

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 19, 2016

Item 5, Report No. 18, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on April 19, 2016.

5

**STOP CONTROL REVIEW
SOUTHDOWN AVENUE AT SHALE CRESCENT (SOUTH INTERSECTION) AND
SOUTHDOWN AVENUE AT AEGIS DRIVE
WARD 4**

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Deputy City Manager of Public Works and the Director of Transportation Services, Parks and Forestry Operations, dated April 5, 2016:

Recommendation

The Deputy City Manager of Public Works and the Director of Transportation Services, Parks and Forestry Operations recommend:

1. That a By-law be enacted to amend By-law 284-94, the Consolidated Traffic By-law, to re-orient the stop controls at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive.

Economic Impact

The capital costs associated with the installation of the warning signs and stop signs is estimated to be \$650.00 and has been included in the approved 2016 Operating Budget.

Communications Plan

Staff will advise the area residents of the outcome of Council's decision in this matter.

Purpose

The purpose of this report is to seek Council's approval to implement alternative stop controls at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive.

Background - Analysis and Options

Southdown Avenue is a two-lane north-south local roadway with a 17.5 metre right-of-way, 8.5 metre pavement width and sidewalk along the west side of the roadway. The road extends from Elihof Drive to Valley Vista Drive and is about 530 metres in length.

Shale Crescent and Aegis Drive are two-lane east-west local roadways with a 17.5 metre right-of-way and 8.5 metre pavement width. There is sidewalk on the south side of Shale Crescent, east of Southdown Avenue, and no sidewalk on Aegis Drive. Aegis Drive extends from Ilan Ramon Boulevard to Shale Crescent. Shale Crescent extends from Ilan Ramon Boulevard to Big Rock Drive.

The intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive are "four-leg" intersections with existing stop controls on Southdown Avenue. A map of the area is shown in Attachment No. 1.

The existing stop signs are implemented according to the approved Block 11 Transportation Management Plan (the Plan).

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 19, 2016

Item 5, CW Report No. 18 – Page 2

The existing stop controls were installed on Southdown Avenue for north-south traffic in accordance to the approved Block 11 Transportation Management Plan dated August 2002. Refer to Attachment No. 2.

By-law No. 47-2011 was enacted by Council on June 28, 2011 to amend the Consolidated Traffic By-law No. 284-94, to effect the stop controls at the intersections of Southdown Avenue at Aegis Drive and Southdown Avenue at Shale Crescent (south intersection) for north-south traffic in accordance with the Plan.

Recent traffic studies have identified stop controls should be re-oriented to improve traffic operations.

Anne Frank Public School was opened in September 2015. Area residents were concerned that traffic operations at the two intersections would impact traffic patterns as a result of new developments in the surrounding area.

Turning movement counts were conducted on November 18, 2015, at the intersection of Southdown Avenue and Shale Crescent (south intersection), and on November 19, 2015 at the intersection of Southdown Avenue and Aegis Drive. Both studies were conducted during the peak traffic periods of 7:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m.

The study results show that both vehicular and pedestrian volumes are higher travelling in the north south direction than in the east-west direction.

The existing traffic volumes at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive are not warranted for All-way Stop Controls.

The data collected was compared to the Provincial Warrant for All-way Stop Controls, with the following results:

		<u>Southdown Avenue and Shale Crescent (south intersection)</u>	<u>Southdown Avenue and Aegis Drive</u>
• Warrant 1 – Minimum Vehicular Volumes	Warranted	27%	21%
• Warrant 2 – Accident Hazard	Warranted	0%	0%
• Warrant 3 – Sight Restriction	Warranted	0%	0%

All-way stop controls are recommended when one of the above warrants meets 100 percent. As shown above, existing traffic volumes do not fulfill the minimum vehicular Warrant No. 1 requirements. Zero vehicle collisions were recorded at either intersection from 2014 to July 2015, and there are no sight restrictions at these intersections. Therefore, All-way Stop Controls are not recommended at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive.

Stop sign re-orientation at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive will improve intersection operation.

The Traffic study results demonstrate that the existing stop controls are currently not effective. Based on established technical criteria governing the installation of a stop sign, which includes right-of-way conflicts, vehicular and geometric configurations, traffic controls in the surrounding area, and safety, it is concluded that the stop signs should be installed for the east-west traffic on Aegis Drive and Shale Crescent (south intersection).

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 19, 2016

Item 5, CW Report No. 18 – Page 3

The proposed stop sign re-orientation would clearly establish right-of-way, which would benefit both vehicular and pedestrian movements in the area.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In accordance with the strategic priorities related to the Term of Council Service Excellence Strategy Map (2014 – 2018), the recommended stop sign re-orientation will improve traffic flow for both drivers and pedestrians at the intersections, thus promoting community safety, health and wellness.

Regional Implications

Not Applicable.

Conclusion

It is recommended that stop controls be re-oriented at the intersections of Southdown Avenue and Shale Crescent (south intersection), and Southdown Avenue and Aegis Drive to clearly define the right-of-way and to regulate traffic, thereby enhancing the level of safety of the intersections.

Attachments

1. Location Map
2. Block 11 Transportation Management Plan

Report prepared by:

Wai Lam Tang, Senior Traffic Technologist, Ext. 6125
Margie Chung, Manager, Traffic Engineering, Ext. 6137

(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.)