

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

Re: Community Transportation Plan - 16th Avenue
between Canada Way and 6th Street

RECOMMENDATIONS:

1. THAT Council approve the Community Transportation Plan for 16th Avenue between Canada Way and 6th Street as outlined in APPENDIX A.
2. THAT Council approve the immediate implementation of Phase I of the Community Transportation Plan, ie. the construction of a delta island at 16th Avenue/6th Street, at an estimated cost of \$25,500.
3. THAT a copy of this report be sent to all residents of 16th Avenue between Canada Way and 6th Street.

R E P O R T

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1993 June 09, adopted the attached staff report presenting a Community Transportation Plan regarding the preferred method of reducing traffic infiltration on the 7700 and 7800 blocks of 16th Avenue.

Respectfully submitted,

Members:

Mr. Ernest Neumann
Mr. Peter Miller
Mr. Len Werden

Councillor D. Evans
Chairman

: COPY - CITY MANAGER
- DIR. ADMIN & COMM. SERV.
- DIRECTOR ENGINEERING
- DIRECTOR FINANCE
- A/DIR. PLNG. & BLDG.
- DIR. REC. & CULT. SERV.

Councillor D. Lawson
Member

Councillor C. Redman
Member

Councillor J. Young
Member

TO: CHAIR & MEMBERS
TRAFFIC & TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION) 1993 JUNE 2
OUR FILE: 16TH AVE

FROM: ACTING DIRECTOR PLANNING & BUILDING

SUBJECT: COMMUNITY TRANSPORTATION PLAN - 16th AVENUE BETWEEN CANADA WAY AND 6TH STREET

PURPOSE: To present a Community Transportation Plan regarding the preferred method of reducing traffic infiltration on the 7700 and 7800 blocks of 16th Avenue.

RECOMMENDATIONS:

1. **THAT** the Traffic and Transportation Committee approve the Community Transportation Plan for 16th Avenue between Canada Way and 6th Street as outlined in Appendix A.
2. **THAT** the Traffic and Transportation Committee recommend that Council approve the immediate implementation of Phase I of the Community Transportation Plan, ie. the construction of a delta island at 16th Avenue/6th Street, at an estimated cost of \$25,500.
3. **THAT** a copy of this report be sent to all residents of 16th Avenue between Canada Way and 6th Street.

REPORT

1.0 BACKGROUND

In a letter and petition dated 1992 July 29, residents of the 7700 and 7800 blocks of 16th Avenue expressed concern regarding the increased traffic volume on 16th Avenue since the installation of the full traffic signal at 6th Street/16th Avenue. Other concerns of the residents included traffic speed, noise, pedestrian safety, and the accident rate at the intersection of Canada Way/16th Avenue.

A 1992 December 9 report to the Traffic and Transportation Committee documented the traffic patterns on 16th Avenue as well as the accident rate at the intersections of 6th Street/16th Avenue and Canada Way/16th Avenue. A later report to the Committee dated 1993 January 5 recommended that a community transportation planning process be initiated with residents from the 7700 and 7800 blocks of 16th Avenue to discuss several options for reducing the volume of short-cutting traffic on this portion of 16th Avenue.

At the beginning of March 1993, a meeting was held for all residents of the 7700 and 7800 blocks of 16th Avenue. At this meeting, information regarding traffic patterns and volumes, as well as accident statistics was presented, and a questionnaire survey

was distributed to assess the level of resident concern on various topics. All residents who were unable to attend the meeting were sent a copy of the questionnaire survey by mail. A total of 20 responses were received, the results are summarised in Table 1 below.

Table 1 Results of Resident Survey - Concern Levels
 (1 - not concerned, 2 - neutral, 3 - somewhat concerned, 4 - very concerned)

Topic	Average Concern Level
Traffic Speed	3.75
Traffic Volume	3.70
Accident rate	3.50
Traffic Noise	3.45
Volume of Trucks	3.45
Pedestrian Safety/Sidewalks	3.35
Street Appearance	2.95
Access to Canada Way	2.80
Access to 6th Street	2.70
Access to 16th Avenue east of 6th Street	2.35

As indicated in the table, the greatest level of concern was related to the traffic speed and volume; however, residents were also somewhat concerned about other topics such as pedestrian safety, sidewalks, and the appearance of the street.

A total of 13 residents expressed an interest in being part of a committee to discuss possible options to address resident concerns. Eight of these residents were randomly selected for the committee, and the first resident committee meeting was held on 1993 April 7. At this meeting, staff outlined the advantages and disadvantages of several traffic control and traffic calming measures, and indicated the potential impact of each of these options on traffic patterns, as well as on resident access. Subsequent to the meeting, staff prepared a series of possible options ranging from traffic calming measures, (eg. pavement undulations), to traffic control devices, (eg. delta islands), and sent each member of the resident committee a set of these possible options together with information on their advantages and disadvantages.

2.0 Resident Proposal

At the most recent meeting of the resident committee on 1993 May 20, residents presented staff with a proposal to install two delta islands: one at Canada Way/16th Avenue, and one at 6th Street/Canada Way. Residents are seeking a speedy solution to the "rat-running" problem in their neighbourhood, and have therefore chosen a solution which is relatively easily implemented, and which is expected to be effective in reducing the volume of short-cutting traffic on this portion of 16th Avenue.

Staff reviewed the resident proposal, and recommended a two phased approach, as follows:

Phase I Immediate installation of a delta island at the intersection of 16th Avenue/6th Street to eliminate through traffic to and from the west leg of this intersection, as shown in Figure 1.

Phase II Assessment of the impact of the installation of the delta-island at 6th Street/16th Avenue, and if necessary, the installation of an additional delta island, (as shown in Figure 2), at the intersection of Canada Way/16th Avenue to further reduce traffic infiltration.

The criteria used to assess the effectiveness of Phase I include the reduction in traffic volume on the 7700 and 7800 blocks of 16th Avenue, and the extent of any diversion of short-cutting traffic onto adjacent east-west streets.

The two phased approach, as recommended by staff, was subsequently endorsed by the resident committee.

Residents are also interested in improving the appearance of their street, but have decided that it is best to address the problem of "rat-running" traffic as soon as possible, and to address street appearance at a later date as part of a Local Improvement Program. Local Improvement is included in the plan.

3.0 Monitoring of Delta Island Construction

The impact on area traffic patterns of the installation of a delta island at the intersection of 16th Avenue/6th Street will be carefully documented by staff. Both the impact on 16th Avenue, and on other parallel streets such as Graham Avenue, 15th Avenue, 17th Avenue, 18th Avenue, and 19th Avenue will be assessed by conducting traffic counts both before and after the construction of the island. At a future resident meeting the results of this "before and after" traffic count program will be presented, as a basis for assessing the need for an additional delta island at the intersection of 16th Avenue/Canada Way as Phase II of the Community Transportation Plan, will be addressed.

The construction of a delta island at the intersection of 6th Street/16th Avenue is not

expected to cause a significant diversion of short-cutting traffic from 16th Avenue to other east west residential streets. It is expected that the short-cutting problem on these neighbouring streets will be no worse than before the signal was installed at 6th Street/16th Avenue. By conducting the "before and after" traffic count surveys, the City will be able to assess the extent of any diversion of "rat-running" traffic to other local streets.

4.0 Resident Support for the Proposed Solution

To assess the level of support for the resident proposal, staff distributed information regarding the proposed Community Transportation Plan to all residences in the 7700 and 7800 blocks of 16th Avenue. The residents were asked to indicate whether or not they support the recommendation to install a delta island at 6th Street/16th Avenue. Thirty eight households were surveyed, and a total of 33 responses were received prior to the response deadline of June 1, 1993. The results of the survey are presented in Table 2 below.

Table 2 Support for Delta Island Proposal

Question: Do you agree with the solution proposed by the resident committee ?	
YES	31
NO	2

The survey response rate was very encouraging, with 86% of households surveyed responding on or before the deadline of June 1, 1993. By far the majority of residents of this portion of 16th Avenue are in favour of the resident proposal. There were only two negative responses to the resident proposal.

5.0 Cost of Delta Island

The cost for construction of the delta island, relocation of the existing curb on the north side of 16th Avenue, the provision of all the associated signage, and the alteration of the configuration of the traffic signal, and the possible need for a retaining wall on the north west corner of the intersection, is estimated at \$25,500. The funds for the construction are available in the Traffic Management section of the Capital Budget.

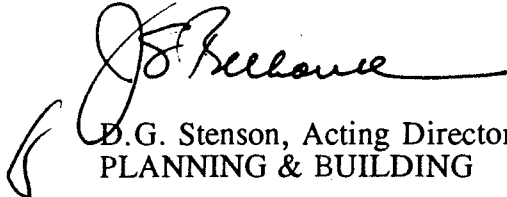
6.0 SUMMARY AND CONCLUSION

Traffic volumes on the 7700 and 7800 blocks of 16th Avenue have increased significantly since the installation of the full traffic signal at 16th Avenue/6th Street. Due to this increased traffic, and the associated increase in accidents at the intersection of 16th Avenue/Canada Way, a consultation process was set up with the residents of 16th Avenue to develop a solution to the problem of traffic infiltration.

After three meetings with staff, and several informal meetings amongst themselves, the resident committee has recommended the construction of two delta islands: one at Canada Way/16th Avenue, and one at 6th Street/16th Avenue. Staff reviewed the resident proposal, and recommended a two phased approach as outlined in the Appendix, which was subsequently endorsed by the resident committee.

Phase I calls for the immediate installation of a delta island at 16th Avenue/6th Street. Phase II involves the assessment of the effectiveness of Phase I, and the potential installation of an additional delta island at the intersection of Canada Way/16th Avenue. Phase II will be discussed at a future meeting of the resident committee in the Fall of 1993.

Staff recommend that the design of the delta island proceed immediately, and that the construction take place prior to August 31, 1993.

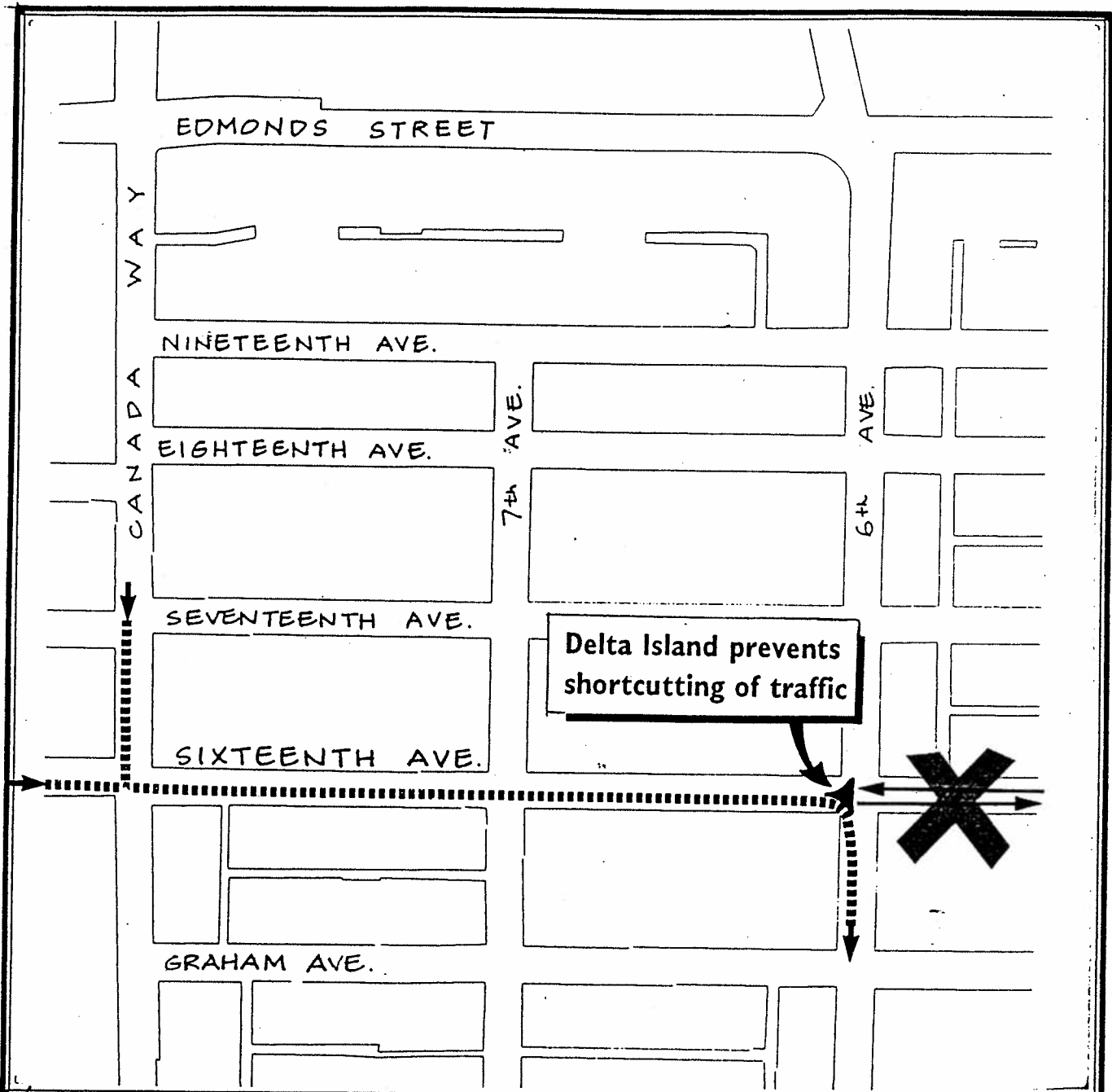

D.G. Stenson, Acting Director
PLANNING & BUILDING



DAB/dab
Attach.

cc: Director Administrative Services
Director Engineering
Director Parks and Cultural Services
Director Finance

PHASE I

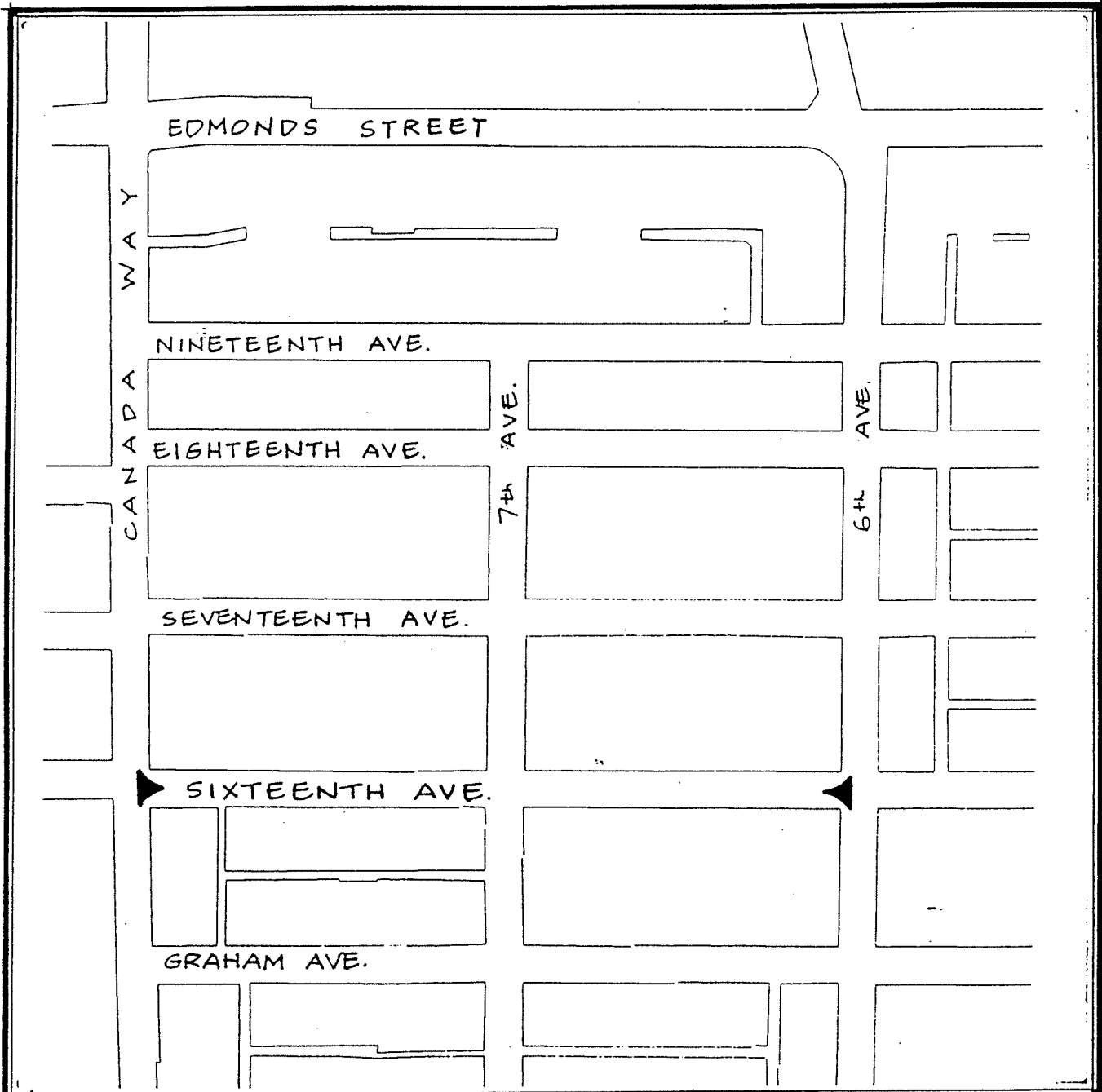
Install Delta Island at 6th Street and Sixteenth Avenue



Date:	 <p>City of Burnaby Planning & Building Dept.</p>	<ul style="list-style-type: none"> • Allows only right turns in and right turns out of Sixteenth Avenue at 6th Street • Prevents shortcutting traffic to and from Sixteenth Avenue east of 6th Street 	
Scale:			
Drawn By:			<p>FIGURE 1</p>

PHASE II

Install Delta Island at Canada Way and Sixteenth Avenue (if necessary)



Date:
Scale:
Drawn By:

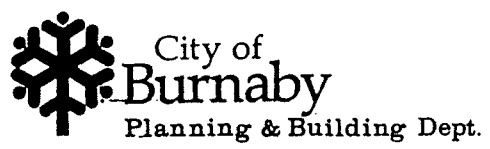


FIGURE 2

APPENDIX A

COMMUNITY TRANSPORTATION PLAN 16TH AVENUE BETWEEN CANADA WAY & 6TH STREET

The 16th Avenue resident committee endorses the following two phased approach to eliminate "rat-running" traffic from the 7700 and 7800 blocks of 16th Avenue.

Phase I

A delta-island should be installed at the intersection of 6th Street/16th Avenue to prevent "rat-running" traffic from travelling straight through the signal at 6th Street/16th Avenue, and using the 7700 and 7800 blocks of 16th Avenue as a route to and from Canada Way. The cost of the delta island is estimated at \$25,500.

Phase II

Upon completion of Phase I, and subsequent monitoring of "before and after" traffic counts, the effectiveness of the delta island will be reviewed with the resident committee to determine whether an additional delta island should be installed at the Canada Way end of 16th Avenue.

Local Improvement Program

Subject to resident concurrence, a Local Improvement Program could be initiated to address concerns of residents regarding street appearance and pedestrian safety.

