

Report TR-CW-34-17

To: Warden Barfoot and Members of Grey County Council
From: Pat Hoy, Director of Transportation Services
Meeting Date: November 23, 2017/December 14, 2017
Subject: **Grey Road 119 Speed Limit Changes**
Status: Report deferred to the meeting of December 14, 2017;
Recommendation was revised by staff for December 14, 2017.
Revised recommendation adopted by Committee as amended by removing the word “two” in the second clause per Resolution CW01-18; Endorsed by County Council January 11, 2018 per Resolution CC11-18;

Recommendation

1. **That Report TR-CW-34-17 regarding Grey Road 119 Speed Limit Changes be received for information.**

Revised Recommendation for consideration on December 14, 2017 :

1. **That Report TR-CW-34-17 be received and that the 3.4 km section of Grey Road 119 from Ravenna easterly to approximately 0.4 km west of the 5th Line remain posted at 60 km/h, and the section from 0.4 km west of the 5th Line to 125 m west of Sideroad 15 be increased from 60 km/h to 70 km/h; and**
2. **That two vertical curves (between Banks and Ravenna) will be signed to reflect a steep hill grade; and**
3. **That Schedule N – Rates of Speed of By-law 4788-13 be amended to reflect these changes and that the by-law be brought forward for Council’s consideration.**

Background

On October 12, 2017, By-law 4788-13 was adopted by Grey County Council as per Report TR-CW-29-17 Amendments to By-Law 4788-13 Regulating Traffic and Parking, to regulate traffic and parking on roads under the jurisdiction of the County of Grey. Schedule N included the following speed reduction.

Grey Road No.	From	To	Rate of Speed
119	A point 500 metres west of the intersection of Grey road 2 (Ravenna)	A point 125 m west of Sideroad 15	60 kilometres per hour

This reduced the posted speed on Grey Road 119 from Ravenna to Sideroad 15 to 60km/hr. Upon installation of the 60km/hr signs on Grey Road 119, Transportation Services received a number of complaints (4) from road users indicating that the new posted speed will be an inconvenience to the daily users.

Geometric Design

Grey County Transportation Services Department uses the Ministry of Transportation of Ontario (MTO) Geometric Design Standards for Ontario Highways to determine the actual design speed of the roads. The formula for design speeds uses sight distance to establish posted speed.

Typically, 80 km/hr would be the posted speed limit for a rural local type road like Grey Road 119 from Ravenna to 15th Sideroad. However, the majority of Grey Road 119 does not meet the requirements for an 80 km/hr speed zone. Transportation Services' top priority is keeping our roads safe for all users. If Grey County posted a speed of 80 km/hr and the stopping distance only satisfied a 60 km/hr, an accident could occur and Grey County could be found negligent. The design speeds for Grey Road 119 are shown on the attached drawings at the end of the report.

Speed Limit Guidelines

Grey County Transportation Services also evaluated Grey Road 119 by using the Transportation Association of Canada (TAC) Automated Speed Limit Guidelines. This spreadsheet assesses risk based on a number of variables such as roadside hazards, entrances, cyclist exposure etc. Please see the attached Completed Automated Speed Limit Guidelines Form. This analysis also resulted in a 60 km/hr posted speed.

Why Not Design to 80 km/hr?

In the case of Grey Road 119, certain sections meet the requirements for 80km/hr. However, some sections only satisfy 60 km/hr and some satisfy 30 km/hr. There are some difficult vertical curves that would have needed to be addressed. This would have required many land acquisitions or expropriations, hydro relocations, rock excavation and earth excavation. This would have cost millions of additional dollars and delayed

the project extensively. The project did include widening the platform to complete paved shoulders on Grey Road 119.

Grey County will install warning signs for the 30 km/hr areas as shown on the attached Grey Road 119 Speed Zones from Ravenna to Banks Map. As shown in the Grey Road 119 Speed Zones from Banks to Scenic Caves Road Map, the majority of the road sections meet the design criteria for 60km/hr. To post speed limit signs that jump up and down between 60 km/hr and 80 km/hr would be more confusing to drivers; therefore, 60 km/hr speed limit signs were posted. Only 37% of the road satisfies an 80km/hr design speed.

Inconvenience to Citizens

Grey Road 119 has a traffic count of 600 vehicles per day. It is one of the lower volume roads in the county. It likely is the most convenient route from Kimberley to Collingwood since the completion of the Mill Creek culvert in 2001.

The distance from Ravenna to 15th Sideroad is approximately 7.8km. Travelling at 60 km/hr vs travelling at 80 km/hr makes a difference of just less than 2 minutes. Although no one appreciates a longer commute time, a 60 km/hr posted speed zone results in an increase in safety and a reduction in liability.

Financial/Staffing/Legal/Information Technology Considerations

For a signed speed limit to be enforceable, the by-law must be consistent with the field signage. Typically, Grey County avoids posting speeds that most drivers won't follow. However, in this case, posting a speed based on the geometric design is necessary due to liability.

Link to Strategic Goals/Priorities

N/A

Attachments

[TR-CW-29-17 Amendments to By-Law 4788-13 Regulating Traffic and Parking](#)

Grey Road 119 Speed Zones from Ravenna to Banks Map

Grey Road 119 Speed Zones from Banks to Scenic Caves Road Map

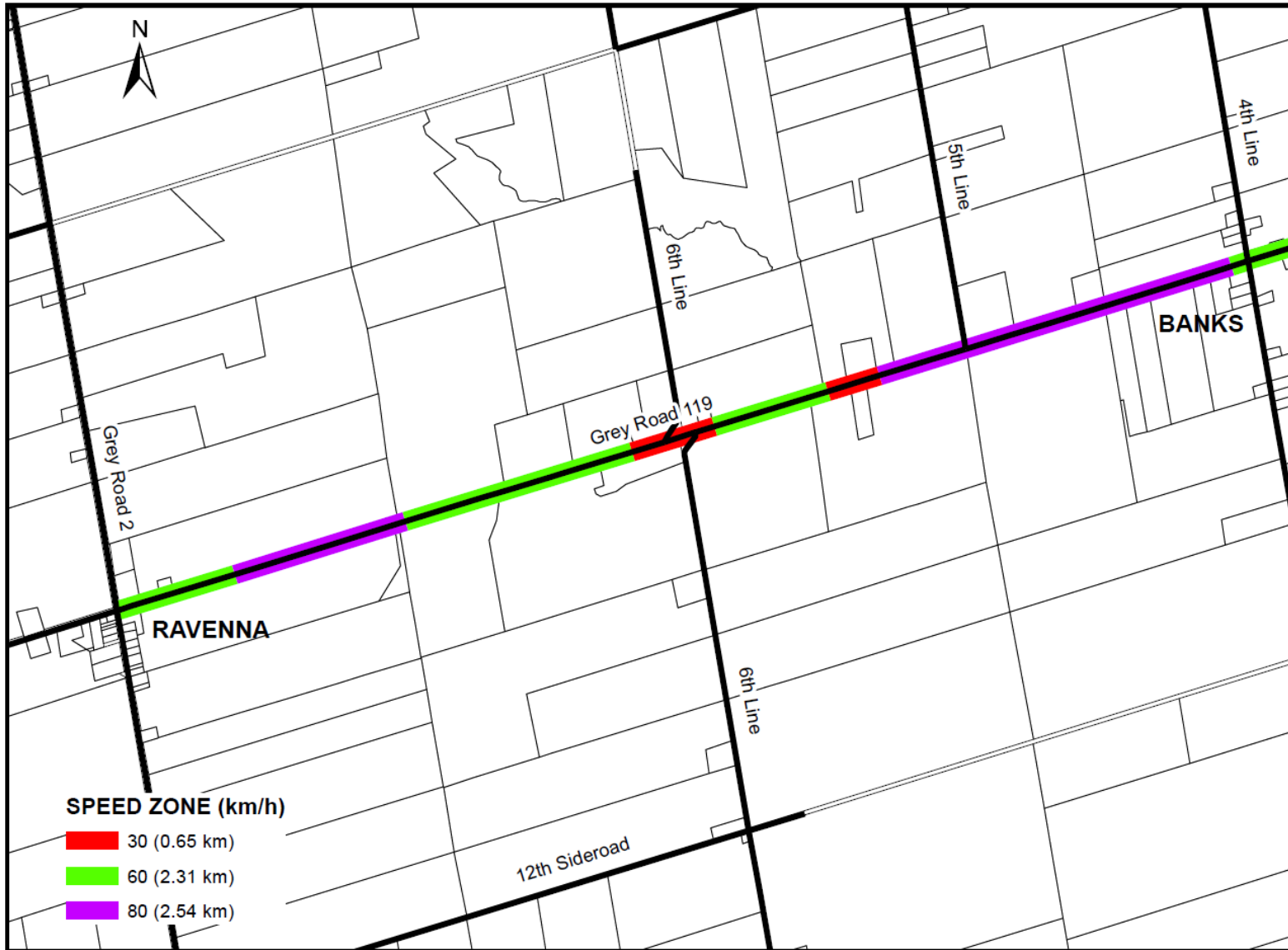
Completed Automated Speed Limit Guidelines Form

Respectfully submitted by,

Pat Hoy

Director of Transportation Services

Grey Road 119 Speed Zones from Ravenna to Banks Map



Grey Road 119 Speed Zones from Banks to Scenic Caves Road Map



Completed Automated Speed Limit Guidelines Form



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

Version:
10-Apr-09

Name of Corridor:	Grey Road 119		
Segment Evaluated:	Grey Road 2	to	125 m west of sideroad 15
Geographic Region:	Town of the Blue Mountains		
Road Agency:	County		
Road Classification:	Collector	Length of Corridor:	7,819 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	80 km/h
Major / Minor:	Minor	Prevailing Speed: (85th Percentile - for information only)	km/h
# Through Lanes	1 lane	Policy: (Maximum Posted Speed)	80 km/h
Per Direction:			

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	2
A2	GEOMETRY (Vertical)	Medium	4
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Lower	1
C2	CYCLIST EXPOSURE	Higher	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	<i>Number of Occurrences</i>	1
	STOP controlled intersection	2	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
	Sidestreet STOP-controlled or lane	5	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	<i>Number of Occurrences</i>	2
	Left turn movements permitted	30	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	<i>Number of Occurrences</i>	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

24

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

60

As determined by policy

80

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:

FORM A