

Managers' Reports

### **Request for Decision**

Municipal Road 8 - Lane Conversion and Speed Limit Review

Traffic Committee
Thursday, Sep 08, 2011
Wednesday, Aug 31, 2011

#### Recommendation

THAT the speed limit on Municipal Road 8 from 100 metres southeast of St. James Street to 305 metres south of Riverview Road remain 70 km/h;

AND THAT the southbound passing lane on Municipal Road 8 be converted to a two-way centre left turn lane from the Onaping River Bridge to 100 metres southeast of St. James Street; AND THAT a by-law be passed by City Council to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended changes in accordance with the report from the General Manager of Infrastructure Services dated August 31, 2011.

#### **BACKGROUND**

The Councillor for Ward 3, Claude Berthiaume, has requested that the City's Roads and Transportation Department review the possibility of converting a portion of the southbound passing lane on Municipal Road 8 (M.R. 8) to a two-way centre left turn lane. The request is due to concerns about the high speed of traffic passing through the community of Onaping. Staff has also

#### Signed By

Type:

#### **Report Prepared By**

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Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed Aug 31, 11

#### **Division Review**

David Shelsted, MBA, P.Eng. Acting Director of Roads & Transportation Digitally Signed Aug 31, 11

#### **Recommended by the Department**

Greg Clausen, P.Eng. General Manager of Infrastructure Services Digitally Signed Aug 31, 11

#### Recommended by the C.A.O.

Doug Nadorozny Chief Administrative Officer Digitally Signed Aug 31, 11

been requested to review the possibility of reducing the existing 70 km/h speed limit through Onaping.

Municipal Road 8 is located near the northwest end of the City (see Exhibit "A"). M.R. 8 is designated as a secondary arterial road that provides a connection from Highway 144 to the communities of Onaping and Levack. It is also a major road link serving the mining industry in the area. Within the study area, M.R. 8 is constructed to a rural standard with one lane in each direction, and an additional southbound passing lane. The passing lane starts at the Onaping River bridge, and extends southerly to Highway 144, a distance of approximately 2.8 km. Currently, MR 8 carries an annual average daily traffic volume (AADT) of 6,500 within the study area.

The existing speed limit is 80 km/h from Highway 144 to 100 metres south of St. James Street where it changes to 70 km/h. The 70 km/h speed limit extends to 305 metres south of Riverview Avenue where it changes to 50 km/h through the community of Levack.

The residents of Onaping have requested that the southbound passing lane be converted to a centre left turn lane due to the high incidence of speeding that occurs through the area. The safety of pedestrians crossing the road, especially seniors near the Golden Age Club is also a concern.

As a result of a previous request in 2007, Staff conducted a number of speed studies and traffic counts along Municipal Road 8. The speeds of approximately 100 vehicles were recorded at each location and the results are outlined in the table below.

Location	Posted Speed Limit (km/h)	Average Speed (km/h)	85th Percentile Speed (km/h)	% Complying with Speed Limit
200 m South of Onaping Drive	80	79	91	49
50 m North of Fraser Avenue	70	73	84	43
20 m North of First Avenue North	50	52	60	48

The studies identify that the 70 km/h zone near Fraser Avenue has the highest number of drivers exceeding the speed limit. The study showed that over 60% of drivers in this area were speeding and over 30% of drivers were recorded travelling at more than 10 km/h above the legal limit.

#### **Speed Limit**

At the October 13, 2010 meeting, City Council adopted the use of the Canadian Guidelines for Establishing Posted Speed Limits, published by the Transportation Association of Canada, for evaluating posted speeds on arterial and major collector roadways. These guidelines assess appropriate posted speed limits based primarily on the classification, function and physical characteristics of a roadway.

Applying the physical characteristics of M.R. 8, through Onaping, to the new Canadian Guidelines and using a functional classification of a "two lane rural undivided major arterial" yields a total risk score of 40 and a recommended speed limit of 80 km/h (see Exhibit 'B').

Based on the results of the Canadian Guidelines and the speed studies the speed studies that were conducted, staff does not recommend lowering the posted speed limit of 70 km/h.

#### Passing Lane

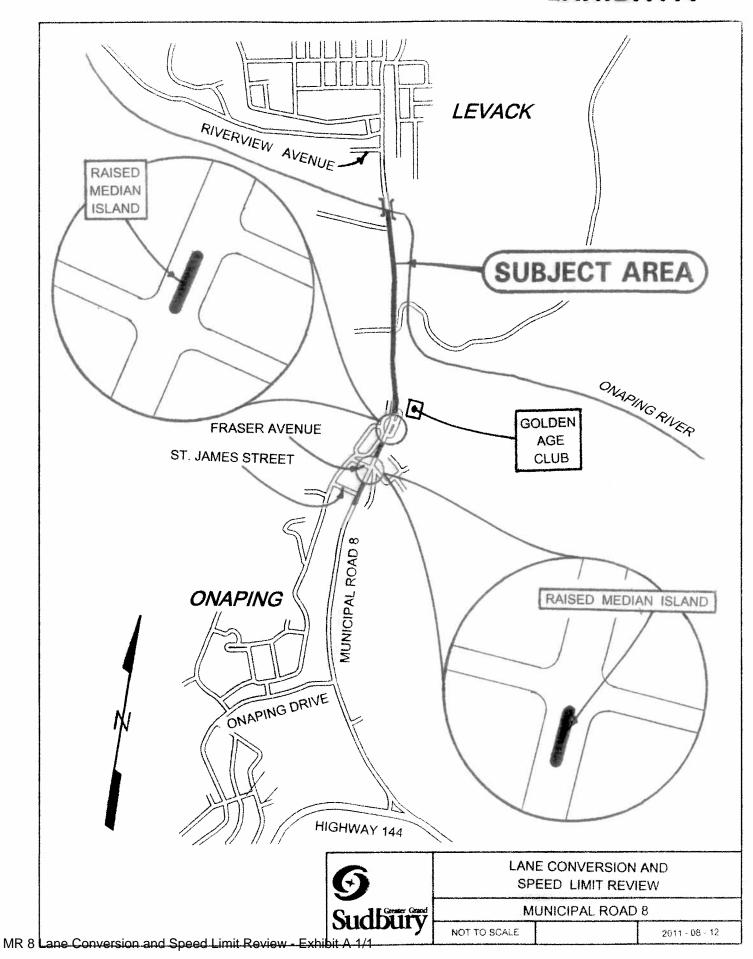
The southbound passing lane was constructed in the mid 1990's to address concerns from the mining industry and residents regarding the congestion and impact that trucking had on the roadway. While the passing lane has been successful in reducing the impact that the mining industry has on M.R. 8, it may have contributed to the existing speeding problem through Onaping. Based on the results of the speed studies and the concerns expressed by residents, staff supports the conversion of the southbound passing lane to a two-way centre left turn lane.

While the change will have some impact on traffic operations during the peak periods, traffic volumes will be able to be accommodated with two through lanes and a centre left turn lane. The two-way centre left turn lane will also improve safety on M.R. 8 by allowing an area off of the through lane for left turn maneuvers to

occur. The left turn lane also provides a refuge area for pedestrian's crossing the road.

As part of the 2011 Capital Roads program, M.R. 8 will be resurfaced from Highway 144 to the Onaping River Bridge. This will provide an opportunity to easily change the pavement markings to convert the southbound passing lane to a two-way centre left turn lane. Additionally, staff has identified two locations where raised median islands can be installed to offer a refuge area for pedestrians trying to cross M.R. 8 and to help eliminate the improper use of the two-way centre left turn lane for passing.

## **EXHIBIT: A**



## **EXHIBIT: B**



# Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version: 10-Apr-09

Name	e of Corridor:	M.R. 8					
Segm	nent Evaluated:	100 m South of St.	James Street	to 305 m South of Riverview Avenue			
Geog	raphic Region:	Onaping					
Road	Agency:	City of Greater Sudbury					
Road	Classification:	Arterial		Length	of Corridor:	1,350	m
Urbar	n / Rural:	Rural		Design Speed: (Required for Freeway, Expressway, Highway)			km/h
Divide	ded / Undivided: Undivided		divided		t Posted Speed:	70	km/h
Major	r / Minor:	Major		Prevailing Speed: (85th Percentile - for information only)		84	km/h
# Through Lanes Per Direction:	1 lane		Policy: (Maximum Posted Speed)				
			RISK	Score	<b></b>		
A1	GEOMETR	RY (Horizontal)	Lower	3			
A2	GEOME1	TRY (Vertical)	Lower	3			

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	3
A2	GEOMETRY (Vertical)	Lower	3
А3	AVERAGE LANE WIDTH	Medium	6
В	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Lower	2
C2	CYCLIST EXPOSURE	Medium	6
D	PAVEMENT SURFACE	Lower	3
1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	
	STOP controlled intersection	0	
	Signalized intersection	0	
E1	Roundabout or traffic circle	0	7
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
	Sidestreet STOP-controlled or lane	5	
	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of	
E2	Left turn movements permitted	Occurrences 7	3
	Right-in / Right-out only		
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
"	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Lower	1

	Recommended Posted Speed Limit (km/h):				
	opoda zimie (kimin)				
As determined by road characteris					
	80				
	As determined by policy				
checked agains	ded posted speed limit may be st the prevailing speeds of the eroad's safety performance.				

**Total Risk Score:** 40

Comments: