



**STAFF REPORT
ACTION REQUIRED**

**All-Way Stop Control Study - Pharmacy Avenue at
Pachino Boulevard**

Date:	August 6, 2008
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 40 – Scarborough Agincourt
Reference Number:	P:\2008\Cluster B\TRA\Scarborough\sc08054 D07-1609, D08-2844076 & D08-2844081 Pharmacy Avenue at Pachino Boulevard – AWSC not warranted

SUMMARY

This staff report is about a matter for which the Community Council does not have delegated authority from City Council to make a final decision.

This report responds to a request from Councillor Norm Kelly’s office, on behalf of an area resident, to install an All-Way Stop Control at the intersection of Pharmacy Avenue and Pachino Boulevard. The report shows that this intersection failed to meet the required technical warrant for this type of traffic control.

It is recommended that an All-Way Stop Control not be installed at Pharmacy Avenue and Pachino Boulevard since the subject intersection failed to meet the warrant for installation of an All-Way Stop Control which was adopted by Council for use in the city of Toronto.

This report also provides the results of traffic studies conducted on Pachino Boulevard where a 40 kilometre per hour (km/h) speed limit is technically justified and recommended for implementation over the entire length of the subject roadway.

In addition, while reviewing area signage, Transportation Services staff also identified nine uncontrolled three-way intersections in the immediate area (Alice Crescent at Crosland Drive (north intersection), Alice Crescent at Crosland Drive (south intersection), Annaree Drive at Amberley Drive, Annaree Drive at Rothwell Road, Christina Crescent at Alice Crescent, Clanwilliams Court at White Abbey Park, Joanna Drive at Crosland Drive, Randane Drive at Amberley Drive and Randane Drive at Rothwell Road).

It is recommended that minor street stop signs be installed at these nine subject uncontrolled three-way intersections to clearly define the right-of-way and to regulate traffic flow.

RECOMMENDATIONS

Transportation Services, Scarborough District, recommends that Scarborough Community Council recommend that City Council:

1. Adopt the 40 kilometre per hour speed limit on Pachino Boulevard, as identified in Appendix 1 of this report,
2. Adopt the “Compulsory Stops” regulations for nine uncontrolled three-way intersections, as identified in Appendix 1 of this report,
3. Not approve the installation of an All-Way Stop Control at Pharmacy Avenue and Pachino Boulevard, and
4. Amend the appropriate by-laws accordingly.

Financial Impact

The financial costs of installing the posted speed limit signage as well as the nine recommended stop controls is approximately \$4,750.00. The funding for the proposed signage is available in the Transportation Services 2008 Operating Budget, within Cost Centre TP0226. However, if an All-Way Stop Control were to be installed at Pharmacy Avenue and Pachino Boulevard, the additional financial cost of installing the two addition stop signs would be approximately \$500.00 plus approximately \$6,000.00 to remove the existing pedestrian crossover (PXO) on the north side of the intersection.

ISSUE BACKGROUND

Further to a request from Councillor Norm Kelly, Transportation Services staff reviewed the feasibility of installing an All-Way Stop Control at the intersection of Pharmacy Avenue at Pachino Boulevard.

COMMENTS

The following characteristics describe the intersection of Pharmacy Avenue at Pachino Boulevard, Pachino Boulevard and the nine subject uncontrolled three-way intersections:

- The roadways are located in the community east of Victoria Park Avenue and north of Ellesmere Road.
- Pachino Boulevard intersects Pharmacy Avenue from the east and west and forms a four-way intersection, which is presently controlled by eastbound and westbound stop signs on Pachino Boulevard at Pharmacy Avenue. A PXO is located on the north side of the intersection.
- Pachino Boulevard is a two-lane collector roadway with an unsigned default speed limit of 50 kilometres per hour. The daily traffic volume is approximately 1,900 vehicles per day, east of Joanna Drive. Pachino Boulevard has an 85th percentile speed of 54 Km/h (Monday, April 14, 2008).
- Vehicle classification data on Pachino Boulevard, east of Joanna Drive indicates that 38 vehicles (2 % of total vehicles) were bus or truck traffic.
- The land use on Pachino Boulevard consists of single family residential dwellings as well as elementary school use (Terraview-Willowfield Public School.)
- Pharmacy Avenue is a two-lane collector roadway with a signed speed limit of 40 kilometres per hour and a daily traffic volume of approximately 6,800 vehicles per day, south of Joanna Drive. Pharmacy Avenue has an 85th percentile speed of 55 Km/h (Monday, April 14, 2008).
- Vehicle classification data on Pharmacy Avenue, south of Joanna Drive indicates that 463 vehicles (7 % of total vehicles) were bus or truck traffic.
- The land use on this portion of Pharmacy Avenue consists primarily of single family residential dwellings with the exception of two small plazas which are located on the north side of Ellesmere Road at Pharmacy Avenue.
- Sidewalks are located on both sides of Pharmacy Avenue and on the north side of Pachino Boulevard.
- The TTC operates a bus route on the section of Pharmacy Avenue from Ellesmere Road to Penworth Road.
- All intersections within the subdivision are controlled by stop signs with the exception of the subject nine uncontrolled three-way intersections (see Appendix 1).

40 Km/h Speed Limit Warrant

Application of this warrant reveals that a 40 km/h speed limit is appropriate on Pachino Boulevard. Specifically, the “Pedestrian Environment” category of the 40 km/h Speed Limit Warrant is satisfied due to the presence of an elementary school adjacent to the roadway.

When installed, the 40 km/h speed limit will be consistent with the traffic environment of the community.

Uncontrolled Three-Way Intersections

Minor street stop signs are recommended at the nine subject uncontrolled three-way intersections (see Appendix 1), to provide stop sign uniformity, to clearly define the right-of way, regulate traffic flow and to encourage motorists to stop before the sidewalk to enhance driver and pedestrian safety.

All-Way Stop Control

An All-Way Stop Control is not recommended on Pharmacy Avenue at Pachino Boulevard, since the subject intersection failed to meet the warrant for an All-Way Stop Control installation, as adopted by Council for use in the city of Toronto.

A traffic study conducted at the intersection of Pharmacy Avenue and Pachino Boulevard during the morning and afternoon peak hours of a typical weekday (Tuesday, April 29, 2008) produced the following results:

All-Way Stop Control Warrant	A Total Approach Vehicle Volume	B Vehicle/Pedestrian Volume Crossing Major Road	C Unit Volume Split* Major/Minor Roads
Two-Hour Study Period Average	501	135	75/25
Warrant Requirements For Study Period Average For Local Roads	≥ 500	≥ 200	≥ 30/70 or ≤ 70/30

* “Unit Volume Split”: Major Road Volume – Vehicles only.
Minor Road Volume – Vehicles plus pedestrians crossing the major road.

For an All-Way Stop Control to be numerically justified, the traffic volume requirements for the “Study Period Average” must be completely satisfied in Categories A and C, or Categories B and C.

As outlined in the above table, the traffic volumes do not meet the requirements to install an All-Way Stop Control at the subject intersection at this time.

If an All-Way Stop Control were to be installed at the subject intersection the existing PXO would have to be removed. Staff conducted an “environmental standards” review which revealed that the existing PXO, on the north side of Pharmacy Avenue at Pachino Boulevard, is currently operating in a safe and efficient manner and continues to be in a suitable location and an appropriate traffic control device for this intersection.

Pedestrians are assisted at the PXO by an adult crossing guard during the school morning arrival time, lunch time and afternoon dismissal times. During our eight hours of observation, compliance at the PXO was excellent with 238 (94%) of the 252 pedestrians using the proper crossing technique by activating the overhead beacons and providing vehicles adequate time to stop.

A review of the Toronto Police Service collision records revealed that six collisions were reported at this intersection during the three-year period ending December 31, 2007. Two of the subject collisions were weather related where rainy or snowy road conditions prevailed at the time of the collision. None of the collisions resulted in minor or major injuries and no pedestrians were involved.

Accordingly, based on the above-mentioned traffic study results, this intersection is operating in a safe and efficient manner with the existing eastbound and westbound stop signs on Pachino Boulevard at Pharmacy Avenue. In addition, the existing PXO on the north side of the intersection is currently operating in a safe and efficient manner and continues to be in a suitable location and an appropriate traffic control device for this intersection. An All-Way Stop Control is not recommended at the subject intersection.

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SIGNATURE

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ATTACHMENTS

1. Appendix 1 – By-law Amendment (enact)
2. Location Plan (Pharmacy Avenue Area - Ellesmere Road to Terraview Boulevard)

Appendix 1

“Maximum Rate of Speed – 40 Kilometres Per Hour”
Regulations to be enacted

<u>Column 1</u> <u>Highway</u>	<u>Column 2</u> <u>From</u>	<u>Column 3</u> <u>To</u>
Pachino Boulevard	Victoria Park Avenue	The east end of Pachino Boulevard

“Compulsory Stops”
Regulation to be Enacted

<u>Column 1</u> <u>Intersection</u>	<u>Column 2</u> <u>Stop Street</u>
Alice Crescent and Crosland Drive (north intersection)	Alice Crescent
Alice Crescent and Crosland Drive (south intersection)	Alice Crescent
Annaree Drive and Amberley Drive	Annaree Drive
Annaree Drive and Rothwell Road	Annaree Drive
Christina Crescent and Alice Crescent	Christina Crescent
Clanwilliams Court and White Abbey Park	Clanwilliams Court
Joanna Drive and Crosland Drive	Joanna Drive
Randane Drive and Amberley Drive	Randane Drive
Randane Drive and Rothwell Road	Randane Drive