

REPORT
1993 March 29

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

Re: Canada Way/Edmonds Intersection Improvements

RECOMMENDATION:

1. THAT Council approve the revised design for the intersection reconstruction of Canada Way at Edmonds incorporating the design modifications shown in Figure 6 of this report.

R E P O R T

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1993 March 10, adopted the attached staff report regarding a revised design for the intersection reconstruction of Canada Way/Edmonds.

Arising from the discussion, the Committee requested that staff consult with the Ministry of Transportation and Highways regarding the advisability of implementing interim measures, including two additional left turn phases, at the Canada Way/Edmonds intersection.

Respectfully submitted,

Members:

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

Councillor D. Evans
Chairman

Councillor D. Lawson
Member

Councillor C. Redman
Member

COPY - CITY MANAGER
- DIR. ADMIN. & COMM. SERV.
- DIRECTOR ENGINEERING
- DIRECTOR PLANNING & BUILDING
- OFFICER-IN-CHARGE, R.C.M.P.

Councillor J. Young
Member

TO: CHAIR AND MEMBERS 1993 JANUARY 07
TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION) OUR FILE: 08.640

FROM: ACTING DIRECTOR, PLANNING & BUILDING

SUBJECT: CANADA WAY/EDMONDS INTERSECTION IMPROVEMENTS

PURPOSE: To seek the approval of the Committee to a revised design for the intersection reconstruction of Canada Way/Edmonds.

RECOMMENDATION:

1. THAT the Traffic and Transportation Committee approve the revised design for the intersection reconstruction of Canada Way at Edmonds incorporating the design modifications shown in Figure 6 of this report.

R E P O R T

1.0 BACKGROUND

At its regular meeting of 1992 May 19 Council received a report from the Director of Planning and Building with regard to the proposed improvements to the intersection of Canada Way/Edmonds. The report was written in response to public concerns regarding the impact of the project on the trees located on the Edmonds School property and the perceived need for a full public input process for the project. Council subsequently referred this report to the Traffic and Transportation Committee for a review and public input process regarding the intersection reconstruction to assess alternate solutions to the installation of a traffic island, left turn bay and the removal of trees. A public input process was initiated involving a special meeting of the Committee and a Public Open House sponsored by the Ministry of Transportation and Highways.

This report summarizes the major issues arising from the public input process and outlines appropriate design changes for the consideration of the Committee and Council.

2.0 PUBLIC INPUT PROCESS

2.1 Scope

Public input on the Canada Way/Edmonds project was received through two sources including:

- (1) a special meeting of the Traffic and Transportation Committee held on 1992 June 23 in the Council Chambers of Burnaby City Hall. Seven delegations made presentations on the intersection proposals and six items of correspondence were received by the Committee. All but one of the delegations and correspondence expressed concerns about the impact of the Project.
- (ii) a Public Open House was held by the Ministry of Transportation and Highways in the Burnaby Heritage Village Museum on 1992 November. A total of 39 residents from the area reviewed the displays outlining the proposals and their impact on adjacent properties and the trees on the Edmonds School property. Fifty comment forms were distributed at the meeting and only two were returned to Ministry staff. Both of the returned comments were in favour of the Project. (See Attachment A)

2.2 Issues

A number of issues emerged from the design process and the subsequent public review of the original design. These are outlined as follows:

(i) Traffic Safety on Canada Way

The Canada Way/Edmonds intersection exhibits one of the highest traffic accident rates of any location in the Municipality. As shown in Figure 1 attached, the number of reported accidents in the four year period from 1985 to 1989 was 427 which is equivalent to an average of one traffic accident every 3.5 days.

(ii) Edmonds School Trees

The Edmonds school property now partly owned by the Municipality is bordered by street trees fronting on both Canada Way and Edmonds.

On the east side of the Edmonds School property, 11 Chestnut trees, approximately 10m in height, line Canada Way approximately 3.5m from the existing curb. On the Edmonds side, seventeen Sycamore (London plane) trees line the school property approximately 4.5m from the existing curb.

Concerns were expressed from a number of delegations regarding the current project design (Figure 2 attached) which would result in the removal of these trees to accommodate the widening of Canada Way and Edmonds.

(iii) Properties on Canada Way

The major component of the project is the introduction of a left turn lane on Canada Way extending from Edmonds northwest to Rosewood Street a distance of approximately 300m. Development of this left turn lane requires the acquisition of up to 4.5m of widening from properties on the west side of Canada Way.

At the public meetings one property owner, a Mr. R. Drew of 7037 Canada Way (Figure 3 attached) expressed objections to the impact of the widening on his property.

(iv) Traffic Infiltration Into The Lakeview Area

In early October 1990 a petition was received by the Municipality from 135 residents in the Lakeview neighbourhood concerned about traffic using Lakefield Drive and Fourth Street to bypass the traffic congestion on Canada Way. In response to this petition a public participation process was set up to involve residents in the development of a Community Transportation Plan for the Lakeview area. The subsequent Plan as shown in Figure 4 attached, approved by 89 percent of the residents of the area, proposed traffic circles and stop signs be introduced to control traffic speeds through the area.

It was concluded however that the volume of traffic through the neighbourhood however, could only be addressed through intersection improvements on Canada Way/Edmonds and, Canada Way/Imperial. Subsequently these improvements were approved by Council as part of the Community Transportation Plan in 1990 December.

Mr. P. Milne representing the residents of the Lakeview area expressed his support for the project as currently designed.

3.0 PROJECT DESIGN

A modified design for the Canada Way/Edmonds intersection is shown in Figure 5 attached. This design responds to the issues identified in the design and public input process as follows:

3.1 Traffic Accidents on Canada Way

A substantial portion of the traffic accidents on Canada Way are attributable to collisions between left turning vehicles and either opposing or following vehicles. Provision of a left turn bay and a separate left turn signal phase by the project should address this issue and sharply reduce the intersection accident rate.

In addition provision of a raised median on Canada Way should reduce traffic accidents at the intersections of Wedgewood and Rosewoods with Canada Way (see Figure 1) by eliminating dangerous left turn in and left turn out movements.

3.2 Trees on Edmonds School Property

(i) Canada Way Chestnut Trees

Due to the proximity of the chestnut trees to the existing curb on Canada Way, measures to retain the trees would require maintaining the curb in its existing location and shifting the alignment of Canada Way eastward. The entire widening to accommodate the left turn lane would then be taken from abutting properties on the east side of Canada Way. Properties near the Edmonds intersection would be particularly affected including a church, a service station and a grocery store as well as residences along the east side of Canada Way north of Edmonds. As the viability of these land uses could not be maintained under these circumstances, the option of realigning Canada Way is not recommended. The Ministry of Transportation

and Highways concurs with this conclusion. An assessment of the Chestnut trees conducted by an arborist retained by the Ministry has concluded that the trees are in extremely poor condition due to their age, and the effect of severe pruning. Neither retention nor relocation of the chestnut trees is therefore recommended. Recognizing the value of the Chestnut trees to the community, the Ministry is prepared to replace these trees with large caliper trees of a similar, or other variety.

(ii) Sycamore Trees on Edmonds

The location of the Sycamore trees further into the Edmonds School property than the Chestnut trees provides some opportunities for retaining these trees. With this as a primary objective, the Edmonds approach to the intersection has been redesigned to limit the widening to an absolute minimum. The redesign as shown in Figure 6 attached removes the right turn lane on Edmonds replaces the raised median with a painted pavement marking to define the left turn lane and relocates the sidewalks inside of the Edmonds School property. These measures enable the curb to be moved north to a location 1.2m outside the trees.

While sixteen of the eighteen Sycamore trees can be retained with this redesign, the long term health of the remaining trees remains a concern. It is the view of staff that the proximity of the new curb to the trees would probably not appreciably affect the health of the trees provided that sensitive construction methods avoided damage to root systems. To further protect the trees construction of the Edmonds section will require relocation of existing overhead power lines to the opposite side of Edmonds.

Both B.C. Hydro and the Ministry of Transportation and Highways concur with the feasibility and desirability of this relocation.

3.3 Properties on Canada Way

The intent of the Canada Way/Edmonds project is to accommodate the turning movements which are currently obstructing the through traffic at the intersection. The project therefore focusses on the addition of left turn lanes on Canada Way both north and south of Edmonds. No additional through traffic lanes will be provided. The proposed improvements are expected to eliminate the traffic queuing on Canada Way and the significant delay which is the primary cause of traffic infiltration into the Lakeview neighbourhood.

Reflecting the location of the project in a developed urban area the project has been designed to meet the Ministry's minimum standards for provincial highways. The provision of left turn channelization in the critical southbound to eastbound direction, however requires the widening of the pavement surface on Canada Way by up to 3.7 m from Edmonds to Rosewood Avenue, a distance of approximately 300m. The pavement surface would be tapered back to the existing pavement at a point south of Rosewood Avenue.

To accommodate the Canada Way/Edmonds project the City of Burnaby over the past two decades has been taking dedication of up to 4.5m in conjunction with rezoning or subdivision of properties on Canada Way. In addition however acquisition from the existing properties on Canada Way will be required. One of these residents on the west side of Canada Way, Mr. R. Drew has objected to the widening due to its impact on his property at 7037 Canada Way.

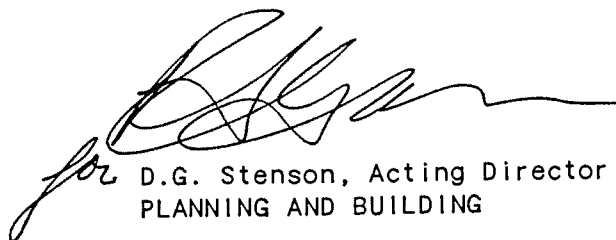
To avoid any impact on the property at 7037 Canada Way the left turn lane would need to be shortened from the current 300m to approximately 210m. As a result the storage capacity of the left turn lane would be reduced from the proposed 25 vehicles to 17 vehicles which is less than the minimum 18 vehicle capacity required to accommodate the current left turning volumes. Reduction of the left turn capacity could therefore result in left turning vehicles obstructing the through lanes and causing the potential for continued traffic queuing at the intersection immediately after completion of the project. In addition the reduced left turn lane would have no capacity for future traffic growth. As modification of the left turn lane would compromise the effectiveness of the Canada Way/Edmonds project it is therefore recommended that the current design for the south eastbound left turn lane be retained.

3.4 Traffic Infiltration into Lakeview Area

Traffic congestion at the southbound Canada Way approach to the intersection in the afternoon peak period is the primary cause of the daily infiltration of through traffic into the Lakeview area. Provision of a southbound to eastbound left turn lane on Canada Way to Edmonds is expected to effectively eliminate traffic queuing and delay, thus removing the incentive to shortcut through adjacent neighbourhoods. Moreover the introduction of a raised median demarcating the left turn lane will further reduce traffic infiltration by eliminating left turn movements from Canada Way to intersecting side streets including Wedgewood, and Rosewood. Design changes to reduce the left turn lane or eliminate the raised median are therefore not recommended.

4. CONCLUSION

The Canada Way/Edmonds project is required to address the problems of traffic safety and traffic congestion and to ensure the integrity of the Lakeview neighbourhood. The proposed redesign of the Project is expected to achieve these objectives while retaining the sycamore (London Plane) trees on the Edmonds School property. It is also proposed that representatives of the neighbourhood be involved in the process of selecting the type of replacement trees on Canada Way. Other design changes are not recommended as they would severely compromise the effectiveness of the Project in addressing the traffic issues. It is therefore recommended that the Traffic and Transportation Committee approve the design of the Canada Way/Edmonds project as outlined in this report.


for D.G. Stenson, Acting Director
PLANNING AND BUILDING

RG/cr

Attach.

cc. Director Administration & Community Services
Director Engineering
Director Finance
Director Recreation & Cultural Services



7818 6th Street, Burnaby, B.C., V3N 4N8

January 7, 1993

Bob Glover
Transport Planning Manager
City of Burnaby
4949 Canada Way
Burnaby, B.C., V5G 1M2

↑↑↑↑↑↑ FEED DOCUMENT THIS DIRECTION					
IMPORTANT FAX MESSAGE					
TO <u>Bob Glover</u>					
COMPANY <u>City of Burnaby</u>					
FAX NO. <u>294-7220</u>					
FROM <u>K McCune</u>					
NO. OF PAGES <u>2</u>					
RE <u>Can. Way</u>					

- original to follow in mail

Dear Bob:

Re: Open House - Canada Way-Edmonds/Canada Way-Imperial
Intersection Upgrading Projects

On November 3, 1992, the Ministry held an open house for the public to view designs for the above noted projects. The open house was held at Burnaby Village Museum Administration Building, with viewing for the Municipal Council and traffic committee members from 3:30 pm to 4:30 pm, and the general public from 4:30 pm to 8:30 pm. Notice of the meeting was advertised in both the Burnaby local papers two weeks prior to the meeting. Letters of invitation were sent to property owners who are affected by the projects.

Overall attendance at this open house was 50 people, including municipal council members and interested Ministry staff. 38 Burnaby residents attended and one resident from Armstrong B.C. Twenty seven (69%) of these residents came from the area bounded by Imperial to the north, 16th Avenue to the South, Humphries to the east and 6th Street in the West. Nine (23%) of the residents came from the area north of Imperial, south of Burriss, east of Walker and west of Burnfield. Two Burnaby residents came from the Metrotown area. Five of the thirteen property owners notified attended.


...2

The issues raised by the public concerned the left hand turning bay on Canada Way and the environmental impact of the project. The turning bay length and the necessity of a raised median were the general queries taken by our design staff. The proposed cutting of the heritage trees, rather than relocation, was addressed by both Ministry staff and a consultant arborist. The consultant, Dr. Shirley Nicholson, had an excellent presentation with photographs of the individual trees and spent considerable time explaining the current state of health and the safety issues regarding the trees. It was felt by Ministry staff that most citizens were satisfied that all options regarding the trees had been explored and the removal was inevitable, due to their age and health.

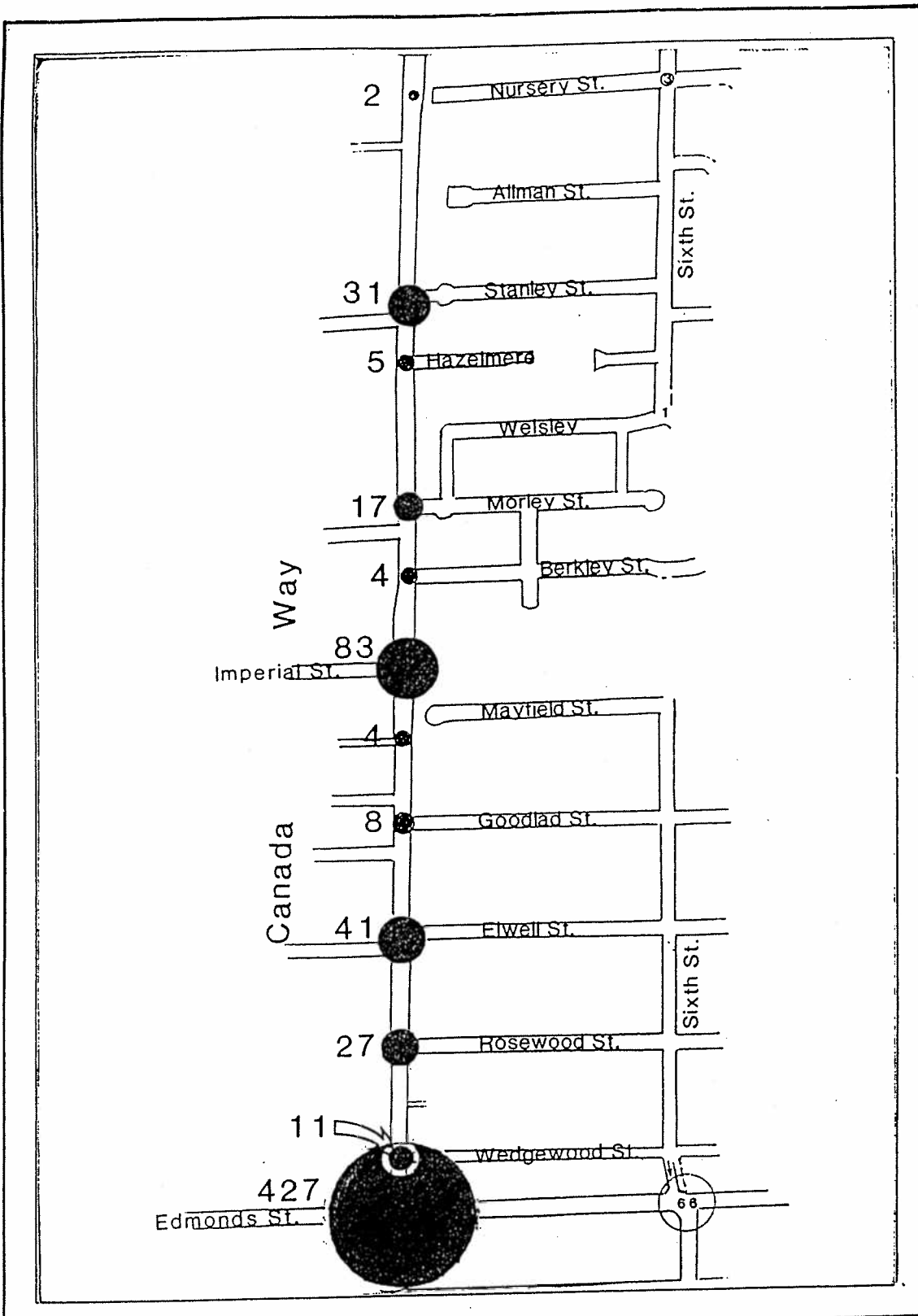
The Ministry gave each attendee a comment sheet to fill in and leave or mail back to the Ministry. Only two comments were received (as of January 6, 1993), and both endorsed the project.

In review of the open house, Ministry staff felt that the public were generally supportive of the proposed projects.

Sincerely


Katherine L. McCune
Public Information Officer

c.c. Doug Hyde, Project Manager

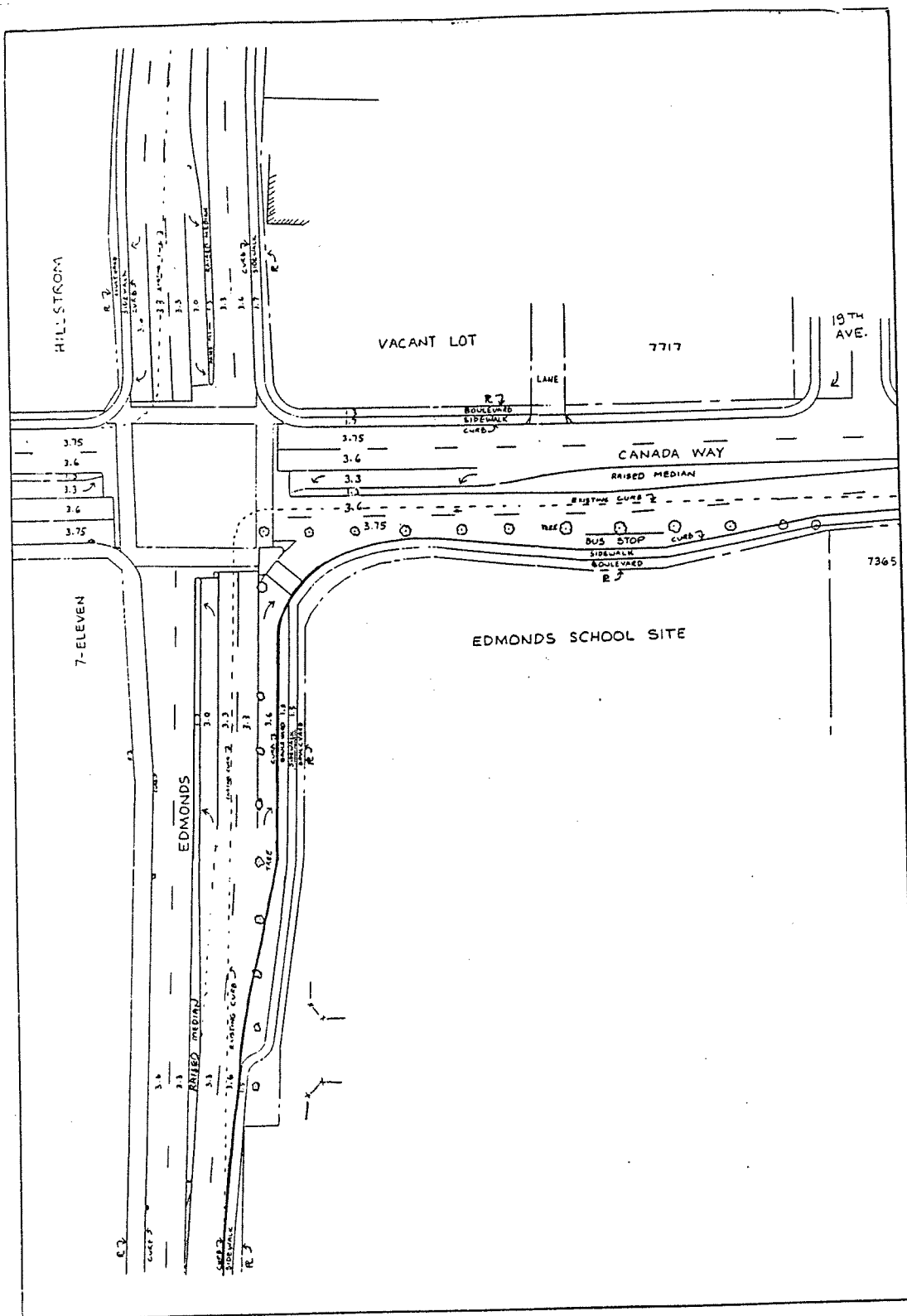


Date:
1992 MAY

Scale:
N/A



FIGURE 1
TRAFFIC ACCIDENTS
ON CANADA WAY
1985 - 1989

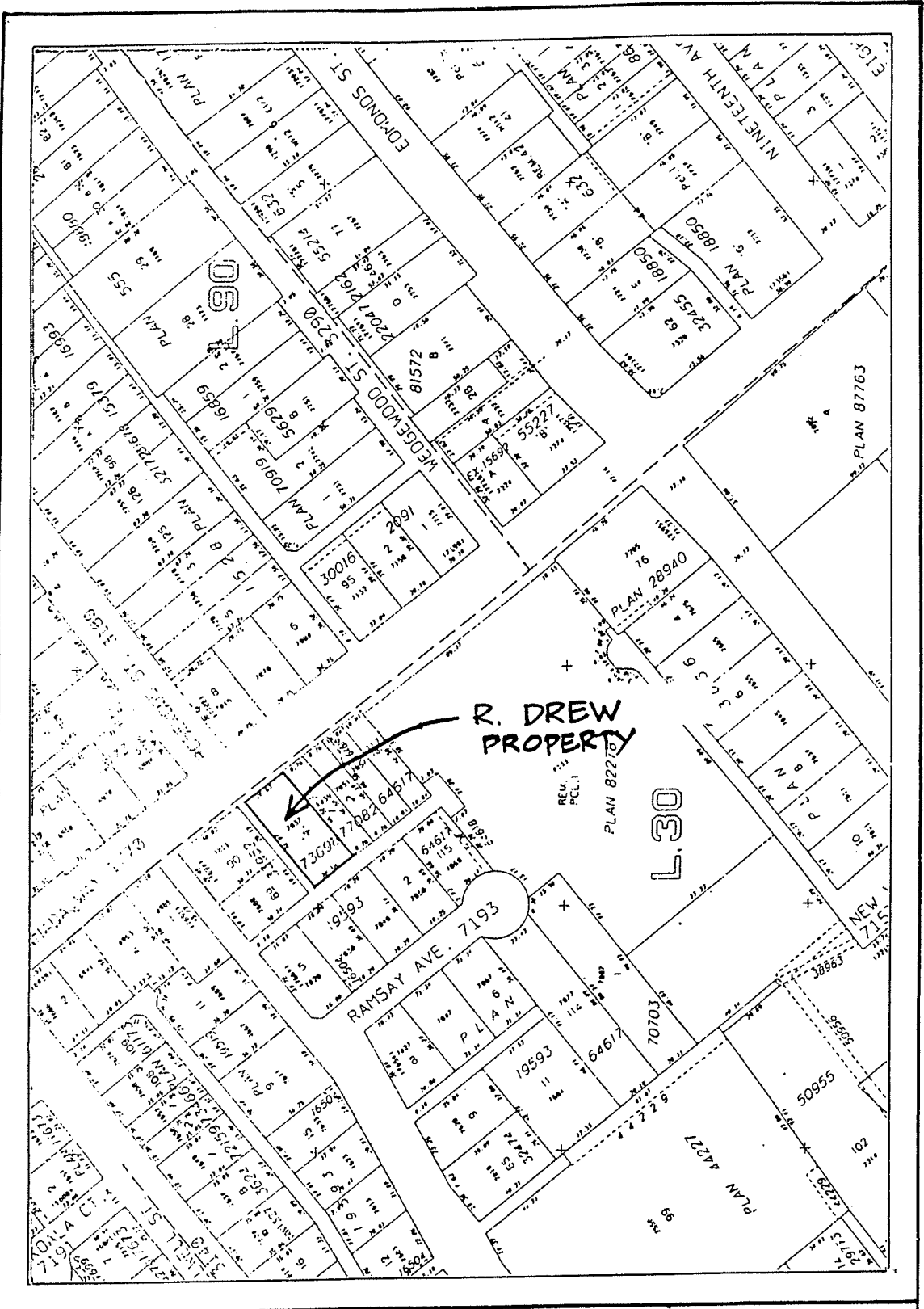


Date:	92 05 13
Scale:	NTS
Drawn By:	TESSLA


CITY OF BURNABY
 Planning &
 Building Inspection
 Department

FIGURE 2

**CANADA WAY EDMONDS STREET
 INTERSECTION DESIGN : AFFECT ON
 EDMONDS SCHOOL STREET TREES**



Date:
1993 01

Scale:
1:2000

wn By:



FIGURE 3

CANADA WAY/
EDMONDS
INTERSECTION

7037 CANADA WAY

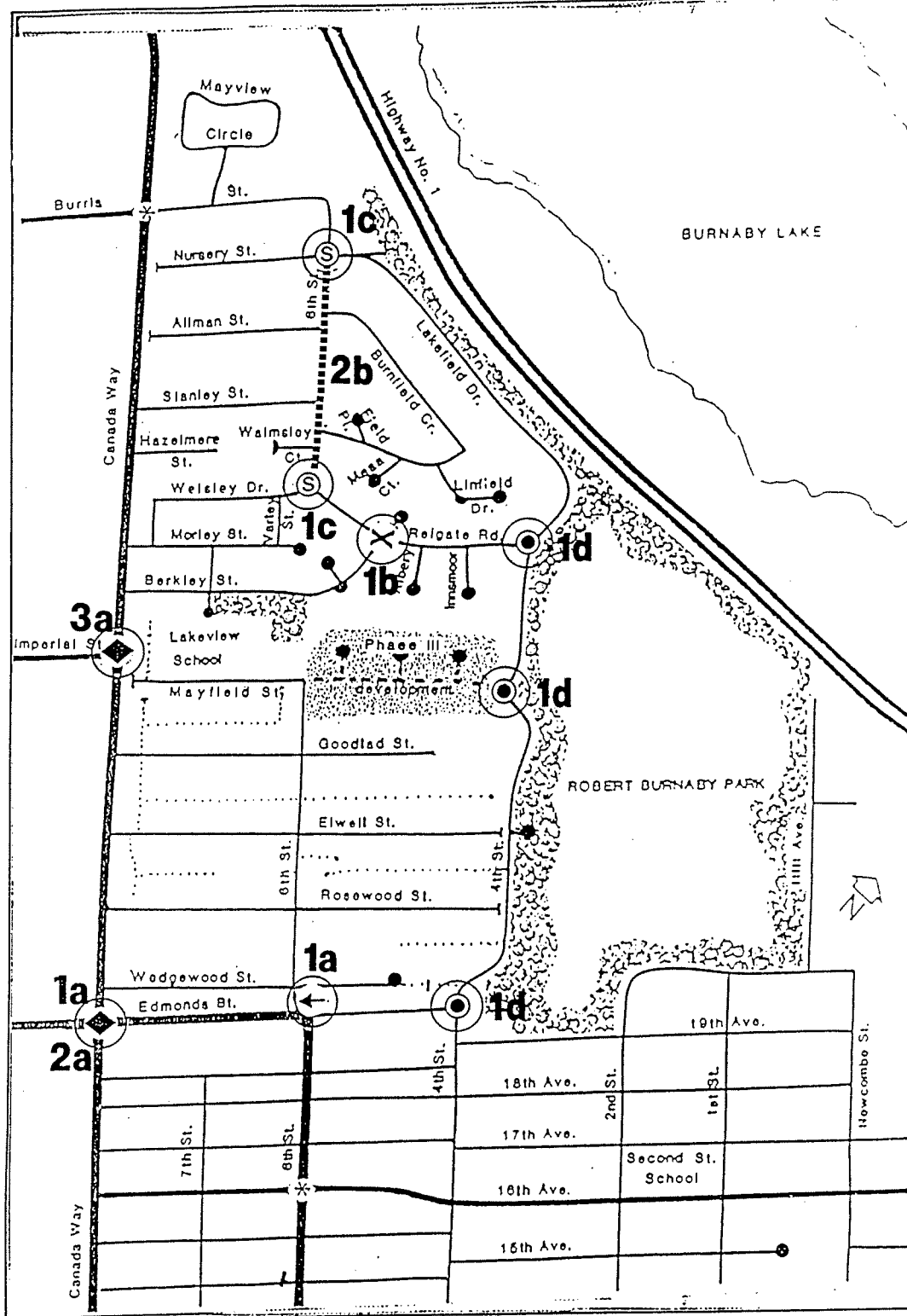


FIGURE 4
 COMMUNITY TRANSPORTATION PLAN
 LAKEVIEW AREA

Date:
 1993 01

Scale:
 N.T.S.

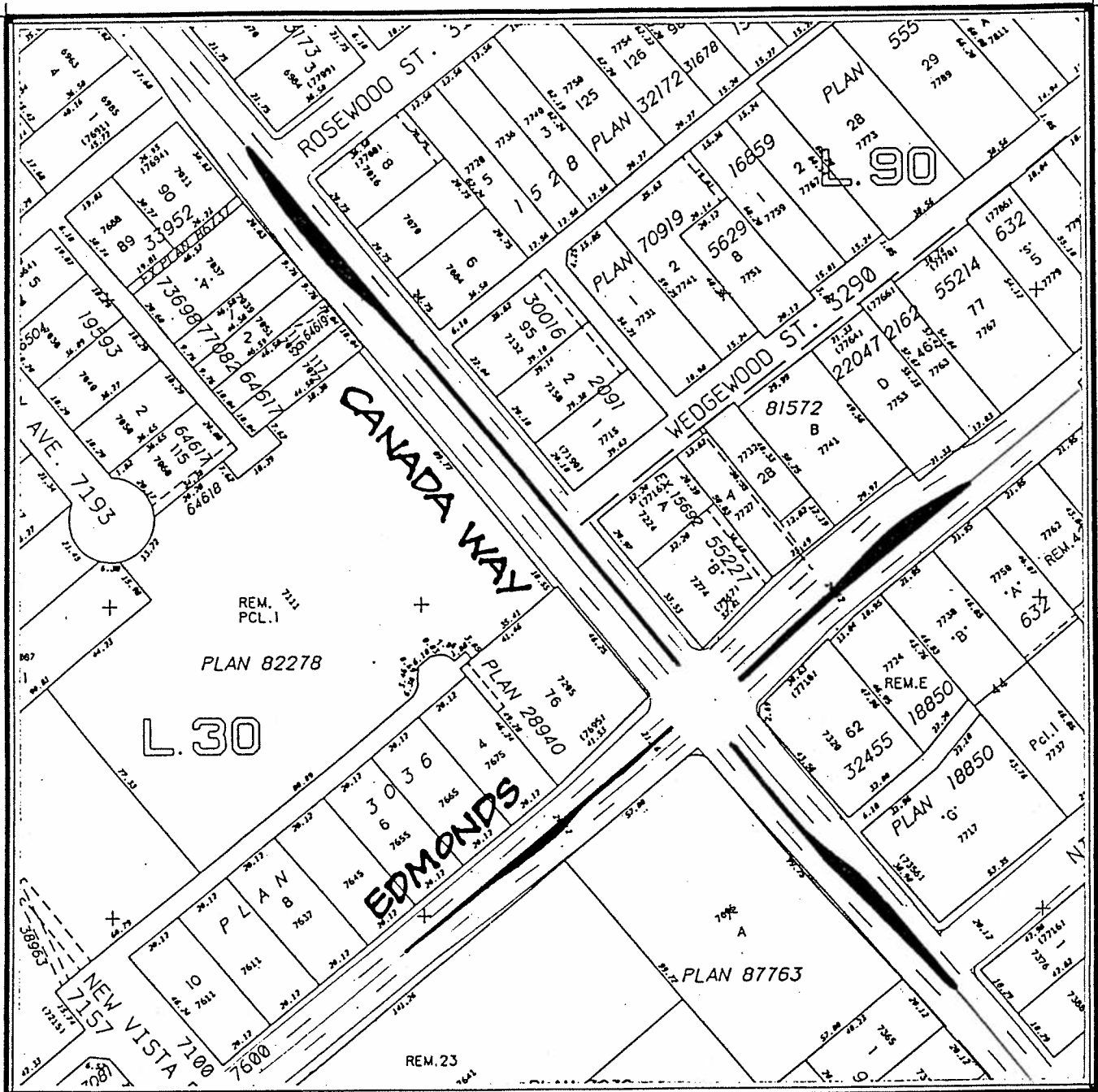
Drawn By:
 R.W.



Planning &
 Building Inspection
 Department



- (S) STOP SIGN
- (X) PEDESTRIAN CROSSWALK
- (◇) INTERSECTION IMPROVEMENTS
- (←) LEFT ARROW
- (C) TRAFFIC CIRCLES
- SIXTH STREET



Date:
1993 01

Scale:
1:2000

Drawn By:

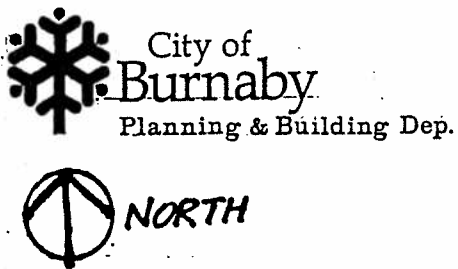


FIGURE 5

CANADA WAY/
EDMONDS
PROPOSED DESIGN

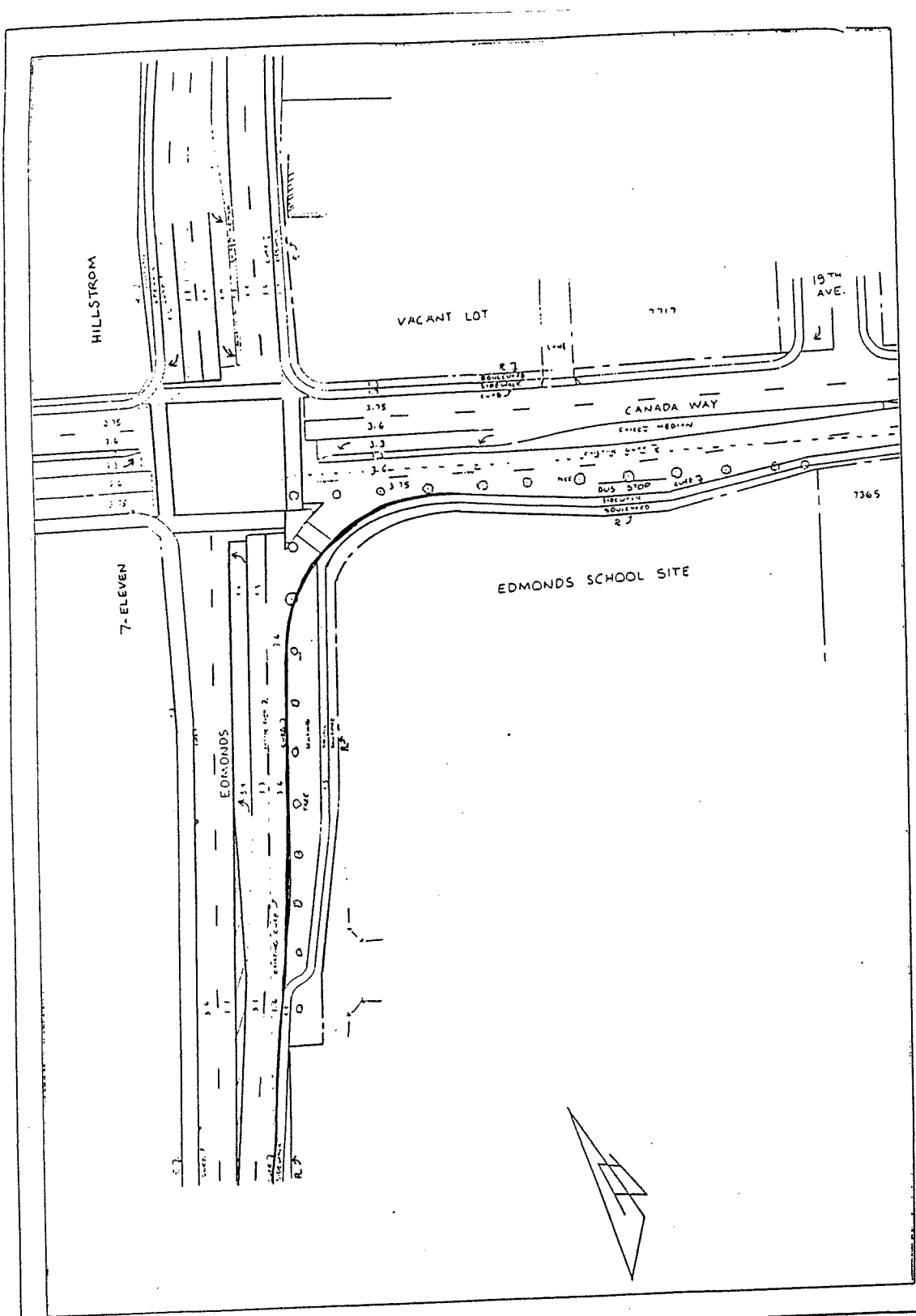


FIGURE 6

Date:	92 05 13
Scale:	NTS
Drawn By:	TESSLA


BURNABY
 Planning &
 Building Inspection
 Department

REDESIGN OF EDMONDS SECTION