

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

REPORT
RAPPORT

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Your File/V/Réf.

DATE 28 April 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 - ADDENDUM REPORT**

DEPARTMENTAL RECOMMENDATION

That the Transportation Committee recommend Council approve the revised design modifications to the intersection of Bank Street and Cahill Drive which incorporates the removal of the proposed channelizing island situated in the north-west quadrant and the provision of reduced corner radii in the north-west and south-west quadrants as illustrated in Annex A.

BACKGROUND

At its meeting on 16 April 1997, Transportation Committee, after its consideration of the proposed modifications to the intersection of Bank Street and Cahill Drive to accommodate the Cahill Drive extension, directed staff to include the following items.

Additional Signs

Appropriately located signs to indicate the permissible east-west movements will be provided to supplement the proposed interdictory signs prohibiting eastbound and westbound through traffic (buses and bicycles exempted).

Arrow Pavement Markings

Right-turn arrow pavement markings will be painted in the southerly eastbound lane to indicate the appropriate traffic movement.

18-Month Compliance Monitoring

After the construction of the modifications, the intersection's operation will be monitored from time to time over an 18 month period to ensure that compliance with the signed traffic regulations (east-west through prohibition) is at an acceptable level.

60-Day Notification Period

In accordance with the public hearing process, under Sections 297 and 300 of the Ontario Municipal Act, a municipality is required to provide a 30-day notification period prior to a public hearing regarding a local roadway modification. In an effort to comply with the City of Ottawa's desire to allow more comprehensive community input, staff will make every effort to extend, as much as practicable, the notification period to 60 days.

Removal of Channelizing Island and Pedestrian Safety and Crossing Ease

As indicated in the recommendation of this addendum report, the proposed channelizing island will be removed from the north-west quadrant of the intersection and replaced with a standard corner with a reduced radius. A channelizing island was proposed in the original intersection design to maintain existing pedestrian crossing distances across Bank Street and to safely accommodate moderate usage from large, right-turning trucks (tractor semi-trailers).

Although there is undeveloped land abutting this intersection to the southwest which may require more frequent truck usage in the future, it was indicated that the incidence of southbound, right-turning tractor semi-trailers would be infrequent. In view of this, the channelizing island proposed for the north-west corner of the intersection will be changed to a standard corner with a reduced radius. Should the future usage of this intersection increase for southbound right-turning tractor trailers to the extent that, in the opinion of the Environment and Transportation Commissioner, pedestrian safety and traffic operations are unduly compromised, this Department will take whatever action it considers appropriate to rectify the situation and report to Transportation Committee.

In addition to the provision of a reduced corner radius in the north-west quadrant of the intersection, current pedestrian crossing exposure can be reduced with a reduction in radii of the proposed south-west corner and the existing south-east corner. The resulting reduced crossing distances will enhance the pedestrians' level of comfort when using this intersection.

PEDESTRIAN MEDIAN REFUGES

Staff was requested to examine and report back to the Transportation Committee in regard to the provision of pedestrian refuges on the medians on Bank Street as part of the modifications to the intersection of Bank and Cahill.

The application of pedestrian median refuges on Bank Street are not recommended at this intersection from the perspective of maintaining safe roadway operations while keeping costs to a minimum.

Pedestrian Safety and Level of Comfort

The provision of median refuges would have the following effects on pedestrian safety.

1. The overall time for pedestrians to cross Bank Street would be increased which means greater exposure to traffic on Bank Street.
2. While on the median, pedestrians would be required to actuate a pedestrian signal phase with a push button which may not be conveniently located and, in turn, be more troublesome for those pedestrians who are aged and/or physically challenged.
3. Pedestrians could have problems accessing the push button on the median after a snow storm.
4. There would be no reduction in crossing delay because the same amount of time is allocated to pedestrian crossings with or without median storage.
5. Pedestrians waiting on the median would be exposed on both sides to nearby high speed traffic and to roadway spray during inclement weather which significantly increases pedestrian unease and discomfort.
6. Median storage for pedestrians will compromise safety for many pedestrians who are not familiar with the operational requirements for this type of crossing, since this is fairly uncommon on divided Regional roads. The clearance period (flashing hand indication) provides sufficient time for a pedestrian to cross the entire roadway under conditions where no median storage is present. If median storage was provided, the time for the clearance period would be reduced to crossing only one half of the roadway which would seriously jeopardize the safety of those pedestrians who begin their crossings immediately prior to the start up of the clearance period and do not realize that they will not be able to cross the roadway within the clearance period.

Operations and Costs

Pedestrian refuges on the median would increase costs and would likely hamper traffic operations.

1. Extra pedestrian heads and push buttons would be required.
2. The existing median nose would have to be widened and lengthened to achieve an adequate pedestrian storage area which may entail a road widening to accommodate the increased median width.

3. Additional maintenance costs would be incurred during the winter to ensure that the refuge areas were cleared of snow and ice and that the push buttons were readily accessible.
4. The prolongation of the median nose on the north side of the intersection would restrict the left-turning movement of eastbound tractor semi-trailers.

*Approved by
Doug Brousseau*

WJ/sc

Attach. (1)

