

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRANSPORTATION AND TRANSIT DIVISION)

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

Re: Deer Lake Administrative And Cultural Area Access: Canada Way/Sperling  
Intersection And Related Projects.

RECOMMENDATIONS:

1. *THAT* Council approve the approach for the reconstruction of Canada Way at Sperling including signalization as outlined in Section 2.2 and Figure 1 **attached**, of this report.
2. *THAT* Council approve the modifications to Deer Lake Avenue to accommodate transit access to the Shadbolt Centre for the Arts as outlined in Section 3.1 and Figure 4 **attached** to this report.
3. *THAT* Council approve the reconstruction of Century Park Way to accommodate limited vehicular access to the Shadbolt Centre for the Arts as outlined in Section 3.2 and shown in Figure 6 **attached** to this report.
4. *THAT* Council approve the Implementation Schedule as outlined in Section 5.1 of this report.
5. *THAT* a copy of this report be forwarded to the Burnaby Parks and Recreation Commission.
6. *THAT* a copy of this report be forwarded to Mr. J. Jensen, Acting Regional Director, South Coast Region, Ministry of Transportation and Highways, Mr. Denis Clements, Vice President, Customer Service, BC Transit, and Mr. M. Bulietta, Taina Developments.

<p>: Copy - City Manager - Deputy City Mgr. Cor. Services - Director Engineering - Director Finance - Director Rec &amp; Cultural Ser. - Fire Chief, Bby Fire Department - Superintendent, RCMP - City Solicitor - Director Planning</p>
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REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1996 June 12 , adopted the attached report outlining various road improvement projects which will provide safe private vehicle, transit and pedestrian access to the Deer Lake Administrative and Cultural area, including the Shadbolt Centre for the Arts and the adjacent residential areas of Rayside and Buckingham Heights.

Respectfully submitted,

Councillor D. Evans  
Chairman

Councillor J. Young  
Member

(Attachments)

MEMBERS:

Mrs. Y. Coveney-Boyd  
Ms. L. Tatangelo  
Mr. W.B. Roxburgh  
Mr. L. Werden

TO: CHAIR & MEMBERS  
TRAFFIC AND TRANSPORTATION COMMITTEE  
(Transportation and Transit Division)

1996 JUNE 17

FROM: DIRECTOR PLANNING & BUILDING

SUBJECT: **DEER LAKE ADMINISTRATIVE AND CULTURAL AREA ACCESS:  
CANADA WAY/SPERLING INTERSECTION AND RELATED PROJECTS**

PURPOSE: To request approval of the Traffic and Transportation Committee to a number of road improvement projects to provide safe private vehicle, transit and pedestrian access to the Deer Lake Administrative and Cultural Area, including the Shadbolt Centre for the Arts and to the adjacent residential areas of Rayside and Buckingham Heights.

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**RECOMMENDATIONS:**

1. **THAT** the Traffic and Transportation Committee approve the approach for the reconstruction of Canada Way at Sperling including signalization as outlined in Section 2.2 and Figure 2 **attached**, of this report.
2. **THAT** the Traffic and Transportation Committee approve the modifications to Deer Lake Avenue to accommodate transit access to the Shadbolt Centre for the Arts as outlined in Section 3.1 and Figure 4 **attached**, of this report.
3. **THAT** the Traffic and Transportation Committee approve the reconstruction of Century Park Way to accommodate limited vehicular access to the Shadbolt Centre for the Arts as outlined in Section 3.2 and shown in Figure 6 **attached**, of this report.
4. **THAT** the Traffic and Transportation Committee approve the Implementation Schedule as outlined in Section 5.1 of this report.
5. **THAT** a copy of this report be forwarded to the Burnaby Parks and Recreation Commission.
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## REPORT

### 1.0 INTRODUCTION

The Deer Lake Area of Burnaby is the major administrative, cultural and recreational centre of the City comprising City Hall, the Justice Building, the Shadbolt Centre for the Arts, Heritage Village, the Burnaby Art Gallery, and Deer Lake Park.

To provide the main access to these civic facilities, Deer Lake Avenue was developed in the mid 80's. The design of Deer Lake Avenue recognized the need to discourage traffic infiltration into the park precinct and protect the natural features and environment values of Deer Lake Park. Features included a narrow road pavement, curvilinear route, "necklace" parking and access limitations. Largely, these measures have been successful in securing these objectives which continue to be pertinent to the interests of Deer Lake Park and the people who use it.

Access to the Deer Lake Area, however, has been a persistent concern amongst the residents of Burnaby and others who use the facilities and amenities of the area. The primary issues which have emerged in recent years include the following:

- (i) safety concerns for drivers and pedestrians using the intersection of Canada Way and Sperling;
- (ii) safe access for fire vehicles to and from Firehall #1.
- (iii) lack of convenient access by transit to civic facilities on Deer Lake Avenue including the Shadbolt Centre for the Arts and Heritage Village;
- (iv) difficulties experienced by Burnaby residents in locating facilities in the Deer Lake Administrative Area, particularly the Justice Building and RCMP buildings.
- (v) circuitous and confusing access to Deer Lake Beach;
- (vi) traffic infiltration in the Buckingham Heights area and lack of safe access to the Rayside area.

This report proposes for the consideration of the Traffic and Transportation Committee an overall plan for transportation improvements to address these issues including reconstruction and signalization of the intersection of Canada Way and Sperling, improvements to Deer Lake Avenue to allow usage by buses and minor modifications to Century Park Way to allow limited access from Canada Way to the Shadbolt Centre. It is intended that these improvements, as outlined in the following sections, would provide enhanced access for genuine park and administrative area users without materially compromising the "Park Drive" characteristics of Deer Lake Avenue.

## 2.0 CANADA WAY/SPERLING INTERSECTION

### 2.1 Background

The intersection of Canada Way and Sperling provides the major access to the Deer Lake Area where the City of Burnaby has established major administrative, cultural and recreational facilities. The intersection also provides access to Fire Hall #1 and the Buckingham and Rayside residential areas on the south and north sides of Canada Way respectively.

The Rayside area located north of Canada Way has no safe access except via Canada Way at the unsignalized intersections of Clayton and Rayside Avenues. As both of these intersections are located downstream from both a curve and incline on Canada Way, left turns in and out from these intersections are extremely hazardous. Recognizing this problem, the Planning Department identified the need for signalization of the intersection of Canada Way and Sperling in conjunction with review of a 23 lot single family housing development proposed for the Rayside area. Development of this housing as part of an overall development of the Rayside area as shown in **Figure 1** would also involve closure of Clayton Avenue, conversion of Rayside Avenue to right in/right out only and the extension of Claude Avenue to the future signalized intersection of Canada Way and Sperling. These improvements, funded by the developer, are intended to ensure safe access for existing and future residents of the Rayside area.

Following from the review of the rezoning, partial funding of the Canada Way/Sperling intersection improvements by the developer were included as servicing requirements for the development subject to Ministry approval of signalization. After lengthy discussion with the Ministry of Transportation and Highways over the past two years, approval of the Ministry to signalization of Canada Way and Sperling as a key component of a number of projects to improve access to the Deer Lake area, was recently secured. With Ministry approval of the intersection design, the Canada Way/Sperling project can now proceed.

### 2.2 Functional Design

The functional design for the reconstruction of Canada Way and Sperling is shown in **Figure 2**. The design provides for the development of opposing left turn lanes on Canada Way to Sperling Avenue, a right turn lane from Canada Way to Sperling southbound, and full signalization of the intersection. The opposing left turn lanes on Canada Way will significantly improve traffic flow on Canada Way and reduce the number and severity of rear end collisions. The provision of a right turn lane from Canada Way southbound to Sperling also allows right turning vehicles to safely exit from through traffic to access Heritage Village and the other civic facilities in the Deer Lake area. Widening of the turning radius at the northwest corner of Sperling onto Canada Way will allow faster and safer access for fire trucks onto Canada Way (Figure 1) from Fire Hall #1 based on four way red activation of the traffic signal from their control centre.

**2.3 Property Acquisition**

Reconstruction of the intersection of Canada Way and Sperling will require widening of the existing right-of-way on the north and south sides of Canada Way immediately west of Sperling Avenue on City owned property currently zoned for Park and Institutional purposes - P2. Approval of the Burnaby Parks and Recreation Commission has been granted for the dedication of this property as road right-of-way. The only privately owned property required is a truncation at the northwest corner of the property currently occupied by the 7-11 Convenience Store and Service Station.

**2.4 Funding**

The preliminary estimate for the improvements to the intersection of Canada Way and Sperling is \$700,000 including signalization of the intersection. Recovery of approximately \$280,000 of these construction costs is proposed through a charge levied against future residential developments in the Rayside area (Figure 1). Residents of the area at a Public Hearing into the recent development of the 23 lot subdivision previously discussed, emphasized the need for a safe access into and out of the area. The applicant for the rezoning has since agreed to an \$80,500 payment towards the cost of the Canada Way/Sperling improvements. The cost sharing formula agreed to by this developer amounts to a charge of \$3,500 per unit which would be used as the basis for a development cost charge applied to future developments in the Rayside area. A report defining a development cost charge bylaw will be brought forward for Council consideration if Council approves the Canada Way/Sperling improvements as outlined in this report.

**3.0 ACCESS TO THE SHADBOLT CENTRE**

**3.1 Transit Access**

Access to the Deer Lake Area by bus is currently available from Canada Way and Deer Lake Parkway located on the periphery of the area, but this necessitates a two to three block walk to most civic facilities including the Shadbolt Centre for the Arts. In view of the importance of these facilities to the community, more direct access by transit is desired.

The reconstruction of Canada Way at Sperling with opposing left turn lanes and full signalization creates the opportunity to consider improved transit access to the Deer Lake Area. As shown in **Figure 3**, improved transit access can be provided by rerouting existing Canada Way bus services via Deer Lake Avenue. Buses would be rerouted from Canada Way left turning onto Sperling and from Sperling right turning onto Canada Way in the opposite direction. To be accommodated efficiently and safely, these movements require left turn lanes and signalization at the intersection, with modifications to enlarge curve radii and provide bus stopping areas to accommodate transit vehicles on Deer Lake Avenue. Staff are currently reviewing with BC Transit the extent of the modifications required to Deer Lake Avenue recognizing the need to absolutely minimize impact on trees adjacent to the road.

The preliminary estimate for the construction costs of the proposed modifications shown in **Figure 4** is \$70,000.

### 3.2 Vehicular Access

The signalization of Canada Way and Sperling accommodates access from the east on Canada Way and from the north along Kensington to the Shadbolt Centre and other Deer Lake facilities. Access from the west on Canada Way, however, is both circuitous and confusing to Burnaby residents. While facilities such as the Shadbolt Centre, the RCMP and the Justice Building can be seen from Canada Way, there is no discernable direct access off Canada Way to these facilities. In the absence of convenient access, Burnaby residents have difficulty locating these facilities and are constantly finding themselves at City Hall inquiring directions to the Justice Building.

Century Park Way, which connects Canada Way with Deer Lake Avenue at the entrance to the Shadbolt Centre and adjacent to the Justice Building, offers the opportunity to provide limited direct access from Canada Way. Currently, the use of Century Park Way is restricted to emergency vehicles with its primary use being police vehicles entering and exiting from the RCMP Building. With some minor modifications to Century Park Way, however, it is possible to permit public use of this road southbound only without compromising its use by the RCMP or other emergency vehicles, which often have to exit quickly in the northbound direction onto Canada Way. It is proposed therefore, that Century Park Way be made available for use by the public in the southbound direction only (i.e. to the Shadbolt Centre) from Canada Way, as shown on **Figure 5**. As restrictions on public vehicle access from Deer Lake Avenue northbound to Canada Way would be maintained, RCMP staff have reviewed this proposal and have indicated their concurrence.

Traffic volumes on Deer Lake Avenue would not be increased by the private vehicle use of Century Park Way because the access from Canada Way would only be used by vehicles already destined for facilities in the Deer Lake area who would be otherwise access Deer Lake Avenue from Deer Lake Parkway or Canada Way at Sperling. No additional traffic on Deer Lake Avenue would be generated.

In summary, the proposed change would allow right turn only access from Canada Way to the Shadbolt Centre. Left turn access for private vehicles from Canada Way into Century Park Way would not be available as it is currently prohibited by signing and the presence of the median on Canada Way. Traffic flow eastbound on Canada Way would therefore not be disrupted by left turning vehicles. To accommodate right turning vehicles from Canada Way, minor curbswork will be required to enlarge the radius on the curve as shown in **Figure 6**. With these proposals, Century Park Way would become the "entrance" to the Shadbolt Centre for eastbound patrons and could be designated as such with attractive "entranceway" signing for eastbound traffic and appropriate landscaping at Canada Way and along Century Park Way. The estimated cost of these changes is \$30,000.

#### 4.0 BUCKINGHAM HEIGHTS AND DEER LAKE BEACH ACCESS

##### 4.1 Buckingham Heights Community Transportation Plan

Provision of a full signal at Canada Way and Sperling will improve access for residents of the Buckingham Heights area of Burnaby onto Canada Way to and from the westbound direction. However, as shown in **Figure 7**, signalization could also tend to encourage more diversion of traffic from Burris Street via Buckingham Street and Sperling Avenue to left turn out onto Canada Way at the Sperling Avenue intersection. Measures available to mitigate or eliminate potential traffic infiltration could range from speed humps on Buckingham Street to intersection treatments on Buckingham at Burris including a delta island or complete closure. These measures, however, would only be considered in consultation with residents of the Buckingham area through a Community Transportation Plan process. It would be necessary to complete this process including implementation of the traffic calming measures prior to activating the signal at Canada Way and Sperling.

##### 4.2 Deer Lake Beach Access

Access to Deer Lake Beach, a recreation facility for all residents of Burnaby is currently only available using a circuitous route via Burris, Buckingham Avenue and Sperling Avenue. As the potential implementation of traffic calming measures on Buckingham Avenue would impact this existing access to Deer Lake Beach consideration should be given to changing the beach access route to be via Canada Way and Sperling Avenue. This change in access would require a reconfiguration of the existing partial closure of Sperling south of Deer Lake Avenue, and the possible installation of a delta island at the intersection of Buckingham and Sperling to permit beach access while preventing access to Buckingham Avenue. The Community Transportation Plan process would review both the Deer Lake Beach access and traffic measures for Buckingham Heights. The preliminary estimate for the cost of both the Buckingham Heights traffic measures outlined in Section 4.1 and the Deer Lake Beach access improvements is \$50,000.

#### 5.0 IMPLEMENTATION STRATEGY

##### 5.1 Project Implementation

In view of the desirability of completing the improvements to Deer Lake Access within a reasonable time frame it is proposed to initiate some of these projects in 1996 for completion of all of the improvements by June 1997. To meet this timing the following scheduling is proposed:

- (i) 1996 Activities
  - ▶ Complete design of Canada Way/Sperling intersection improvements; approval by Ministry of Transportation and Highways - 1996 October.



- ▶ Design and construct improvements for limited vehicle access to Century Park Way from Canada Way - 1996 October.
- ▶ Initiate Community Transportation Plan for Buckingham Heights Area - 1996 November.
- ▶ Complete design for transit access improvements to Deer Lake Avenue - 1996 October.

(ii) 1997 Activities

- ▶ Complete Buckingham Heights neighbourhood traffic measures and Deer Lake Beach access improvements - 1997 June.
- ▶ Complete Canada Way intersection improvements and activate traffic signal - 1997 June.
- ▶ Complete transit access improvements to Deer Lake Avenue and initiate transit service - 1997 June.

**5.2 Project Funding**

A breakdown of the estimated costs of the access improvements to the Deer Lake Area is shown in Table 1 below.

**Table 1  
 Deer Lake Access Improvements**

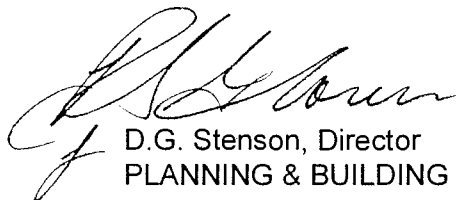
PROJECT	ACTIVITY			
	Construction	Signalization	Landscaping	Total
Canada Way/Sperling	\$600,000	\$90,000	\$10,000	\$700,000
Deer Lake Avenue	60,000		10,000	70,000
Century Parkway	25,000		5,000	30,000
Buckingham Heights	50,000			50,000
<b>Total</b>	<b>\$735,000</b>	<b>\$90,000</b>	<b>\$25,000</b>	<b>\$850,000</b>

Due to the previous uncertainty of Ministry approval for signalization of Canada Way and Sperling, the improvements to Deer Lake access were not included in the 1996 - 2000 Capital Budget. However, in consideration of the importance of these projects to the residents of Burnaby it is proposed that these improvements be approved in the 1996 fiscal year so that work can be initiated this year for completion in 1997. If Council concurs, a Capital Works and Expenditure Bylaw in the amount of \$850,000 would be brought down in 1996. The Director of Finance advises that sufficient Capital Reserves are available to finance the Deer Lake Area Access improvements, however, approval of this project would cause the 1996 Capital Spending Limit to be exceeded by approximately \$60,000.

## 6.0 CONCLUSION

With the recent approval of signalization to the Canada Way/Sperling Avenue intersection by the Ministry of Transportation and Highways there are opportunities not only to upgrade this unsafe intersection, but also to undertake a comprehensive program to improve access to the administrative, cultural and recreational facilities in the Deer Lake Area of Burnaby and to the adjacent residential areas of Rayside and Buckingham Heights. The Shadbolt Centre for the Arts would be provided with better transit service via Deer Lake Avenue and improved vehicle access from Canada Way via Century Park Way simultaneously with a landscaping and signing program. Improvements to the Canada Way/Sperling intersection, however, must be undertaken in conjunction with a Community Transportation Plan for the Buckingham Heights area so as to improve access from this neighbourhood and to Deer Lake Beach without encouraging traffic infiltration.

The projects outlined in this report are intended to improve access to civic facilities without compromising the natural amenities of the park precinct or the ambience of Deer Lake Avenue. In view of the major benefits of these projects to the facilities in the Deer Lake Area, to local neighbourhoods and to all residents of Burnaby who use these civic facilities, it is recommended that the Traffic and Transportation Committee approve the recommendations in this report which would allow these projects to be initiated in 1996 and 1997, and completed in 1997.

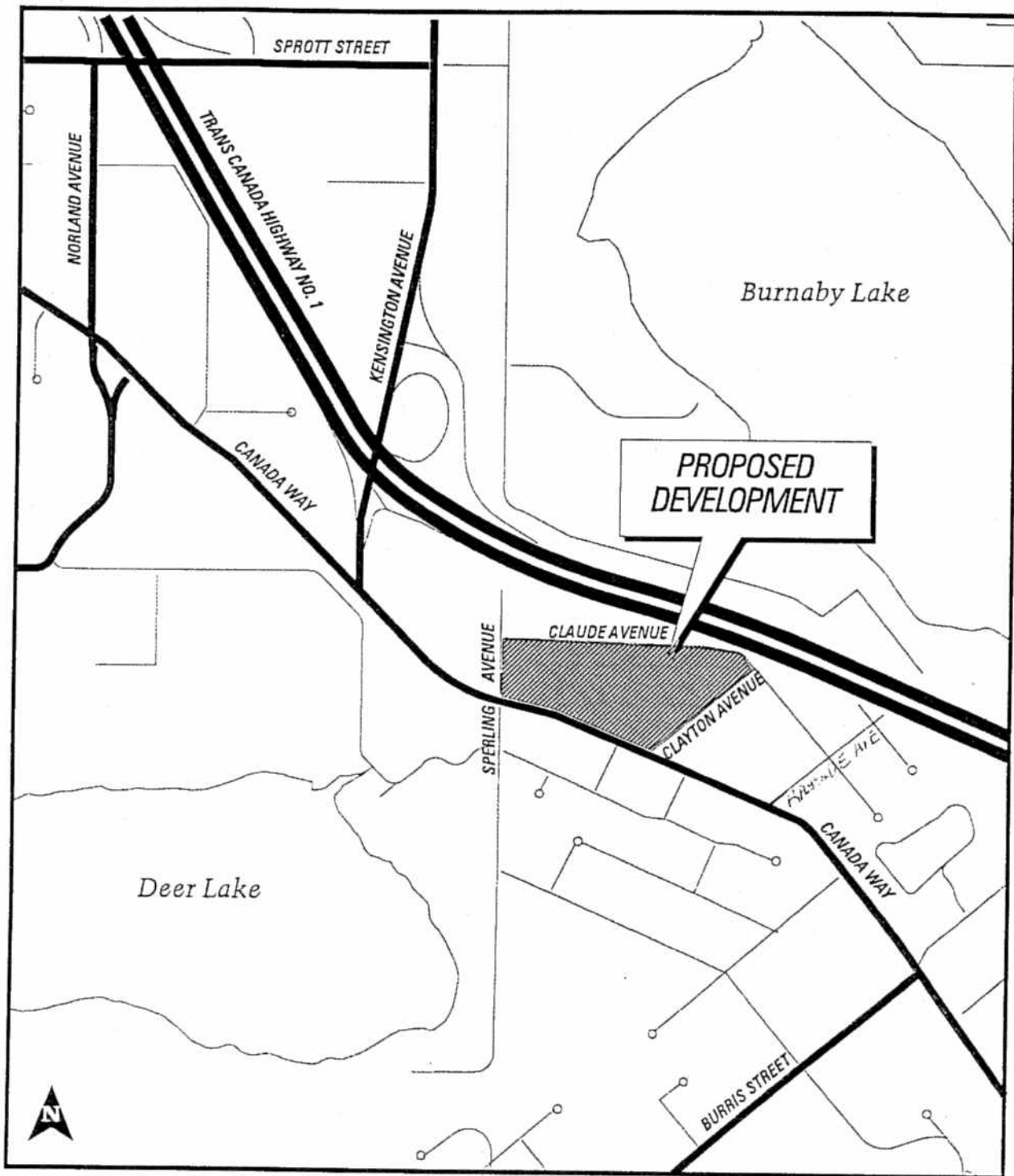


D.G. Stenson, Director  
PLANNING & BUILDING

RG/jp  
Attachments (7)

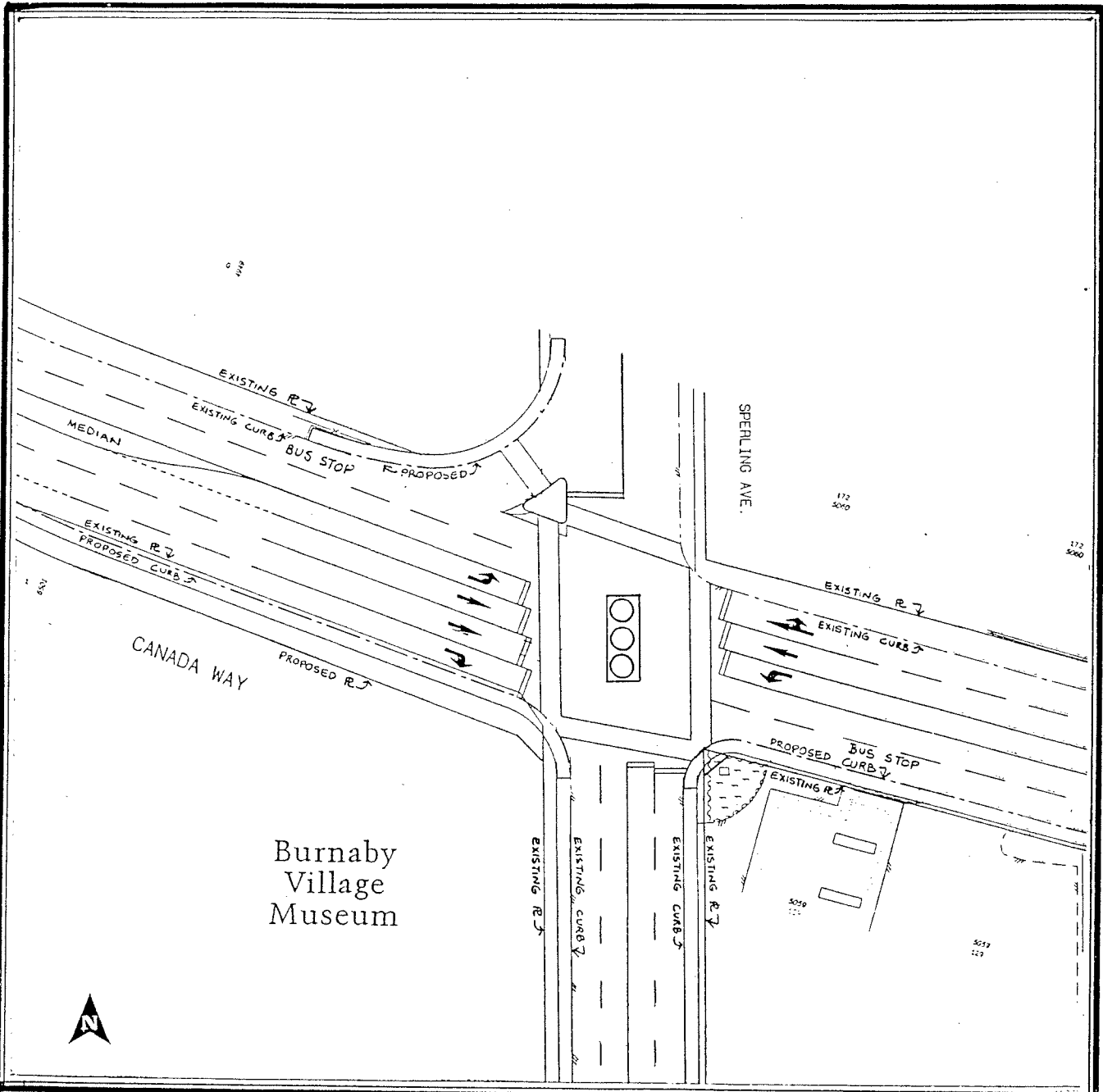
copy: City Manager  
Deputy City Manager, Corporate Services  
Director Engineering  
Director Finance  
Director Recreation & Cultural Services  
Fire Chief, Burnaby Fire Department  
Superintendent, RCMP  
City Solicitor

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**Proposed Development**

Figure 1



Date: 96 04 25

Scale: NTS

Drawn By: JAT



FIGURE 2

# Canada Way / Sperling Avenue

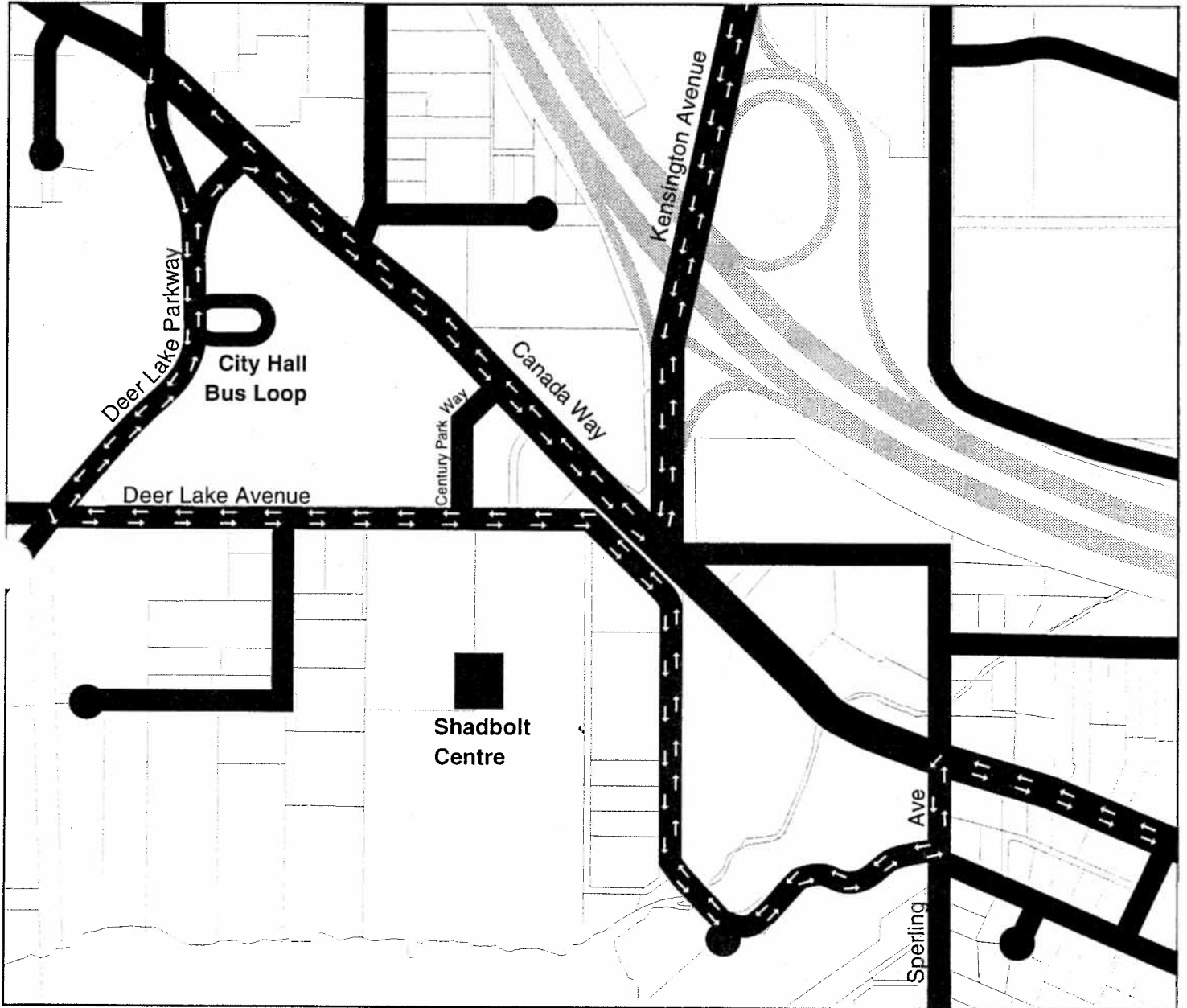


Figure 3

## Deer Lake/Shadbolt Centre Bus Routing



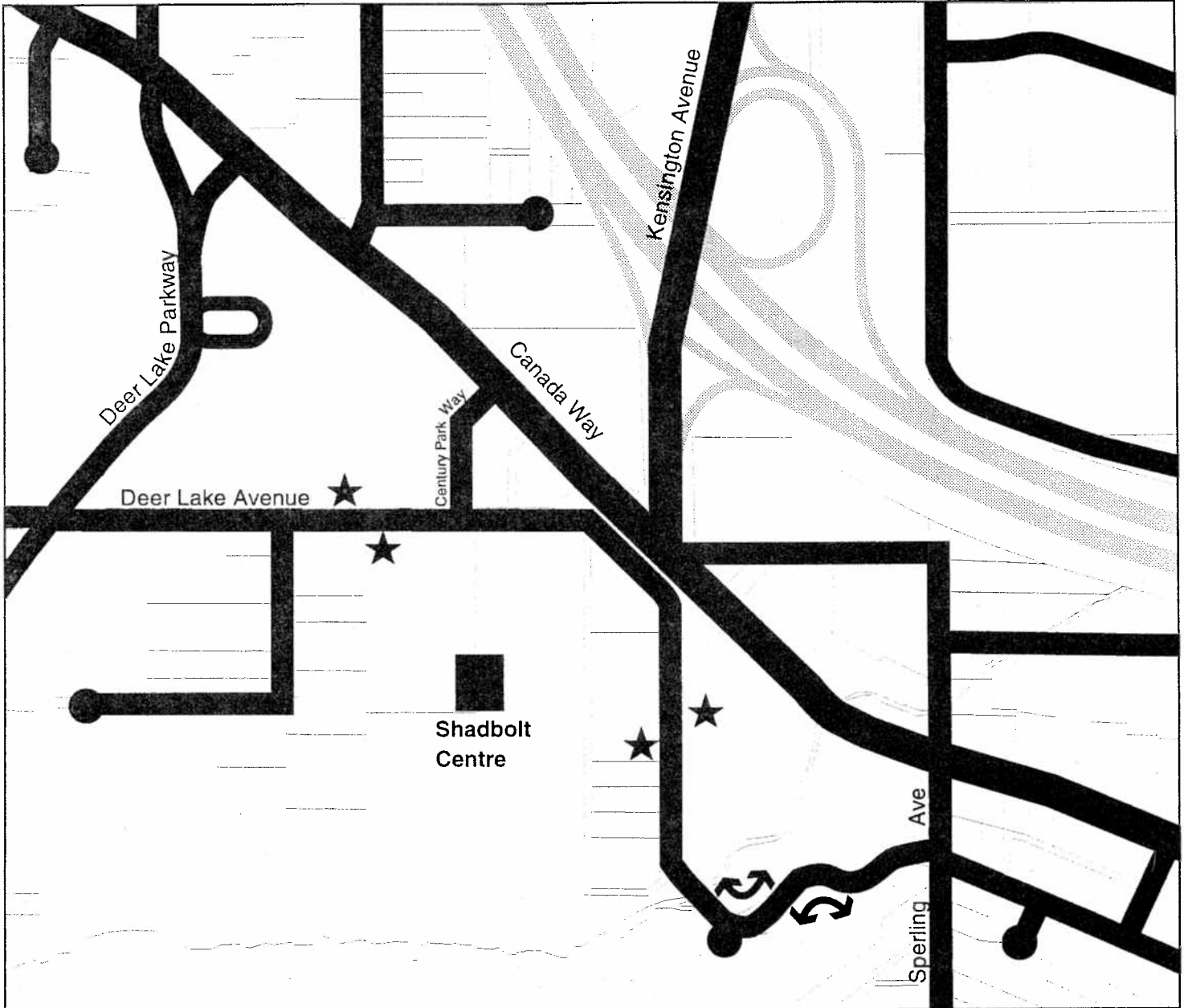


Figure 4

## Shadbolt Centre Transit Access: Deer Lake Avenue Modifications

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- ★ Transit Stops
- ↻ Road Curvature Modifications

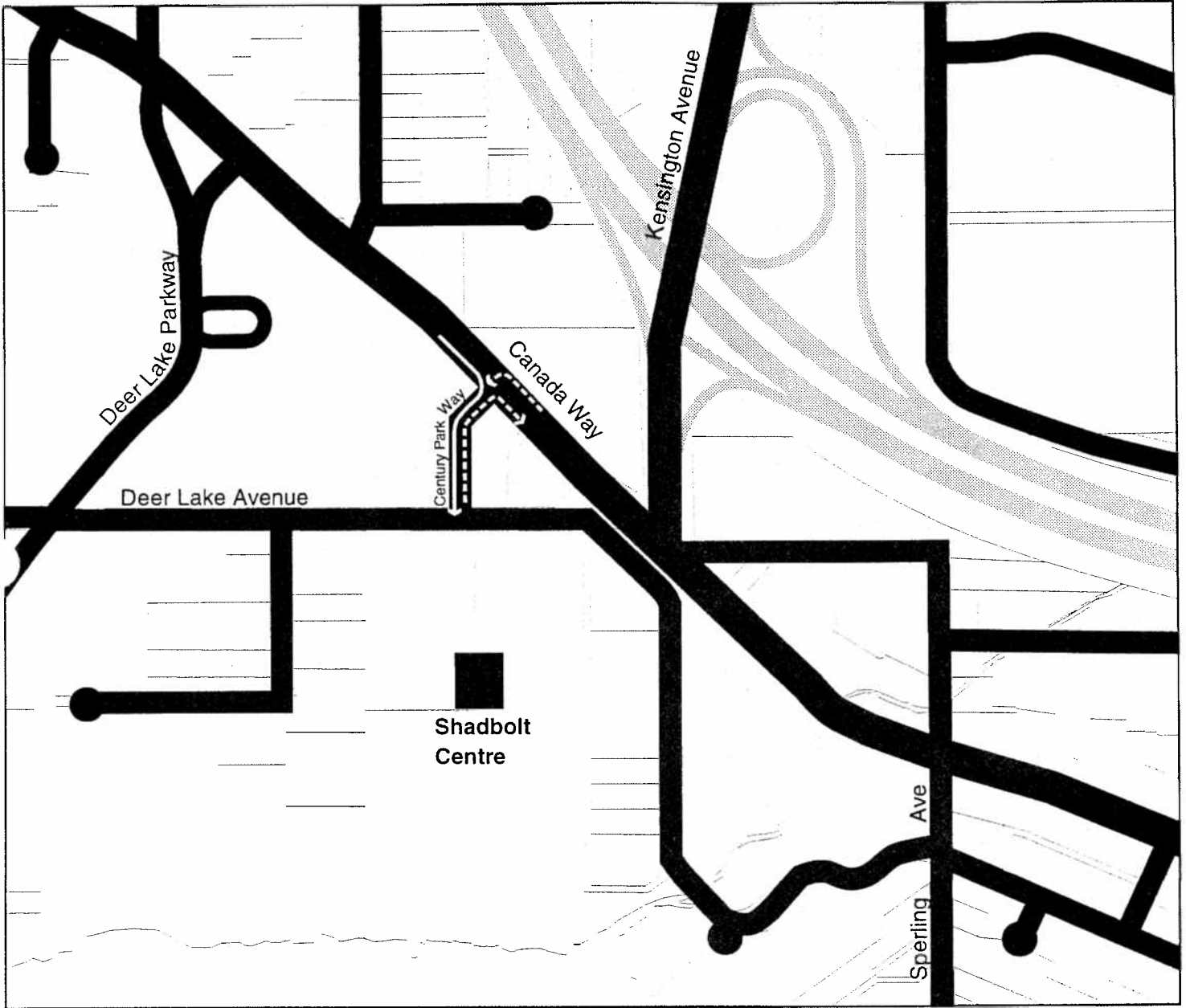


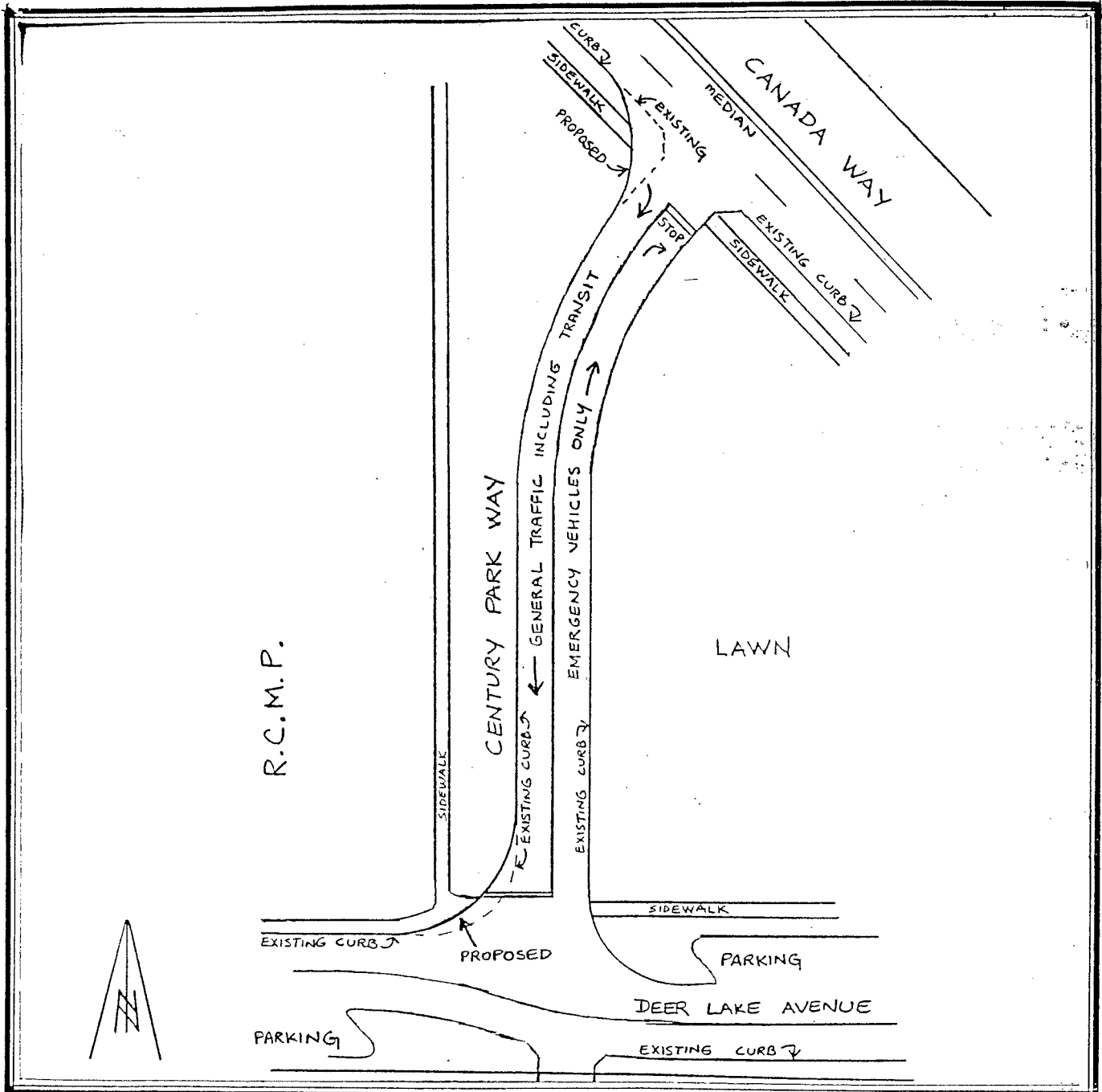
Figure 5

**Shadbolt Centre:  
Access from Canada Way via  
Century Park Way**

Private vehicle access

Emergency vehicle access

north



Date: 96 04 25

Scale: NTS

Drawn By:



FIGURE 6

CENTURY PARK WAY IMPROVEMENTS



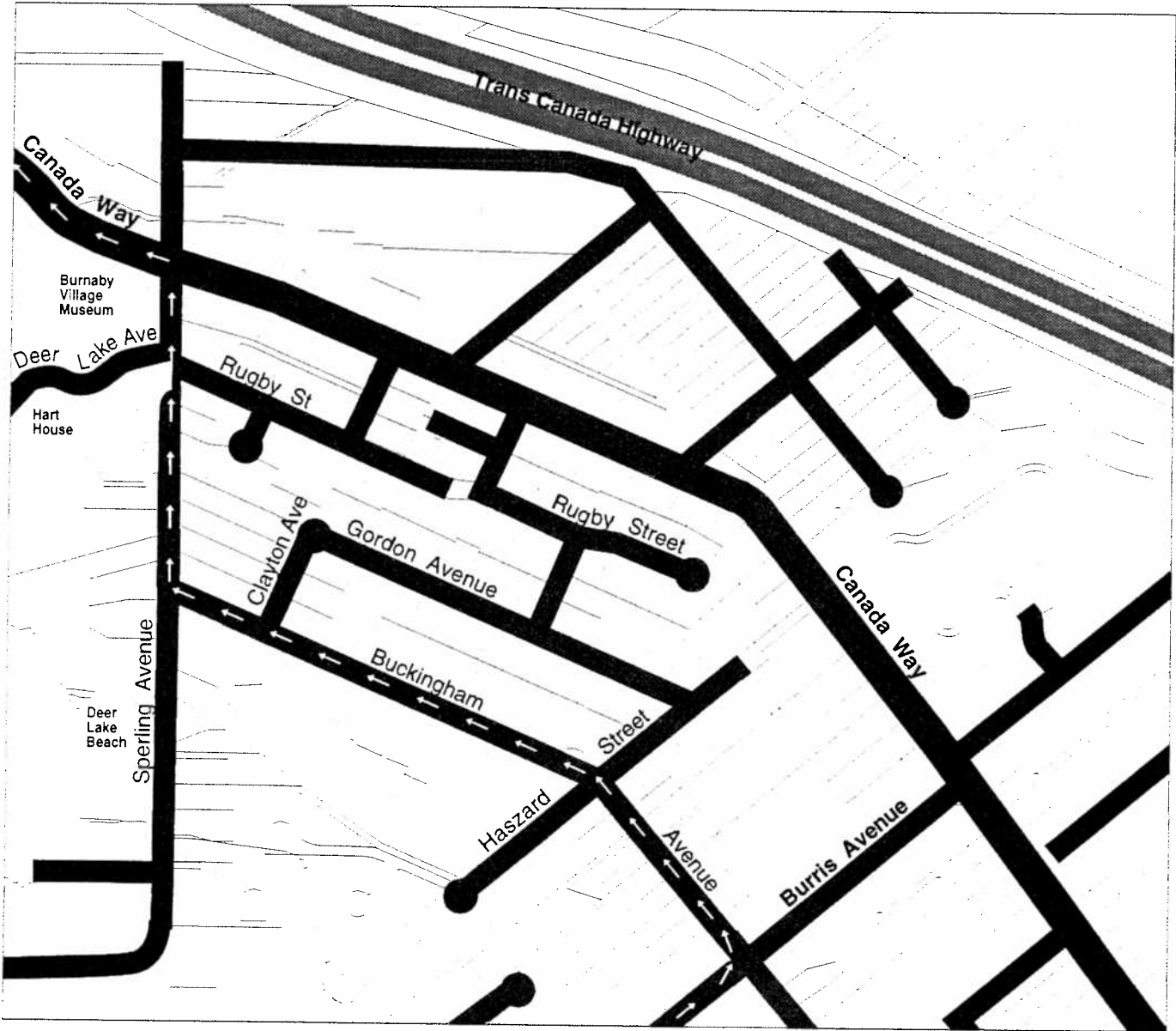


Figure 7

## Buckingham Heights Traffic Infiltration Route



