

# OPERATIONS COMMITTEE AGENDA

#### Operations Committee Meeting Monday, January 13, 2020 Tom Davies Square - Council Chamber

### COUNCILLOR DEB MCINTOSH, CHAIR

#### Mark Signoretti, Vice-Chair

2:00 p.m. OPERATIONS COMMITTEE MEETING COUNCIL CHAMBER

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#### **DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**

#### PRESENTATIONS

- Report dated December 23, 2019 from the General Manager of Growth and Infrastructure regarding Winter Control Operations Update. (ELECTRONIC PRESENTATION) (FOR INFORMATION ONLY)
  - Randy Halverson, Director, Linear Infrastructure Services

(This report provides information regarding the financial results of the 2019 winter roads operations up to and including the month of November 2019.)

# **REGULAR AGENDA**

#### **MANAGERS' REPORTS**

 R-1. Report dated December 20, 2019 from the General Manager of Growth and
 11 - 15

 Infrastructure regarding Maximum Speed Limit - Panache Lake Road.
 (RESOLUTION PREPARED)

(This report provides a recommendation regarding the speed limit on Panache Lake Road, from Municipal Road 55 to 210 metres north of Suihkola Road.)

#### **MEMBERS' MOTIONS**

#### M-1. Request to Accelerate the Retrofit/Replacement of the Sand/Salt Dome

As presented by Councillor McIntosh:

WHEREAS lake water quality is of great importance to the City of Greater Sudbury and the management of road salt is important to minimizing impact to lake water quality;

AND WHEREAS according to the 2018 Salt Optimization Plan the preferred solution to manage road salt storage within the Ramsey Lake intake protection zone is to redevelop the existing site using best management practices, for example, building a dome for the pickled sand and salt storage and provide indoor loading;

AND WHEREAS the Depot Master Plan proposes to build new types of salt/sand domes that will capture salt runoff and divert it from returning to surrounding water bodies and create a more efficient operational environment for handling materials and loading plows;

AND WHEREAS detailed design work of all depot upgrades has commenced;

AND WHEREAS due to its proximity to the Ramsey Lake intake protection zone, the sand/salt dome retrofit or replacement at the Frobisher Depot should be the priority;

THEREFORE BE IT RESOLVED that the City of Greater Sudbury directs staff to provide a report to the Operations Committee by the second quarter of 2020, identifying the requirements to accelerate the retrofit/replacement of the sand/salt dome aspect of the Depot Master Plan and that the facility at the Frobisher Depot be prioritized as part of the process.

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#### **ADDENDUM**

#### **CIVIC PETITIONS**

**QUESTION PERIOD** 

#### **ADJOURNMENT**



For	Information	Only
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#### Winter Control Operations Update

# Presented To:Operations CommitteePresented:Monday, Jan 13, 2020Report DateMonday, Dec 23, 2019Type:Presentations

#### Signed By

**Report Prepared By** Kelsi Bernier Co-ordinator of Finance (Roads) *Digitally Signed Dec 24, 19* 

**Division Review** Randy Halverson Director of Linear Infrastructure Services *Digitally Signed Dec 23, 19* 

Financial Implications Apryl Lukezic Co-ordinator of Budgets Digitally Signed Dec 23, 19

Recommended by the Department Tony Cecutti General Manager of Growth and Infrastructure Digitally Signed Dec 23, 19

**Recommended by the C.A.O.** Ed Archer Chief Administrative Officer *Digitally Signed Dec 23, 19* 

#### Resolution

For Information Only

#### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

#### **Report Summary**

This report provides an overview of winter maintenance activities for the 2019-2020 winter control season up to and including the months of October and November 2019. As highlighted in the report, the 2019-2020 winter season started very early again this year with the first snow storm occurring on October 31st. The report will provide general information and financial results for this period on six major winter sub-services namely; Roadway Snow Plowing/Sanding/Salting, Snow Removal, Sidewalk Winter Maintenance, Roadway Snow Plowing – Graders/Loaders/4x4's, Winter Ditching/Spring Clean Up and Miscellaneous Winter Maintenance.

#### **Financial Implications**

The winter control deficit will form part of the year end position.

# Winter Control Update

# Background

Winter control services in the City of Greater Sudbury are covered by defined winter control service policies and/or guidelines contained within the Minimum Maintenance Standards (MMS), O.Reg. 239-02. The biggest challenge staff are experiencing in the last couple winter seasons is the weather. During the 2018-2019 winter season, the City received approximately 13 feet or 3.96 meters of snow with very few if any significant melting periods. This resulted in increased activity levels in snow plowing, snow removal and pothole patching to name a few. Unfortunately, the 2019-2020 winter season has not started off any better. Since October, 2019 there have been 3 fairly significant snow events.

# Weather Statistics

As noted the weather has not been very co-operative so far this winter season. Table 1 highlights the statistical information extracted from Environment Canada for this reporting period (October – November 2019). Also included is the 30 year normal (1981 – 2010) for the same months to demonstrate the increases experienced. The total accumulation for the 2019-2020 winter season up to and including November 2019 is 3.3 feet or 1.0 meters. One difference seen this season over last season is some mild weather between snow storms which has caused some melting periods. From a maintenance perspective, melting periods most certainly help with the amount of snow on the edge of roads and sidewalks but also contributes to the need for additional maintenance activities such as drain opening and/or road scraping. On the other hand, the annual snow total for the 2019 calendar year is 12.3 feet or 3.75 meters. The 30 year normal for the same period is 6.56 feet or 2.0 meters. The snow accumulation in 2019 compared to the 30 year normal reflects an 87.5% increase for the same period.

Table	1 –	Weather	Statistics
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Month	Snow Accumulation (cm's)	30 Year Normal (cm's)	Percentage Increase/(Decrease) Compared to 30 Year Normal (%)
Jan	100.6	59.5	69.1
Feb	101.2	51.7	96.0
Mar	42.5	34.9	21.8
Apr	18.1	16.9	7.1
May	12.0	1.9	631.6
Jun-Sep	-		
Oct	19.4	5.7	340.4
Nov	80.8	29.6	273.0
Dec			
Totals	375	200	87.5

Note: All weather data taken from Environment Canada website for weather station Sudbury A.

# Winter Control Sub-Services

#### 1) Roadway Snow Plowing/Sanding/Salting

Includes work activities such as plowing/sanding/salting/anti-icing roads and winter stockpile management.

#### <u>Status Update</u>

With the early onset of winter, staff have been very busy with this sub-service. From the beginning of winter 2019/2020 until the end of November staff have addressed 3 major snow storms. In addition to the snow events, the City had melting periods which caused the snow on roads and sidewalks to melt and required additional plowing/scraping to keep them safe for vehicular and pedestrian traffic.

#### **Challenges**

Staffing – One of the most significant challenges faced at the beginning of each winter is staff training. Generally speaking, the casual pool of employees is topped up in September and they are provided training prior to winter control. Training cannot be completed until winter commences. The timing and amount of snow challenged staff to complete training in a shorter time period. In addition to staff training, there is also an above average number of employees off work for various medical reasons which has created significant stress on the casual pool.

Early onset of winter – As mentioned earlier in this report, winter started very early this season. Not only was the first snowfall on October 31<sup>st</sup> but it measured at over 19 centimeters. The early onset limits staff's ability to secure enough Contract Services to assist with the winter event as most of them were still attending to third party project work. The City's contractor standby period commences on November 15<sup>th</sup> and runs to March 31<sup>th</sup> the following year.

Freezing rain – Freezing rain is a challenge regardless of when it happens. Staff fully deploy as quickly as possible but cannot get to all parts of the City quick enough as it relates to public expectations. There have been a couple of freezing rain events already this year. Snow packed roads become slippery under these weather conditions. It is staff's intention to provide the public with better advance notice of such "significant weather events" through newly developed procedures. Invariably, the public will have to be very careful when driving/walking when these events occur.

#### 2) Snow Removal

Includes work activities such as bus stop clearing, snow removal with loaders, snow dump operation and snow removal in the downtown centres.

#### <u>Status Update</u>

There has been limited if any snow removal during this reporting period.

#### **Challenges**

Public expectations – This is generally a very contentious issue in the City. The public who park vehicles along our roadways would like to have the banks removed in a more timely fashion. The current service level would have staff removing banks for sight lines at intersections, when banks impede the ability for a vehicle to pass safely, at select bus stops and in front of churches at Christmas.

#### 3) Winter Sidewalk Maintenance

Includes work activities such as sidewalk plowing and sanding.

#### <u>Status Update</u>

As noted in item 1.

#### **Challenges**

As noted in item 1.

#### 4) Roadway Snow Plowing with Graders/Loaders/4x4s

Includes work activities such as snow plowing with graders, 4x4s and loaders, municipal parking lot maintenance and snow fence maintenance.

#### <u>Status Update</u>

With the early onset of winter, staff have been very busy with this sub-service. From the beginning of winter 2019/2020 until the end of November staff have addressed 3 major snow storms. In addition to the snow events, the City had melting periods which caused the snow on roads and sidewalks to melt and required staff to complete additional plowing/scraping to keep them safe for vehicular traffic. In a typical winter, staff do not have to complete the amount of road scraping that has been seen to date (October/November). The melting action has caused the roads to become very "mealy" and irregular which facilitates the need to scrape them with graders equipped with ice blades.

#### **Challenges**

Contractor availability – Staff generally try to secure as many graders as they can to complete this work but it is never enough. Some of our Contractor partners have other contracts that they need to fulfill which at times limits their availability. Road scraping is a slow task involving multiple passes with a grader.

Freezing rain – Freezing rain is a challenge regardless of when it happens. Staff fully deploy as quickly as possible but cannot get to all parts of the City quick enough as it relates to public expectations. There have been a couple of freezing rain events already this year. Snow packed roads become slippery under these weather conditions. Staff are limited to the number of options they can perform on roadways when a freezing rain event is experienced. Options include sanding and salting or scraping with a grader. Regardless of which treatment is completed it takes time to cover all 3,600 lane kilometers of the road network.

Cul-de-sac plowing – Many residents who live in cul-de-sacs request snow removal along the frontage of their property after a winter event. The main reason for snow removal is generally associated with the lack of area to store snow due to driveway widths and lot dimensions. Staff are constantly answering calls from the public on this issue. The City deploys 4x4s or loaders to clear cul-de-sacs and bulb outs at the same time plows are deployed on the Class 4-6 network. The windrows of snow left after the snow plowing operations are the same as similar straight sections of Class 4 to 6 roadway as it is in most cul-de-sacs. To deal with this issue staff are planning on providing updated information on the City's website describing the proper way cul-desacs are plowed.

#### 5) Winter Ditching/Spring Clean Up

Includes work activities such as winter ditch maintenance and spring clean up with sweepers/flushers on roads and sidewalks.

#### <u>Status Update</u>

There has been no winter ditching/spring clean up during this reporting period other than minor drainage works during melting periods.

#### **Challenges**

No significant challenges in this reporting period.

#### 6) Miscellaneous Winter Maintenance

Includes work activities such as property restoration (plow damage), pothole patching, winter road patrol, employee standby, equipment standby, health and safety training (snow school), fringe benefits and tool repairs.

#### <u>Status Update</u>

Pothole patching is the only maintenance activity that has been completed under this subservice during the October/November reporting period. To date, there has been some pothole patching completed due to the melting conditions in combination with the freeze-thaw cycles. In 2019 the City completed a significant large patching program which is anticipated to address pothole patching. Over the coming months, staff will continue to monitor this program closely to ensure the 2020 large patching program addresses the areas of greatest concern.

#### **Challenges**

No significant challenges in this reporting period.

# Financials

This report provides the financial results of the 2019 winter roads operations up to and including the month of November, 2019. As depicted in Table 2 below, the result for 2019 is an over expenditure of approximately \$5.7 million.

#### Table 2 – Financial Results

2019 Winter Summary As at November 30, 2019							
	Annual		2019 YTD				
	Budget	Budget	% Change YTD				
Snow Plowing/Sanding/Salting	7,325,549	5,651,062	6,595,907	(944,845)	117%		
Snow Removal	699,111	532,194	2,587,999	(2,055,805)	486%		
Winter Sidewalk Maintenance	1,069,080	801,810	950,479	(148,669)	119%		
Snow Plowing - Graders/Loaders/4x4s	794,962	595,602	1,428,924	(833,322)	240%		
Winter Ditching/Spring Clean Up	2,036,020	2,012,623	2,934,136	(921,513)	146%		
Miscellaneous Winter Maintenance	6,736,505	5,706,985	6,518,378	(811,393)	114%		
Totals	18,661,226	15,300,276	21,015,823	(5,715,547)	137%		

The winter control deficit will form part of the year end position.



Presented To:	<b>Operations Committee</b>		
Presented:	Monday, Jan 13, 2020		
Report Date	Friday, Dec 20, 2019		
Туре:	Managers' Reports		

# **Request for Decision**

#### Maximum Speed Limit - Panache Lake Road

#### **Resolution**

THAT the City of Greater Sudbury reduces the speed limit on Panache Lake Road from Municipal Road 55 to 210 metres north of Suihkola Road to 70 km/h from 80 km/h;

AND THAT the City of Greater Sudbury directs staff to prepare a by-law to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended changes, as outlined in the report entitled "Maximum Speed Limit – Panache Lake Road", from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on January 13, 2020.

#### Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

#### **Report Summary**

The Transportation and Innovation Services section received a request from area residents to review the posted speed limit on Panache Lake Road. This report will outline the criteria used by staff to evaluate the maximum posted speed limit based on the physical characteristics of the road.

#### **Financial Implications**

Recommendations of this report may be carried out within existing approved operating budget.

#### Signed By

**Report Prepared By** Soutsay Boualavong Traffic/Trans Eng Analyst *Digitally Signed Dec 20, 19* 

Manager Review Joe Rocca Traffic and Asset Management Supervisor Digitally Signed Dec 20, 19

**Division Review** Akli Ben-Anteur Project Engineer *Digitally Signed Dec 20, 19* 

Financial Implications Apryl Lukezic Co-ordinator of Budgets Digitally Signed Dec 23, 19

Recommended by the Department Tony Cecutti General Manager of Growth and Infrastructure Digitally Signed Dec 23, 19

**Recommended by the C.A.O.** Ed Archer Chief Administrative Officer *Digitally Signed Dec 23, 19* 

#### Maximum Speed Limit – Panache Lake Road

The Transportation and Innovation Services section received a request from area residents to review the existing 80 km/h posted speed limit on Panache Lake Road between Municipal Road 55 (MR 55) and 210 metres north of Suihkola Road.

In 2010, City Council adopted the Canadian Guidelines for Establishing Posted Limits published by the Transportation Association of Canada (TAC) for establishing posted speed limits on arterial and major collector roads. This was adopted to provide an objective and consistent process for establishing speed limits within the City.

Panache Lake Road is collector road, located in Whitefish, which provides a connection for the rural properties in the area to and from Municipal Road 55. It is constructed to a rural standard with asphalt surface width that varies from 6.5 to 7.0 metres and gravel shoulders.

The Average Annual Daily Traffic volume (AADT) along this section is approximately 920 vehicles and the posted speed limit on this section of Panache Lake Road is 80 km/h. South of this section, the posted speed limit is 60 km/h.



To determine the recommended speed limit from the Canadian Guidelines for Establishing Posted Speed Limits, staff divided Panache Lake Road into two segments based on the residential density and existing speed limits. The risk score and recommended posted speed limit for each segment can be found in the table below. The complete evaluations based on the Canadian guidelines can be found in Appendix A and B.

Location	Current	Total Risk Score	Recommended Posted
	Posted Speed		<u>Speed</u>
MR 55 to Grassy Lake Road	80 km/h	31	70 km/h
Grassy Lake Road to 210 m north of Suihkola Road	80 km/h	32	70 km/h

Table 1 – Summary of Recommended Posted Speed Limits

Applying the physical characteristics of each segment to the Canadian Guidelines and using a functional classification of a "two lane rural undivided major collector", yields a total risk score of 31 and 32 for the two segments and results in a recommended speed limited of 70 km/h.

Staff also reviewed collision data for the two segments from 2015 to 2019 year to date and found that there were total of ten reported collisions during this period. Eight of the ten collisions were classified as single motor vehicle collisions. The operating speed of the vehicle is typically a contributing factor for this type of collision.

Considering the function of the roadway and the collision history, staff recommends the maximum posted speed limit be reduced to 70 km/h.

Additionally, there are several horizontal curves along Panache Lake Road that have a measured "comfortable" speed of less than 70 km/h. City staff will be making improvements to the existing curve warning and advisory speed signs to further enhance safety.

#### **Resources Cited:**

City of Greater Sudbury, *Maximum Road Speed Limits*, September 2010, Accessed Online: <u>http://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=310&ite</u> <u>mid=3480&lang=en</u>



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

Name of Corridor:	Panache Lake Road	ł				
Segment Evaluated:	MR55		to	Grassy Lake Road		
Geographic Region:	Whitefish					
Road Agency:	City of Greater Sud	oury				
Road Classification:	Collector		Length of Corric	lor:	6,790	m
Urban / Rural:	Rural		Design Speed: (Required for Freeway, Expressway, Highway)			km/h
Divided / Undivided:	Undivided		Current Posted S	peed:	80	km/h
Major / Minor:	Major		Prevailing Speed: (85th Percentile - for			km/h
# Through Lanes Per Direction:	1 lane		Policy: (Maximum Posted Sp		No policy	
		RISK	Score			
	Value	Louior				

		11101	JUDIE	
A1	GEOMETRY (Horizontal)	Lower	2	
A2	GEOMETRY (Vertical)	Medium	4	
A3	AVERAGE LANE WIDTH	Higher	3	
в	ROADSIDE HAZARDS	Medium	6	
C1	PEDESTRIAN EXPOSURE	Medium	2	
C2	CYCLIST EXPOSURE	Higher	3	
D	PAVEMENT SURFACE	Lower	3	
	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences		
	STOP controlled intersection	7		
	Signalized intersection	0		
E1	Roundabout or traffic circle	0	4	
	Crosswalk	0		
	Active, at-grade railroad crossing	0		
	Sidestreet STOP-controlled or lane	1		
	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences		
E2	Left turn movements permitted	39	3	
	Right-in / Right-out only	0		
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0	
	Number of interchanges along corridor	0		
F	ON-STREET PARKING	Lower	1	

Total	Risk	Score:	

31

#### **Recommended Posted** Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

No policy

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

Comments:





# **Automated Speed Limit Guidelines**

Version:

		FOR	M A - Automate	ed Speed	d Limit	t Guidelii	nes Spreadsl		rsion: Apr-09
Nam	ne of Corridor:	Panache Lake Road	J						
Seg	ment Evaluated:	Grassy Lake Road			to 210	north of Suihko	la Road		
Geo	graphic Region:	Whitefish							
Roa	d Agency:	City of Greater Sud	oury						
Roa	d Classification:	Collector		Length	۱ of Co	orridor:		4,499	m
Urba	an / Rural:	Rural					ed for Freeway,		km/h
Divid	ded / Undivided:	Undivided		Current	t Poste	/ay, Highway) Posted Speed:		80	km/h
Maio	or / Minor:	Major		(For infor Prevaili	ing Spe	ed:			km/h
# Th	rough Lanes	1 lane		Policy:		- for informa	tion only)	No policy	
Per [	Direction:		RISK	(Maximu Score	ım Poste	ed Speed)			
A1	GEOMETR	Y (Horizontal)	Lower	2	1				
					-				
A2	A2 GEOMETRY (Vertical)		Medium	4					
<b>A</b> 3	AVERAGE	LANE WIDTH	Higher	3				Total Risk Score:	
в	ROADSID	E HAZARDS	Medium	6				32	
C1	PEDESTRIA	N EXPOSURE	Medium	2					
C2	CYCLIST	EXPOSURE	Higher	3					
D	PAVEMEN	IT SURFACE	Lower	3				Recommended Poste Speed Limit (km/h):	d
		NTERSECTIONS BLIC ROADS	Number of Occurrences		1		As	determined by road charac	teristics
		controlled intersection	4					70	
		Signalized intersection	0					/0	
E1	Rou	indabout or traffic circle	0	4				As determined by polic	у
		Crosswalk	0					No policy	
	Active, at-	grade railroad crossing	0	_					

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

#### Comments:

2

Number of

Occurrences

32

0 Number of

Occurrences

0

Lower

4

0

1

Sidestreet STOP-controlled or lane

Left turn movements permitted

Right-in / Right-out only

NUMBER OF INTERSECTIONS

WITH PRIVATE ACCESS DRIVEWAYS

NUMBER OF INTERCHANGES

**ON-STREET PARKING** 

Number of interchanges along corridor

E2

**E**3

F