

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

REPORT  
RAPPORT

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Our File/N/Réf.	<b>25 20-97-R034</b>
Your File/V/Réf.	
DATE	10 June 1997
TO/DEST.	Co-ordinator Transportation Committee
FROM/EXP.	Director Mobility Services and Corporate Fleet Services Environment and Transportation Department
SUBJECT/OBJET	<b>ST. JOSEPH BOULEVARD (REGIONAL ROAD 34) - SPEED ZONING</b>

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### **DEPARTMENTAL RECOMMENDATION**

**That the Transportation Committee recommend Council approve the implementation of an 80 km/h speed limit on St. Joseph Boulevard between a point 138 m east of Shefford Road and a point 110 m west of Forest Valley Drive/Youville Drive.**

### **BACKGROUND**

The speed limit along St. Joseph Boulevard is currently posted at 70 km/h between a point 138 m east of Shefford Road and Hart Road and 60 km/h easterly from Hart Road to Jeanne d'Arc Boulevard (Regional Road 55).

St. Joseph Boulevard has been constructed as a four-lane divided arterial with average lane widths of 3.7 m. It is one of the principal roadway facilities serving the eastern urban community and its main function is to provide a safe arterial link between Orléans and the urban area inside the Greenbelt. The new construction and several requests from the public requesting an increase in the posted speed limit precipitated this speed zone review.

Existing and proposed speed limits are illustrated in Annex A.

### **ASSESSMENT OF EXISTING CONDITIONS**

The Regional Speed Zoning Policy includes an assessment of the number of private and commercial driveways, lane width, street classification, presence of a median, shoulder type and width, parking activity, roadway geometry (horizontal and vertical curves), pedestrian activity (with special emphasis on children), sidewalk setback, existing operating speeds, and collision

rate. The safety of all road users (pedestrians, cyclists, and motorists) is paramount within a speed zone analysis.

The following details the existing conditions on St. Joseph Boulevard between a point 138 m east of Shefford Road and a point 110 m west of Forest Valley/Youville Drives (a distance of approximately 2.8 km).

Cycling facilities (along both sides of the road) include 1.5 m bicycle lanes from Green's Creek to a point approximately 200 m east of Hart Road and 2.5 m paved shoulders easterly from this point to 300 m west of Forest Valley/Youville Drives. From this point 1.5 m bicycle lanes extend easterly.

Adjacent land use from Shefford Road to a point 200 m west of Hart Road consists of undeveloped Greenbelt along both sides of the roadway. Easterly from this point development consists of 14 private homes, two day-care centres (Bishop Hamilton School and Gloucester Child Care Services), St. Joseph Manor, Madonna Nursing Home, Orléans Fruit Farm and Golden Valley Farm.

There are four traffic control signals within the study area. They are located at the eastbound and westbound off ramps from Regional Road 174 (formerly Highway 17), Bearbrook Road, and the RCMP access.

In light of resident concerns, special attention was given to three specific locations within this speed zone review:

1. the Madonna Nursing Home;
2. the Orléans Fruit Farm/Gloucester Child Care Services east of Hart Road; and
3. the Bishop Hamilton School at Hart Road.

Pedestrian advance signs were installed on the approaches to the Madonna Nursing Home and farm machinery warning signs were installed on the approaches to the Orléans Fruit Farm facilities between the RCMP access and Hart Road. These warning signs indicate to the approaching motorist that farm machinery or pedestrians may be in an area where they may otherwise not be expected and, therefore, to use caution and reduce speed if necessary. Eight-hour pedestrian surveys conducted in 1994 indicate that less than 10 pedestrians cross St. Joseph Boulevard at the Madonna Nursing Home.

Visibility conditions, signing and pedestrian concerns at Hart Road were reviewed. Visibility conditions were found to be excellent and pedestrian activity, during the morning peak period was nil; therefore, pedestrian advance signs are not required. Missing intersection signs were however, installed.

### Current Operating Speeds

A review of the current operating speeds on the roadway reflects an 85th percentile speed (the speed at or below which 85% of motorists travel) of between 82 and 86 km/h. The results of the

speed surveys, including motorist compliance with the currently posted speed limits along St. Joseph Boulevard, are represented in Table I of Annex B.

## DISCUSSION

The speed limit recommended for St. Joseph Boulevard was based on the factors outlined in the Speed Zoning Policy. Specifically, within this section the limited number of private driveways, wide lanes, the presence of a barrier median coupled with very low pedestrian and bicycle activity, and absence of parking activity, justify a higher posted speed limit.

Experience and research show that inappropriate speed limits are ignored by the vast majority of motorists and require rigorous and costly police enforcement. The 85th percentile speed usually represents the most appropriate speed limit. With few exceptions, motorists tend to drive at the speed which best reflects the roadway geometry, the adjacent land use, and the prevailing roadway activity. Studies clearly show that introducing lower speed limits does not result in lower average operating speeds, but instead, only serves to increase the variability of speeds, thus increasing accident potential. A properly posted speed limit gives all road users (motorists, pedestrians, and cyclists) an indication of the actual operating conditions on a roadway.

It must be stressed that the provision of an increased posted speed limit will not result in an increase in actual operating speeds. Recent changes to Hunt Club Road clearly illustrate this fact (refer to Table II).

An appropriately posted speed limit will reduce the disparity between the fastest and slowest vehicles on the roadway resulting in less “tailgating” and fewer lane change manoeuvres. Historical studies have concluded that the number of collisions increases as drivers deviate from the 85th percentile speed. Motorist compliance with the implementation of an appropriate speed limit will increase thereby enabling police enforcement activities to target those drivers travelling at hazardous speeds.

## CONSULTATION

Comments were requested from the City of Gloucester, the Ottawa-Carleton Regional Police Service, the Regional Cycling Advisory Group (RCAG), as well as the public.

The City of Gloucester supports the recommendation to implement an 80 km/h speed limit (Annex C). Concerns were raised regarding pedestrian movements at the Madonna Nursing Home. As part of the City of Gloucester’s public consultation, the City advertised the proposal to revise the speed limit in the *Gloucester News*. Two of the three responses received by Gloucester concurred with the higher speed limit and one was opposed.

The Ottawa-Carleton Regional Police Service concur with the recommended increase in the posted speed limit (Annex D).

RCAG supports the provision of an 80 km/h speed limit between Bearbrook Road and Forest Valley/Youville Drives but feels the implementation of an increased higher speed limit between

Shefford Road and the east side of the bridge crossing Green's Creek would be an added danger and deterrent to cyclists (Annex E).

A total of five letters/phone calls were received by the Environment and Transportation Department. Two supported the proposal to increase the posted speed limit to 80 km/h, two were opposed and one expressed concerns regarding pedestrian safety at the day-care centre at Hart Road.

The owner of the Orléans Fruit Farm expressed concern that increasing the posted speed limit would increase vehicle speeds and this would create a hazardous situation involving his farm machinery.

### RESPONSES TO EXPRESSED CONCERNS

In response to the City of Gloucester's concerns regarding pedestrian movements at the Madonna Nursing Home, pedestrian advance warning signs were subsequently installed facing eastbound and westbound traffic.

In response to concerns regarding farm machinery accessing St. Joseph Boulevard from the Orléans Fruit Farm, additional warning signs have been installed on the approaches to this business. It is not uncommon throughout the Region to have farm machinery using high speed Regional roads. The Department feels that the addition of this signage will enhance driver awareness of the possibility of occasionally encountering a farm vehicle.

Pedestrian safety and visibility conditions at Hart Road were reviewed. Visibility conditions were found to be excellent. Symbolic "intersection ahead" signs were not in place after reconstruction and these were installed in September 1996. No pedestrian activity related to the Bishop Hamilton School located on the north side of St. Joseph Boulevard at Hart Road was observed during the morning peak period in February 1997. Coupled with the excellent visibility, no additional pedestrian warning signs are warranted.

### FINANCIAL IMPLICATIONS

Financial implications will be restricted to signing changes and minor signal timing changes only.

*Approved by  
Doug Brousseau*

TWC/sc

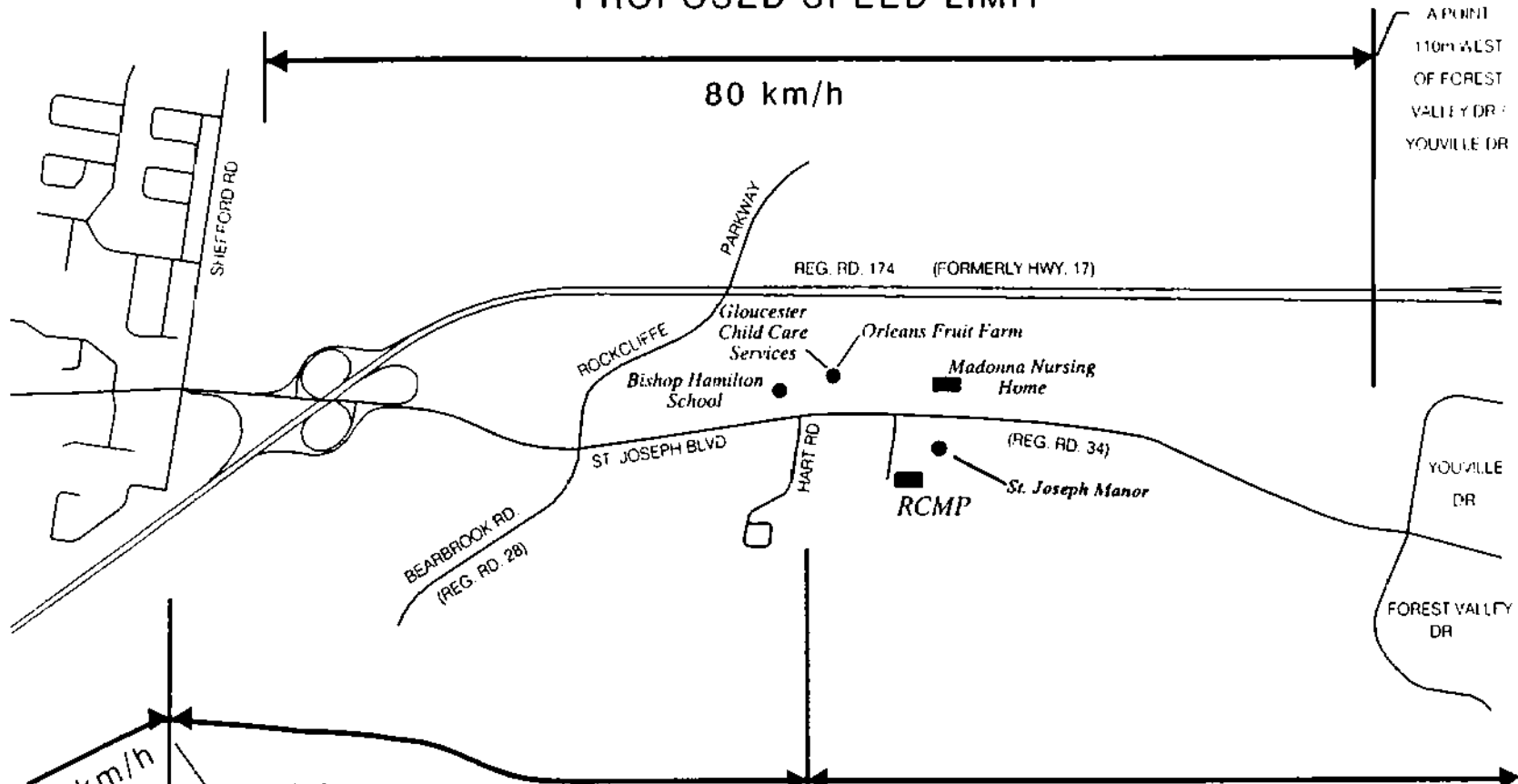
Attach. ( 5 )

( ST. JOSEPH BLVD. )

### PROPOSED SPEED LIMIT

80 km/h

A POINT  
110m WEST  
OF FOREST  
VALLEY DR /  
YOUVILLE DR



### EXISTING SPEED LIMITS

60 km/h

A POINT  
138m EAST  
OF SHEFFORD RD

70 km/h

60 km/h

ANNEX 'A'

ST JOSEPH BLVD (REG. RD. 34) BETWEEN SHEFFORD RD. and FOREST VALLEY /YOUVILLE DR. EXISTING and PROPOSED SPEED LIMITS



MOBILITY SERVICES  
Environment & Transportation Department

DATE	DRAWN BY	CHECKED BY
N.T.S.	K.P.	
DATE	APPROVED BY	
MAY '97		

ANNEX 'B'

Speed Survey Location (West to East along St. Joseph Blvd.)	Posted Speed Limit (km/h)	Average Speed (km/h)	85th Percentile Speed Km/h	% of Motorists Complying with Posted Speed Limit
Green's Creek	70	73	82	36.3%
Imm. east of Hart Road	60	74	83	3.8%
Orléans Farm/Glou. Child Care Ctr	60	76	85	4.0%
Madonna Nursing Home	60	74	83	1.6%
East of RMOC Reservoir Road	60	76	86	2.0%

Table I

Results of Speed Surveys Undertaken on St. Joseph Boulevard

Location	Posted Speed Limit " <i>Before</i> "				Posted Speed Limit " <i>After</i> "				% Change in 85th Percentile Speed
	Speed Limit (km/h)	Ave. Speed (km/h)	85th P'tile (km/h)	% Comp (1)	Speed Limit (km/h)	Ave. Speed (km/h)	85th P'tile (km/h)	% Comp (1)	
Hunt Club <sup>(1)</sup>	60	78	89	1.7%	80	76	85	70.9%	-4.5%
Hunt Club <sup>(2)</sup>	60	71	81	11.0%	80	70	78	90.6%	-3.7%
Hunt Club <sup>(3)</sup>	60	75	84	5.7%	80	72	81	84.5%	-3.6%
Hunt Club <sup>(4)</sup>	60	77	85	3.9%	80	77	84	70.2%	-1.1%

Table II

Before/After Speed Surveys Undertaken at Locations with Approved Speed Limit Increases

- (1) Between Esson and Blohm.
- (2) At CNR overpass west of Antares.
- (3) Between Riverside and Lindberg.
- (4) East of Sunderland.



Council Resolution No: ..... 8 .....  
Meeting Date : ..... January 27, 1997 .....

Moved by: ..... *McDermott* .....

Seconded by: ..... *Stanley* .....

WHEREAS the Operations and Fire Department has received a letter from the Region's Transportation Department, advising the City of the results of a speed zoning review on the section of St. Joseph Boulevard between Highway 17 and Forest Valley Drive.

AND WHEREAS the R.M.O.C is recommending that the speed limit on this section of St. Joseph Boulevard be raised to 80 km./hr.;

AND WHEREAS the Operations and Fire Department concurs with the R.M.O.C.'s recommendation;

NOW THEREFORE BE IT RESOLVED that Council of the Corporation of the City of Gloucester advise the R.M.O.C. of the following:

- (i) That the City of Gloucester supports the establishment of a 80 km/hr. speed limit on the section of St. Joseph Boulevard between Highway 17 and Forest Valley Drive.

NOTE: See also Resolution No. 7 of January 27th, 1997.

CARRIED  
AS AMENDED

*E. Cain*  
MAYOR



**Ottawa-Carleton  
Regional Police Service**

**Service de police régional  
d'Ottawa-Carleton**

## MEMORANDUM

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**DATE:** June 5, 1997

**TO:** Mr. Tom Carmody  
Regional Municipality of Ottawa-Carleton  
Operational Studies  
Cartier Square 111 Lisgar Street  
Ottawa, Ontario

**FROM:** Sergeant John Crozier  
CSS/Youth/Traffic Sections

**SUBJECT: SPEED LIMIT - 80 KM/H**

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Sir,

Our position is in favor of the increased speed limit to 80 km/h. Your comprehensive study suggests that the Road Design is compatible with the increased speed. Our enforcement suggests that there was no difficulty in the laying of charges for speeding at the present speed limit of 60 km/h. We shall continue to monitor speeds should the rate of speed increase

Yours truly,

A handwritten signature in black ink, appearing to be "John Crozier", written over a circular stamp or mark.

John Crozier  
Sergeant

JC/lj



**Carmody, Tom**

**TRAN**

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**From:** Aitkin, Boyd  
**To:** Carmody, Tom                      TRAN  
**Cc:** rcag  
**Subject:** ST. JOSEPH speed  
**Date:** 10 June, 1997 09:57

< <File Attachment: HEADER.TXT> >  
Tom Carmody

**ST. JOSEPH BOULEVARD (REGIONAL ROAD 34) - SPEED ZONING**

File : 25 20-97-R034

The Regional Cycling Advisory Group (RCAG) has reviewed the speed limit implementation proposal for St. Joseph Boulevard between a point 138 m east of Shefford Road and a point 110 m west of Forest Valley Dr. /Youville Dr. and has the following comments.

As there are no provisions for cyclists from Shefford Road to the east side of the bridge crossing Greens Creek we feel the increased speed would be an added danger and deterrent to cyclists. There are also entrance and exits with traffic lights to highway 17 in this area which makes traveling more congested.

In this area there are no paved shoulders. The bridge at Greens Creek makes this stretch even narrower. In ANNEX +B+ the average speed in this area is within 3 Km /h of the posted limit and compliance is much higher than the rest of the area (ten times higher).

The area from Bearbrook to Youville has proper cycling lanes and the increased speed should not create added problems, as your survey indicates the average speed in this area is already higher than posted, by as much as 16 Km /h .

Boyd Aitkin  
RCAG representative