



TORONTO STAFF REPORT

August 23, 2006

To: Chairman and Members of the Scarborough Community Council

From: Peter J. Noehammer, Director, Transportation Services, Scarborough District

Subject: Feasibility of Implementing a One-Way Street (southbound) on Thora Avenue from Danforth Avenue to Wakehood Street

Ward 35 - Scarborough Southwest

Purpose:

To report on the feasibility and justification of implementing a one-way street on Thora Avenue southbound from Danforth Avenue to Wakehood Street.

Financial Implications and Impact Statement:

There are no financial implications associated with receipt of this report.

Recommendation:

It is recommended that this report be received for information.

Background:

At its meeting of July 13, 2006, Scarborough Community Council considered a report by Transportation Services staff to review the feasibility of installing traffic calming measures i.e., speed humps on Thora Avenue. The results of that report indicated that traffic calming measures were not warranted on this roadway.

Scarborough Community Council subsequently referred this report back to Transportation Services staff to report on the feasibility of implementing a one-way operation southbound on Thora Avenue from Danforth Road to Wakehood Street.

Comments:

Thora Avenue, which is classified as a local roadway, terminates approximately 100 metres south of Danforth Avenue, east of Victoria Park Avenue. The unposted default speed limit on

this roadway is 50 km/h. Parking is presently prohibited at all times on both sides of Thora Avenue.

North of Wakehood Street, the land use on Thora Avenue is single family residential, whereas south of Wakehood Street (approx. 30 metres) there are a number of automobile commercial uses, including auto repair shops.

Wakehood Street is an east-west local roadway that connects Victoria Park Avenue with Thora Avenue from the west and forms a tee-type intersection. The land uses on Wakehood Avenue are primarily commercial/industrial.

Traffic volume and speed studies conducted on Thora Avenue were applied to the City's Traffic Calming Warrant Criteria, and found to be well below those required to warrant traffic calming on this street

Specifically, the 85th percentile speed of traffic on Thora Avenue was measured at 31 km/h, which is well below the value required to satisfy the Traffic Calming Warrant Criteria.

Moreover, a volume study revealed that the recorded daily vehicle volume on Thora Avenue, which is classified as a local roadway, is within the vehicle volume range (up to 2,500 vehicles per day) for this type of roadway. Specifically, the two-way 24-hour vehicle volume recorded on this road was approximately 2,031 vehicles. As a result, the recorded traffic volume on Thora Avenue is not considered problematic at this time.

The resultant speed and volume studies suggest that Thora Avenue is operating well within normal operating parameters for a local street.

Notwithstanding the above, Transportation Services staff offer the following comments regarding potential implementation of a one-way operation on Thora Avenue. One-way streets are typically introduced as a means to increase roadway capacity, since the number of lanes available to traffic would effectively be increased. Alternatively, one-way streets have also been used, sometimes in conjunction with other traffic calming measures, to restrict the entry of traffic from a given street, thereby managing traffic flows into or out of a given area or neighbourhood.

One-way street conversions are not an effective speed control measure. In fact, experience has shown that retrofitting an existing two-way roadway to a one-way operation in an urban environment actually encourages higher operating speeds, since there are no contrary traffic movements and there is more road space available. Moreover, a one-way road operation has a tendency to attract parking on both sides of the street, creating potential access and egress difficulties for area residents.

In addition, in this case, given the relatively short spacing between Wakehood Street and Danforth Avenue, the level of compliance for the one-way operation may be poor due to added inconvenience. Specifically, motorists, who wish to travel east on Danforth Avenue have to travel north on Victoria Park Avenue, from Wakehood Street, and turn right onto Danforth Avenue at the traffic control signals. They may feel that the benefits of easier access to Danforth

Avenue from Thora Avenue would outweigh the relatively low risk of being reprimanded for travelling the wrong way on a one-way street. Ultimately, the potential for this to occur would further undermine the operational safety of Thora Avenue.

Transportation Services staff acknowledge the desire of the residents on Thora Avenue to reduce non-resident traffic by diverting some of the commercially based traffic onto Wakehood Street, thereby reducing the potential occurrences/instances of speeding. However, Transportation Services staff feel that the benefits of providing a one-way street operation would ultimately not outweigh the potential for increased vehicle speeds, parking problems and other more serious operational safety concerns on this roadway.

Conclusion:

The traffic volume and speed characteristics on Thora Avenue do not support the consideration of implementing a one-way street on Thora Avenue, southbound from Danforth Avenue to Wakehood Street.

Moreover, the negative operational and potential safety impacts that would result if a one-way street were implemented would outweigh any potential benefit that his type of operation may bring to Thora Avenue.

Contact:

Andre R. Filippetti
Manager, Traffic Operations, Scarborough District
Tel: 396-7148
Fax: 396-5641
E-Mail: afilipp@toronto.ca

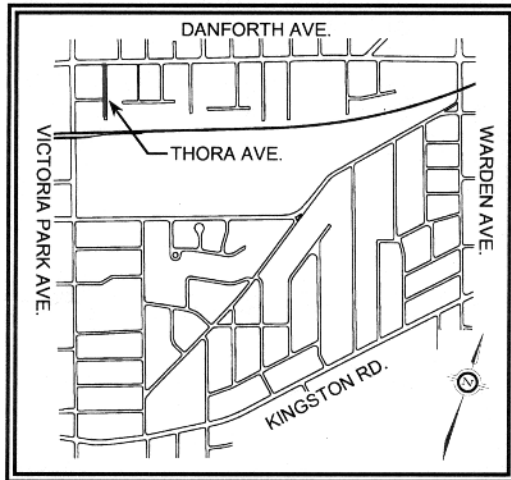


Peter J. Noehammer, P.Eng.
Director
Transportation Services, Scarborough District

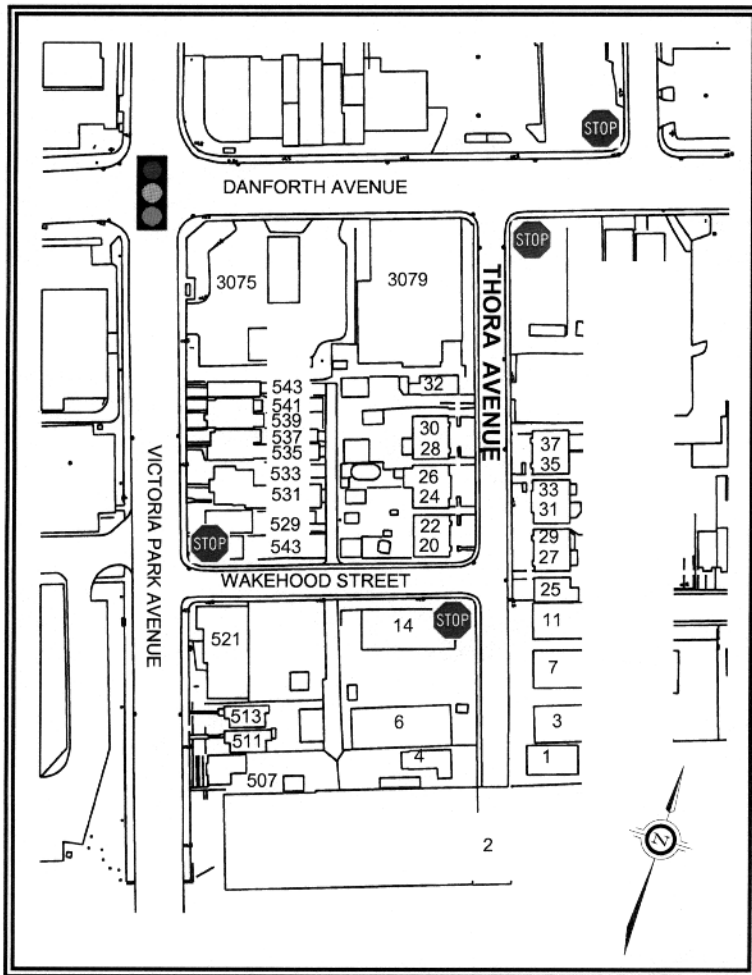
ARF/:lab
D05-1157
p:\2006\wes\tra\east\sc06045

List of Attachments:

1. Location Plan (Thora Avenue)



KEY MAP



THORA AVENUE SOUTHBOUND AT DANFORTH AVENUE



THORA AVENUE NORTHBOUND SOUTH OF WAKEHOOD STREET

LEGEND



Toronto TRANSPORTATION SERVICES

TRAFFIC OPERATIONS
Scarborough District

| | |
|-----------|----------|
| SCALE: | N.T.S. |
| DATE: | MAY 2006 |
| DRAFTING: | M.R. |

LOCATION PLAN
THORA AVENUE

| | |
|----------------------------|-----------------|
| FILE NUMBER: D05 - 1157 | |
| WARD 36 | ATTACHMENT 1 |