

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf. **25 20-97-R085D**
Your File/V/Réf.

DATE 25 March 1997

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services
Environment and Transportation Department

SUBJECT/OBJET **MODIFICATIONS TO THE INTERSECTION OF BANK
STREET AND CAHILL DRIVE**

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee recommend Council approve the proposed modifications to the intersection of Bank Street and Cahill Drive to accommodate the extension of Cahill Drive on the west side of Bank Street as illustrated in Annex C with the prohibition of eastbound and westbound through traffic (school buses and bicycles exempted) on Cahill Drive, subject to the registered owner, South Keys Shopping Centre Limited:

- 1. paying the total cost for all modifications to the intersection including changes to the traffic control signals, signs and pavement markings, and;**
- 2. executing a legal agreement with respect to (1) above;**

and authorize the initiation of the public hearing process as required by Sections 297 and 300 of the Ontario Municipal Act.

BACKGROUND

On 16 February 1994, the Planning and Economic Development Committee of the City of Ottawa approved a subdivision application for the development of a multi-phased shopping complex located at 2210 Bank Street. One of the conditions for the approval was that the registered owner construct, to the satisfaction of the Commissioner of Engineering and Works of the City of Ottawa and at no cost to the City, an extension to Cahill Drive from Bank Street to Hunt Club Road. The site location is shown in Annex A.

An important consideration in the changes to this intersection is the area residents' concern regarding the potential for non-resident, through traffic on Cahill Drive, east of Bank Street. This concern has been addressed in the proposed operation for the intersection.

EXISTING CONDITIONS

Pedestrians

Concrete sidewalks exist on both sides of Bank Street and on the existing section of Cahill Drive. Traffic volume surveys completed in June 1996 indicate the following characteristics.

1. Over an 8-hour period, pedestrian crossing volumes are highest between 11:30 am and 12:30 pm (55 pedestrians) and between 4:00 pm and 5:00 pm (52 pedestrians).
2. Most pedestrians cross Bank Street (63% of the 8-hour total) on the north side of Cahill Drive (southbound approach). These crossing volumes range from 5 to 33 per hour on the north side and from 2 to 27 per hour on the south side (northbound approach).
3. During the same period of time, the number of pedestrians crossing Cahill Drive range from 4 to 19 per hour.

The pedestrian crossing volumes at this intersection are about the same as the other signalized intersections on Bank Street in this area.

Bicycles

A 1.5 m southbound bicycle lane is provided on Bank Street along the frontage of the South Keys Shopping Centre which extends from Johnston Road to immediately south of Cahill Drive. No bicycle lanes are provided for either northbound cyclists on Bank Street or for cyclists on Cahill Drive. The following traffic volume characteristics are taken from surveys completed in June 1996.

1. A total of 123 bicycles proceed through the intersection over an 8-hour period.
2. On Bank Street during this 8-hour period, northbound bicycle volumes range from 2 to 11 per hour while volumes for southbound cyclists range from 2 to 10 per hour.
3. Over the same period of time on Cahill Drive, eastbound bicycle volumes range from 0 to 11 per hour and westbound bicycle volumes range from 0 to 4 per hour.

Transit

The Public and Separate School Boards in the RMOC and OC Transpo were contacted regarding bus service in the vicinity of this intersection.

OC Transpo indicated that there are two bus routes which currently turn left at this intersection. The #43 bus route turns left onto Cahill Drive from Bank Street and the #1 bus route turns left onto Bank Street from Cahill Drive. OC Transpo have no immediate plans to use the westerly extension of Cahill Drive.

The Ottawa-Carleton French Language School Board indicated they currently have a school bus route which makes a left turn from Bank Street onto Cahill Drive and one that turns left onto Bank Street from Cahill Drive. They also mentioned that since some students reside near Bridle Path Drive, there is the likelihood that the future extension of Cahill Drive may be used to conveniently access Bridle Path Drive.

The Ottawa Roman Catholic School Board pointed out that they have one bus route that turns left onto Bank Street from Cahill Drive. Since some existing bus routes use Bridle Path Drive, it is probable that the Cahill Drive extension will be used to access Bridle Path Drive south of Heron Road.

The Ottawa Board of Education indicated that they have bus routes on Bridle Path Drive and, in the future, may use the extension of Cahill Drive to access Bridle Path Drive.

Automobiles

Bank Street is a 4-lane divided arterial with a posted speed limit of 60 km/h. Traffic volumes recorded in 1996 indicated an annual average daily traffic volume of 11,490 vehicles northbound and 11,730 vehicles southbound in the vicinity of Cahill Drive.

Bank Street's existing southbound approach to Cahill Drive is comprised of three through lanes and a left-turn lane. Immediately south of Cahill Drive, the southbound curb lane on Bank Street is terminated and two southbound through lanes continue. Northbound on Bank Street at Cahill, two through lanes, a left-turn lane and a right-turn lane are currently provided. In advance of the left-turn tapers, concrete medians, approximately 5 m in width separate northbound and southbound traffic on Bank Street.

Cahill Drive is a 2-lane residential/collector road, with a posted speed limit of 50 km/h. Traffic volumes recorded in 1996 indicated a westbound annual average daily traffic volume of 1,480 vehicles.

Cahill Drive's existing westbound approach to Bank Street is comprised of a left-turn lane and a channelized right-turn lane.

The existing geometry and operational features of this intersection are illustrated in Annex B.

DESIGN AND OPERATIONAL PROPOSALS

We recommend that, should the Transportation Committee fail to approve all of the following proposals which are outlined in Annex C, this report be referred back to the Department for review and reconsideration. The owner/developer has agreed to pay for all costs related to the extension of Cahill Drive from Hunt Club Road to Bank Street.

Proposed Geometric Changes

The proposed modifications to this intersection include the following geometric changes:

1. the provision of an extension to Cahill Drive on the west side of Bank Street;
2. the provision of a channelled southbound right-turn lane; and
3. the construction of a concrete median on Cahill Drive at both the eastbound and westbound approaches to Bank Street.

Proposed Operational Changes

With regard to the current traffic operations at this intersection, the proposed modifications will entail the following changes:

1. the introduction of northbound left turns (currently the existing northbound left-turn lane is painted out);
2. the introduction of eastbound left turns;
3. the introduction of eastbound and southbound right turns; and
4. the prohibition of eastbound and westbound through movement with the exception of authorized vehicles (buses and bicycles).

Automobiles

The Department has noted the concerns from some area residents that, because of Cahill Drive's proposed extension to Hunt Club Road and the commercial attractions west of Bank Street, there is the potential for an increase in through traffic through the neighbourhood on the east side of Bank Street. Based on past successful experiences in dealing with other similar neighbourhood concerns for the infiltration of non-resident through traffic, the Department proposes to prohibit through vehicular movement except for bicycles and buses.

Pedestrians

Pedestrians will be protected by traffic control signals and will be provided with pedestrian crosswalks to safely cross all legs of the intersection. The current distance for pedestrians to cross Bank Street is approximately 27 m on the north side and 30 m on the south side of Cahill Drive. Approximately 25 m is required for pedestrians to cross Cahill Drive. These crossing distances will not be changed with the proposed intersection modifications. As mentioned earlier, sidewalks are provided on all sides of the intersection.

Bicycles

The existing bicycle system will not be affected by the modifications to this intersection and the proposed restrictions on through movement will not apply to cyclists.

Transit

Transit service and accessibility will not be negatively affected by the modifications to the intersection and could be enhanced should OC Transpo wish to provide bus service on the proposed Cahill Drive extension.

As previously indicated, the future extension of Cahill Drive to Hunt Club Road will optimize the future routing of school buses by enhancing accessibility to and from Bridle Path Drive.

FINANCIAL STATEMENT

Should Regional Council approve the proposed modifications to the intersection, the developer, South Keys Shopping Centre Limited, will be responsible for 100% of all costs.

COST ESTIMATE

The following cost estimates, prepared by Oliver, Mangione and McCalla Engineering Consultants, and iTrans Consulting are conceptual and are provided solely for the information of the Transportation Committee and Regional Council.

<u>Item</u>	<u>Cost Estimate</u>
Construction	\$30,000
Traffic Control Signals including Signs and Pavement Markings (<u>does not</u> include underground traffic plant)	\$75,000
Engineering	\$2,100
Contingencies	<u>\$1,500</u>
TOTAL COST	\$108,600

CONSULTATION

The opportunity for general public input will be provided via the public hearing process.

The proponent, the City of Ottawa, and the South Keys Greenboro Community Association discussed plans for the proposed modifications to the intersection.

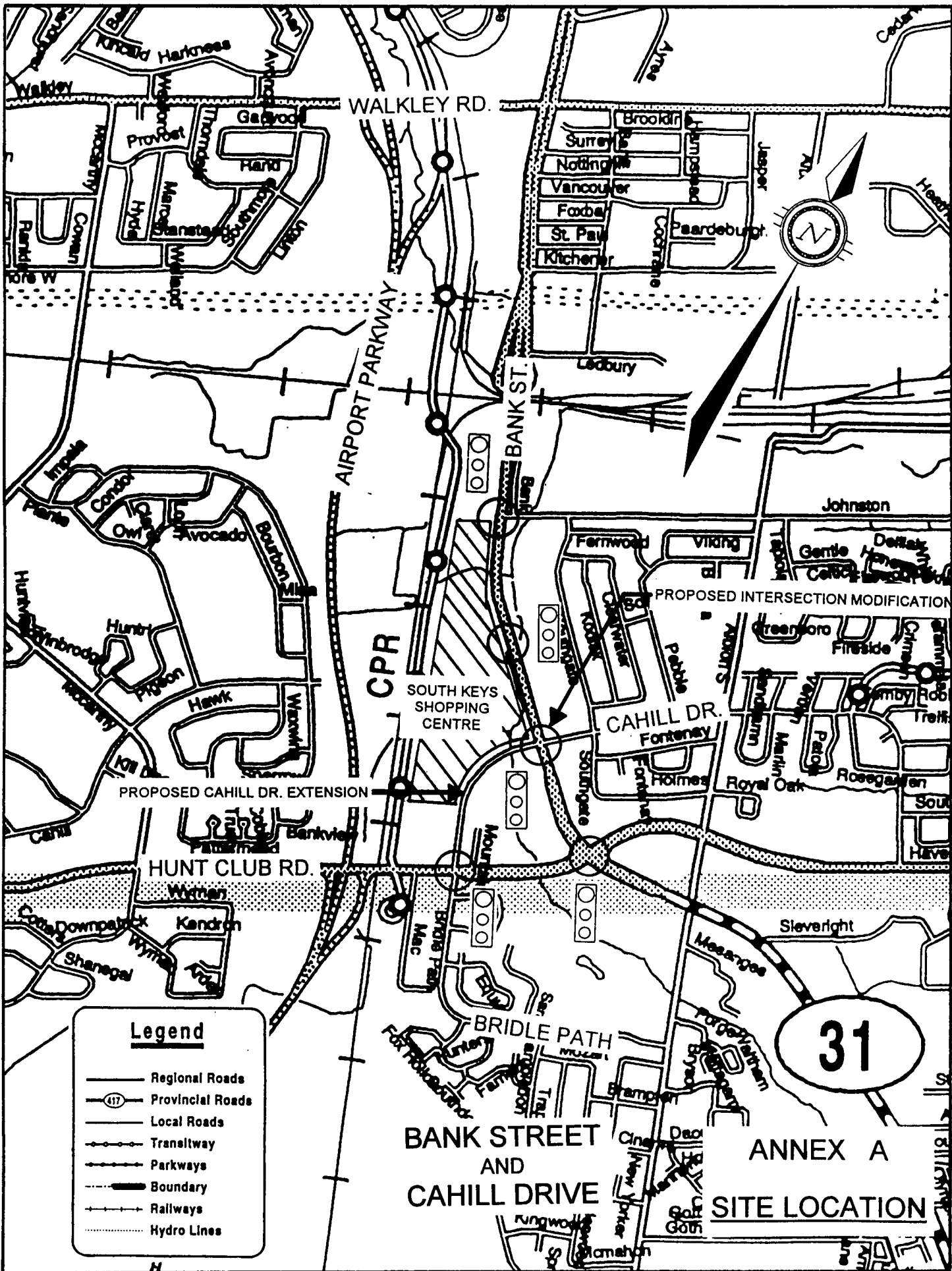
COMMENTS FROM THE REGIONAL CYCLING ADVISORY GROUP

This report will be presented to the Regional Cycling Advisory Group (RCAG) at their meeting on Tuesday, 1 April 1997. Their comments will be available when this item is considered at Transportation Committee.

*Approved by
Doug Brousseau*

WJ/sc

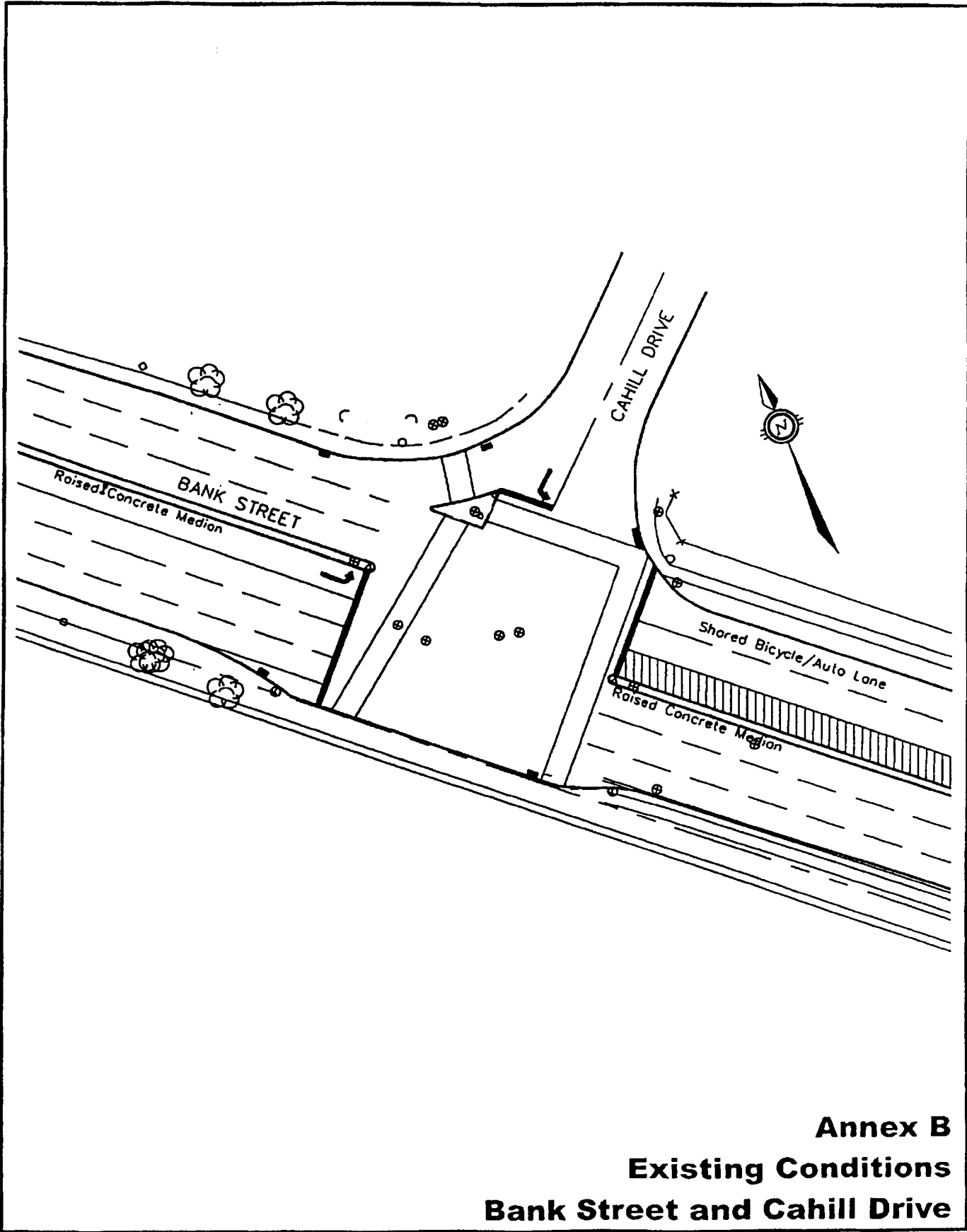
Attach. (3)



- Legend**
- Regional Roads
 - (117)— Provincial Roads
 - - - Local Roads
 - + - Transitway
 - / - Parkways
 - Boundary
 - + - Railways
 - ... Hydro Lines

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BANK STREET AND CAHILL DRIVE
ANNEX A
SITE LOCATION



Annex B
Existing Conditions
Bank Street and Cahill Drive

