by-pass the traffic signal at Keele Street and Major Mackenzie Drive. In order to address these concerns, the necessary traffic studies should be conducted to determine the need and justification for westbound traffic prohibitions on Naylon Street between Keele Street and Jackson Street. The area residents should be informed of the findings of these studies and given an opportunity through a community meeting to provide input on the findings and recommendations.

Attachments

1. Area Road Network

(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. 3

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 13, 2009

Item 26, Report No. 42, of the Committee of the Whole, which was adopted, as amended, by the Council of the City of Vaughan on October 13, 2009, as follows:

By approving the following:

- 1) *That Engineering Services staff be directed to conduct further traffic studies to determine infiltration rates in historic Maple in the area bounded by Major Mackenzie Drive, Keele Street, Lancer Drive, and the ravine;*
- 2) *That staff provide a report to a future Committee of the Whole meeting on the traffic study results;*
- 3) *That a community meeting be held following the Committee of the Whole meeting;*
- 4) *That signage indicating "Local Traffic Only" be considered as part of the strategy of mitigating measures; and*
- 5) *That York Regional Police be requested to strictly and frequently enforce the all-way stop controls in the Historic Maple subdivision.*

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**NAYLON STREET
ONE-WAY REVIEW
WARD 1**

The Committee of the Whole recommends approval of the recommendation contained in the following report of Regional Councillor Rosati, dated September 29, 2009:

Recommendation

Local and Regional Councillor Gino Rosati recommends:

1. That Engineering Services staff be directed to conduct further traffic studies to determine infiltration rates on Naylon Street, Church Street, Gram Street, Jackson Street, Netherford Road, Goodman Street and Merino Road.
2. That staff hold another community meeting to discuss the results of the study after data collection is complete in the expanded study area and report to a future Committee of the Whole meeting following the community meeting.
3. That signage indicating "Local Traffic Only" be installed at the five entrances to the area.
4. That York Regional Police be requested to strictly and frequently enforce the all-way stop controls in the Historic Maple subdivision.

Economic Impact

The cost to install the "Local Traffic Only" signs will be an impact on the 2009 Operating Budget.

Communications Plan

Staff will advise the community of the public meeting through notices delivered to all homes bounded by Major Mackenzie Drive to the north, Keele Street to the east, Netherford Road and Clemson Road to the west, and Lancer Drive to the south and any roadways that have access via these roads.

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CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 13, 2009

Item 26. CW Report No. 42 – Page 2

Purpose

To expand the study area as requested by attendees at the public meeting that was held on September 22, 2009, at the Maple Community Centre, regarding the Naylon Street One-Way review.

Background - Analysis and Options

At its meeting on April 14, 2009, Council adopted without amendment:

- “1. Engineering Services Department staff conduct the necessary traffic infiltration, volume, and speed studies to determine the need and justification of making Naylon Street between Jackson Street and Keele Street one-way eastbound in response to resident concerns about traffic infiltration through the community.**
- 2. That following the completion of the engineering studies, a community meeting be convened to consult with the residents about the findings and recommendations; and;**
- 3. That a report be brought to a future Committee of the Whole meeting regarding the results of the studies, community input and recommendations.”**

The area road network is shown in Attachment 1.

Community Feedback

As directed by Council, staff held a public meeting on September 22, 2009. Forty residents signed the sign-in sheet at the meeting. Of all those in attendance, one resident was in favour of the one-way prohibition.

Staff reported that they received one letter via mail prior to the meeting, this letter stated that they were not in favour of the one-way prohibition.

Staff also advised that they received 11 phone calls prior to the meeting. Of these calls; two residents were in favour of converting Naylon Street into a one-way westbound road; no residents were in favour of a one-way eastbound road; seven residents were in favour of no change, and two did not leave votes.

Staff received emails from five residents. Of these five emails; none were in favour of a one-way westbound; one was in favour of a one-way eastbound; three were in favour of no change, and one did not leave a vote.

Residents on Goodman Crescent were concerned that if Naylon Street was converted to one-way operation, that traffic on their road would increase for two reasons. The first is that they would be the only access for all residents of the subdivision, and the second is that all the vehicles who are currently infiltrating through Naylon Street would now infiltrate through Goodman Crescent.

Residents were concerned about vehicles not stopping at the all-way stops along Naylon Street, Church Street, and Goodman Crescent and asked that York Regional Police be requested to enforce the stop signs.

Residents requested that the study area be expanded to include Goodman Crescent.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF OCTOBER 13, 2009

Item 26, CW Report No. 42 – Page 3

Relationship to Vaughan Vision 2020 / Strategic Plan

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

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

Regional Implications

There are no Regional implications resulting from this report.

Conclusion

Staff should be directed to conduct further traffic studies, including infiltration, speed, and volume collection, for Netherford Road, Gram Street, Jackson Street, Naylor Street, and Merino Street. Once data has been collected, another Public Meeting should be held to review results with the community and a report brought to a future Committee of the Whole meeting regarding study results and community feedback.

Attachments

1. Location Map
2. Report from April 14, 2009 Council Meeting

(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.)