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TRAFFIC SAFETY REVIEW
PINE VALLEY DRIVE
CITY OF VAUGHAN

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, June 1, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. A by-law, prohibiting southbound and westbound left turns at the access opposite Tall Grass Trail on Pine Valley Drive (Y.R. 57) in the City of Vaughan, be approved.
2. The Regional Clerk forward this report to the Clerk of the City of Vaughan and to the Chief of York Regional Police, for enforcement, as their resources permit.

2. PURPOSE

This report presents the findings and recommendations of a traffic safety review that was done on Pine Valley Drive between Strada Drive/Pine York Avenue and Highway 7, in the City of Vaughan, as shown in *Attachment 1*.

3. BACKGROUND

At its meeting on April 3, 2006, the City of Vaughan Council requested the Region to investigate the following safety issues on Pine Valley Drive south of Highway 7:

- Drivers are frequently performing illegal left-turn movements to access businesses on the east side of Pine Valley Drive into and out of the right-in/right-out access situated opposite the intersection with Tall Grass Trail.
- Vehicles approaching Pine Valley Drive from Strada Drive are either making left turns onto Pine Valley Drive from the middle lane or cross Pine Valley Drive and make illegal U-turns on Pine York Avenue.

4. ANALYSIS AND OPTIONS

4.1 Right-in/Right-out Access

There is an existing access situated on Pine Valley Drive directly opposite Tall Grass Trail, approximately 220 metres south of Highway 7. The access has been designed to permit only northbound right turns into the commercial plaza and westbound right turns out of the plaza.

Observations by Regional staff confirmed that numerous illegal southbound and westbound left turns are taking place at the right-in/right-out access. Over a 12-hour period, a total of 38 inappropriate left turns were observed. It is expected that the frequency of these movements will increase with the rise of occupancy in the new commercial plaza east of Pine Valley Drive.

Most of the southbound left turns are performed in relative safety into the northbound right turn lane. In spite of clearly visible “Do Not Enter” signs, a few southbound drivers turned left into the westbound right-turn lane (see *Photo 1*), a dangerous manoeuvre that could result in a head-on collision with an unsuspecting westbound right-turn driver.

Most of the westbound left turns are performed in relative safety from the westbound right turn lane. A few drivers used the northbound right turn lane to perform their left turns (see *Photo 2*). This is a dangerous manoeuvre which could result in a head-on collision with an unsuspecting northbound right turn driver.

Fortunately, since 1999, there were no reported collisions at this access involving southbound or westbound left-turning vehicles.

The existing configuration of having a right-in/right-out access opposite a full movement intersection is not a normal situation. The right-in/right-out access should really be changed to a full movement access. This will require a more detailed investigation and discussions with the property owner and City of Vaughan staff. Until this happens, to improve safety, it is recommended that southbound and additional westbound left-turn prohibition road signs be implemented. For these signs to be enforceable by York Regional Police, a Regional by-law is required.

Additional westbound “Do Not Enter” signs are also recommended to prevent westbound vehicles from entering the northbound right turn lane.

Staff will monitor the effectiveness of these road signs and supporting law enforcement initiatives and, if necessary, will investigate the feasibility of constructing a typical raised median island for a minor street to prevent illegal left turns from occurring, as well as the possibility of changing the access to a full movement access.

Photo 1

Southbound Left Turn into Westbound Right Turn Lane



Photo 2

Westbound Left Turn from Northbound Right Turn Lane



4.2 Pine Valley Drive at Strada Drive/Pine York Avenue

Illegal left turns from the exclusive westbound through-lane and illegal U-turns on Pine York Avenue are consequences of the high levels of delay that westbound left-turn vehicles experience, especially during the afternoon peak period. During the afternoon peak period, the westbound left-turn demand exceeds 600 vehicles per hour. This volume exceeds the Region's dual left-turn lane warrant threshold of 400 vehicles per hour.

The implementation of a dual westbound left-turn operation is expected to significantly improve the overall operation of the intersection. The shorter westbound left-turn queues will also improve traffic operations at the adjacent intersection of Strada Drive with Rowntree Dairy Road. However, minor improvements to the south leg of the intersection will be required to safely accommodate a dual left-turn operation. A critical issue is the presence of a YRT bus stop on the south leg of the intersection which could potentially interfere with a dual left-turn operation.

City of Vaughan staff, in principle, supports a dual left-turn operation at the intersection of Pine Valley Drive and Strada Drive and are prepared to modify pavement markings on Strada Drive to accommodate this operation. Regional staff will work with the City of Vaughan, York Region Transit and the TTC to prepare a design for a dual left-turn operation that accommodates the needs of all stakeholders. If it is found that the double left-turn operation cannot be accommodated by line painting, other road works such as pavement widening may be required. If this is the case, the Region may seek a cost sharing arrangement with the City of Vaughan.

5. FINANCIAL IMPLICATIONS

The costs associated with the manufacture and installation of the new road signs are included within the 2006 Roads Budget.

6. LOCAL MUNICIPAL IMPACT

The implementation of road signs as proposed will have no local municipal impact. The impacts of improvements to the intersection of Pine Valley Drive at Strada Drive/Pine York Avenue will only be apparent after a feasibility study and preliminary designs have been completed.

7. CONCLUSION

In response to a request by the Council of the City of Vaughan, Regional staff conducted a safety review at the right-in/right out access on Pine Valley Drive opposite Tall Grass Trail, as well as at the intersection of Pine Valley Drive at Strada Drive/Pine York Avenue. At the right-in/right-out access, left-turn prohibition signs and additional law

enforcement are proposed. At the intersection of Pine Valley Drive and Strada Drive/Pine York Avenue, the feasibility of implementing a dual westbound left-turn operation requires further investigation and discussion with the TTC, York Region Transit and the City of Vaughan.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)