

# Public Works & Infrastructure Committee

Thursday, January 12, 2017 4:00 PM

Henry Baker Hall, Main Floor, City Hall



#### OFFICE OF THE CITY CLERK

#### APPROVAL OF PUBLIC AGENDA

#### ADOPTION OF MINUTES

Public Works & Infrastructure Committee - Public Meeting - Dec 8, 2016 4:00 PM

#### **ADMINISTRATION REPORTS**

PWI17-1 Snow Routes Pilot Program

#### Recommendation

- 1. That City Council authorizes the implementation of a Snow Routes Pilot Program (the "Pilot Program") on a 5km section on the following Category 1 and 2 streets, beginning in the fall of 2017 and through the 2017/2018 winter season:
  - i. Victoria Avenue (Broad Street to Winnipeg Street);
  - ii. Winnipeg Street (Victoria Avenue to College Avenue); and
  - iii. College Avenue (Winnipeg Street to Abbott Road).
- 2. That City Council approve the enforcement of a parking ban when declared on streets selected for the Pilot Program, as Snow Routes.
- 3. That City Council directs Administration to bring back a report in 2018 that evaluates the effectiveness of the Pilot Program, with future recommendations.
- 4. That City Council instructs the City Solicitor's office to prepare amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 (the "Bylaw") to incorporate the requirements for the Pilot Program as detailed in Appendix C to this report.
- 5. That City Council authorizes \$85,000 of the 2016 Winter Road Maintenance operating budget be used to fund the capital and operating expenses associated with the implementation of the Pilot Program.
- 6. That this report be forwarded to the January 30, 2017 City Council meeting for approval.

#### PWI17-2 Snow Storage Site Fee Bylaw Amendment



#### OFFICE OF THE CITY CLERK

#### Recommendation

- 1. That the City Solicitor's office be instructed to prepare amendments to Schedules "L" and "J" of *The Clean Property Bylaw, No. 9881* (Bylaw) to incorporate the modifications in the description of four truck categories, corresponding to the snow site user fees as indicated in the report.
- 2. That this report is forwarded to the January 30, 2017 meeting of the Council for approval.
- PWI17-3 Amendments to the Regina Traffic Bylaw, 1997, No. 9900

#### Recommendation

- 1. That City Council approve the following amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 (Traffic Bylaw);
  - a. Replace Schedule B of the Traffic Bylaw with the proposed Figure 2

    (Appendix A)
    - (Appendix A).
  - b. Revise the table for maximum allowable weights on bridges in Section 73 (Appendix B).
  - c. Reduce speed limits in Section 10 from 100 km/hr to 70 km/hr on Albert Street from 200 meters south of the north city limits (Appendix C).
- 2. That the City Solicitor be instructed to amend the Traffic Bylaw to reflect the changes proposed in this report; and
- 3. That this report be forwarded to the January 30, 2017 meeting of City Council for approval.
- PWI17-4 Bridge Underpass Clearance Signs Imperial and Metric Dimensions

#### **Recommendation**

- 1. That the posting of dual Imperial and Metric underpass clearance signs not be approved;
- 2. That item PWI16-11, Underpass Safety Bridge Underpass Traffic Signs, be removed from the outstanding item list.
- PWI17-5 Impact Report Removal of Bus Lanes 11Th Avenue and 12Th Avenue

#### Recommendation

That item #CR15-38, amendments to the *Regina Traffic Bylaw*, 1997, No. 9900, be removed from the list of outstanding items.



# OFFICE OF THE CITY CLERK

# ADJOURNMENT

# AT REGINA, SASKATCHEWAN, THURSDAY, DECEMBER 8, 2016

# AT A MEETING OF THE PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE

#### HELD IN PUBLIC SESSION

#### AT 4:00 PM

These are considered a draft rendering of the official minutes. Official minutes can be obtained through the Office of the City Clerk once approved.

Present: Councillor Sharron Bryce, in the Chair

Councillor Lori Bresciani Councillor John Findura Councillor Barbara Young

Regrets: Councillor Jason Mancinelli

Also in Council Officers, Mavis Torres and Kristina Gentile

Attendance: Solicitor, Mark Yemen

Executive Director, City Planning & Development, Diana Hawryluk

Executive Director, Transportation & Utilities, Karen Gasmo

Manager, Winter District Maintenance, Chris Warren

Senior City Planner, Downton, Chris Sale

#### APPOINTMENT OF CHAIRPERSON

The Secretary called the meeting to order and following nomination procedures for the position of Chairperson, Councillor Sharron Bryce was declared Chairperson of the Public Works and Infrastructure Committee for 2017.

(Councillor Bryce took the Chair.)

#### APPOINTMENT OF VICE-CHAIRPERSON

Following nomination procedures for the position of Vice-Chairperson, Councillor Barbara Young was declared Vice-Chairperson of the Public Works and Infrastructure Committee for 2017.

#### APPROVAL OF PUBLIC AGENDA

Councillor Barbara Young moved, AND IT WAS RESOLVED, that the agenda for this meeting be approved, as submitted and that the delegations be called in the order they are called by the Chairperson.

#### **ADOPTION OF MINUTES**

Councillor John Findura moved, AND IT WAS RESOLVED, that the minutes for the meeting held on June 20, 2016 be adopted, as circulated.

#### ADMINISTRATION REPORTS

#### PWI16-11 Annual Winter Maintenance Summary

#### Recommendation

That this report be forwarded to the December 19, 2016 meeting of City Council for information.

The following addressed the Committee:

- Jim Elliott, representing himself; and
- Sara Marie Daubisse, Brandon Wright and Luke Nichols, representing Bike Regina

Councillor Barbara Young moved that the recommendations contained in the report be concurred in.

Councillor Barbara Young moved, AND IT WAS RESOLVED, that the cost portion of category 1, 2 and 3 enhancement of bicycle lane snow clearing be deferred to the Administration for inclusion on the 2017 budget process.

The main motion was put and declared CARRIED.

#### PWI16-12 Feedback on Operations for the Mobile Food Vending Program

#### Recommendation

That item #CR16-35 Amendments to *The Clean Property Bylaw No. 9881* be removed from the list of Outstanding Items for this Committee.

Councillor John Findura moved, AND IT WAS RESOLVED, that the recommendation contained in the report be concurred in.

#### CITY CLERK'S REPORTS

#### PWI16-13 2016 Review of Outstanding Items

#### Recommendation

1. That the following item be deleted from the list of outstanding items for the Public Works & Infrastructure Committee:

<u>Item</u>	<b>Committee</b>	<b>Subject</b>
PW12-6	Public Works & Infrastructure	Measuring the City of Regina's Sustainability
PW14-25	Public Works & Infrastructure	Snow Routes Options Report/Snow Routes
PW14-28	Public Works & Infrastructure	Septage Receiving Station (SRS) - Revised Hauled Wastewater Program

2. That the updated List of Outstanding Items be forwarded to the Executive Committee for information.

Councillor Barbara Young moved, AND IT WAS RESOLVED, that the recommendations contained in the report be concurred in.

# **ADJOURNMENT**

Councillor Lori Bresciani moved, A	AND IT	WAS ]	RESOLVE	D, that th	e meeting
adjourn.					

The meeting adjourned at 4:45 p.m.		
Chairperson	Secretary	

January 12, 2017

To: Members

Public Works & Infrastructure Committee

Re: Snow Routes Pilot Program

#### RECOMMENDATION

1. That City Council authorizes the implementation of a Snow Routes Pilot Program (the "Pilot Program") on a 5km section on the following Category 1 and 2 streets, beginning in the fall of 2017 and through the 2017/2018 winter season:

- i. Victoria Avenue (Broad Street to Winnipeg Street);
- ii. Winnipeg Street (Victoria Avenue to College Avenue); and
- iii. College Avenue (Winnipeg Street to Abbott Road).
- 2. That City Council approve the enforcement of a parking ban when declared on streets selected for the Pilot Program, as Snow Routes.
- 3. That City Council directs Administration to bring back a report in 2018 that evaluates the effectiveness of the Pilot Program, with future recommendations.
- 4. That City Council instructs the City Solicitor's office to prepare amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 (the "Bylaw") to incorporate the requirements for the Pilot Program as detailed in Appendix C to this report.
- 5. That City Council authorizes \$85,000 of the 2016 Winter Road Maintenance operating budget be used to fund the capital and operating expenses associated with the implementation of the Pilot Program.
- 6. That this report be forwarded to the January 30, 2017 City Council meeting for approval.

#### **CONCLUSION**

The implementation of a pilot project to test the effectiveness and processes of Snow Routes is recommended. To implement the pilot project, approval is required for:

- Designation of snow routes locations;
- bylaw changes for the declaration and enforcement of snow routes when in effect; and
- budget of \$85,000 for signage and communication.

The recommended Snow Routes Pilot is based on the framework approved by the Public Works and Infrastructure Committee in report PWI16-7.

The effectiveness of the pilot project will be assessed through the establishment and evaluation of key benchmarks focussed on the compliance during no parking periods, effectiveness of communication and efficiency improvements for winter maintenance activities. The benchmark measures will be evaluated during the 2016/2017 winter season prior to implementation and during the pilot period in the 2017/2018 winter season. The comparison of the results will help in understanding the cost and efficiency gains resulting from implementation of snow routes and factors to be considered to optimize the full implementation of a Snow Routes Program.

#### **BACKGROUND**

On June 20, 2016, Administration submitted report PWI16-7 and the PWI Committee approved the following recommendations:

- 1. That Public Works and Infrastructure Committee approve the framework for a Snow Route Program (Program) consisting of temporary parking bans for specific hours on Category 1 and 2 streets as defined in the Winter Maintenance Policy.
- 2. That Administration bring back a report in quarter 4 of this year (2016) detailing a phased in implementation plan for the Pilot Program including an initial Pilot Project beginning in the 2017/2018 winter season.

The framework approved in report PWI16-7 for the development of a Snow Route Program includes the following:

- Temporary parking restrictions;
- public awareness about the program;
- public notifications regarding parking restriction times; and
- proposed Traffic Bylaw amendments.

The Bylaw recommendations in this report have been reviewed by and supported by the Traffic Bylaw Working Group on December 12, 2016.

The Traffic Bylaw Working Group consists of representatives from the Regina Police Service, Office of the City Solicitor, Fire & Protective Services, Bylaw Enforcement Branch, Parking Services Branch and Traffic Branch. It reviews the Traffic Bylaw and submits any recommended bylaw amendments for consideration and adoption to the Public Works & Infrastructure Committee and ultimately City Council.

#### DISCUSSION

The proposed Snow Route Pilot Program, if approved, will be implemented during the 2017/2018 winter season. The following proposes how the pilot program will be implemented and evaluated:

#### 1. Description of the Pilot Program:

A section of streets representative of the Category 1 and 2 streets that currently provide challenges for effective snow removal, due to on-street parking during the winter season, were selected. The map of the Pilot Program sections is provided within Appendix A.

The following summarizes the locations and other details related to the implementation of the Pilot Project:

- a. 5km of streets on the following sections were selected for the Pilot Program:
  - i. Victoria Avenue (Broad Street to Winnipeg Street);
  - ii. Winnipeg Street (Victoria Avenue to College Avenue); and
  - iii. College Avenue (Winnipeg Street to Abbott Road).
- b. Permanent signs will be installed to identify Snow Routes.
- c. No parking will be allowed on Snow Routes when parking bans are declared.

#### 2. Communication:

Communication activities will be aimed at providing details about the Pilot Project to the residents, potential on-street parking users and the public in general about the selection of routes and expectations. This would include the objectives and locations of the Pilot Project, awareness of the snow route signage, the temporary parking ban timelines, notifications on when snow routes are declared, parking fines, as well as amendments to the Traffic Bylaw.

#### Awareness of Pilot Program

Communication activities will be initiated in Q2 of 2017 and will continue throughout the 2017/2018 winter season. This would include:

- o Public Service Announcements (PSAs);
- o mail drops;
- o City of Regina website and social media (Facebook, Twitter) updates;
- o appropriate signage on the applicable street locations, and
- public engagement activities prior to and during the implementation of the Pilot Program.

#### Notification of Temporary Parking Bans

The City will notify the public when snow routes are declared and parking bans come into effect at locations on the designated Snow Routes. Notifications such as PSA's, social media and the City's website, will be issued within the minimum 8hr period prior to parking bans going into effect.

#### **Constraints:**

The following are key constraints and challenges related to the communication and implementation of the Pilot Program:

- Parking ban declarations will be based on the weather forecasts, which may not always be accurate; and
- reaching every affected resident or visitor when providing notifications may not be possible.

During the Pilot Program, Administration will learn how best to mitigate these constraints and what modifications may be needed to implement a successful full scale Snow Routes Program in the future.

#### 3. Bylaw Changes:

Key changes to the Regina Traffic Bylaw, 1997, No. 9900, will include:

- Declaration of roads subject to snow route designation;
- provisions for no parking or stopping on designated snow routes for a period of up to 24 hours once a declaration announcing that snow routes are in effect;
- inclusion of a fine of \$110.00 for parking on a snow route when declared; and
- provision for towing.

A summary of the key required Bylaw amendments is included in Appendix C of this report.

#### 4. Enforcement:

Parking Services will program updates to its handheld devices and Ticket Tracer Program to allow for the issuance of fines in the event that a vehicle is parked on a Snow Route, when Snow Routes have been declared.

#### 5. Cost to Implement:

The estimated costs to implement the pilot project is \$85,000. These funds would be used for the installation of signage along the proposed routes and communication activities to engage residents. It is recommended that this funding be allocated from the existing winter maintenance operating budget.

A portion of these expenditures may be recovered through efficiency gains in snow clearing operations. Parking fines may provide additional revenue to offset costs associated with the implementation of Snow Routes. These revenues however, will vary based on the level of compliance with the parking restrictions.

#### 6. Evaluation:

During the 2016/2017 winter season, Administration will gather data from the locations of the Pilot Program. This will provide a benchmark for comparison for when the program is implemented at the beginning of the 2017/2018 winter season. The data collected from the two seasons will be used to evaluate the Pilot Program to determine the impacts on residents,

visitors, traffic flow and City operations. Appendix B to this report lists the benchmark criteria.

#### RECOMMENDATION IMPLICATIONS

#### **Financial Implications**

It is estimated that the City requires an investment for the Pilot Program roll-out as described:

- \$32,000 to install permanent 'Snow Route when declared' signs on the designated streets sections;
- \$50,000 to communicate and educate residents in the affected neighbourhoods on the new Snow Route Pilot Program and temporary parking bans; and
- \$3,500 to provide Parking Enforcement, based on five storm events in a season.

The City anticipates that there will be some operational savings resulting from the Pilot Program to help offset these additional costs however, the amount is unknown at this time. The benchmarks are designed to assist with this analysis.

#### **Environmental Implications**

Implementation of the Pilot Program will have positive environmental implications, through improved traffic flow resulting in reduced fuel consumption and exhaust emissions.

#### Policy and/or Strategic Implications

The Pilot Program implementation will assist City of Regina Winter Maintenance crews in providing safe transportation, better mobility and accessibility on city streets in line with the City's Official Community Plan (OCP), Section D3 Transportation, Goal 1- Sustainable Transportation 5.4.

The implementation of the Pilot Program requires Traffic Bylaw amendments. See Appendix C for details of the required Bylaw amendments.

#### Other Implications

Implementation of the Snow Routes in the City, should result in more efficient winter maintenance operations, improved driving conditions, safer roads, and reduced claims due to property damage. Properly cleared streets will help in creating a more positive image of the City in the eyes of residents, businesses and visitors. However, the Pilot Program will temporarily eliminate parking on the affected streets.

#### **Accessibility Implications**

Administration included monitoring accessibility as a criteria in its benchmark analysis for the implementation of the Pilot Program during the 2017/2018 winter season. This information will be considered when implementing a City-wide Snow Route Program in the future.

#### **COMMUNICATIONS**

Multiple communication channels will be used to ensure that residents, especially those from the neighbourhoods selected for the Pilot Program, are well informed on how the Snow Routes and temporary parking bans will work. Proposed changes to *The Regina Traffic Bylaw 1997*, *No 9900* will also be communicated. Notices when Snow Routes are in effect will be provided a minimum of 8hrs in advance.

#### **DELEGATED AUTHORITY**

The recommendations contained in this report require City Council approval. City Council's approval will also be required to authorize amendments to *The Regina Traffic Bylaw No. 9900*.

Respectfully submitted,

Norman Kyle, Director Roadways & Transportation Respectfully submitted,

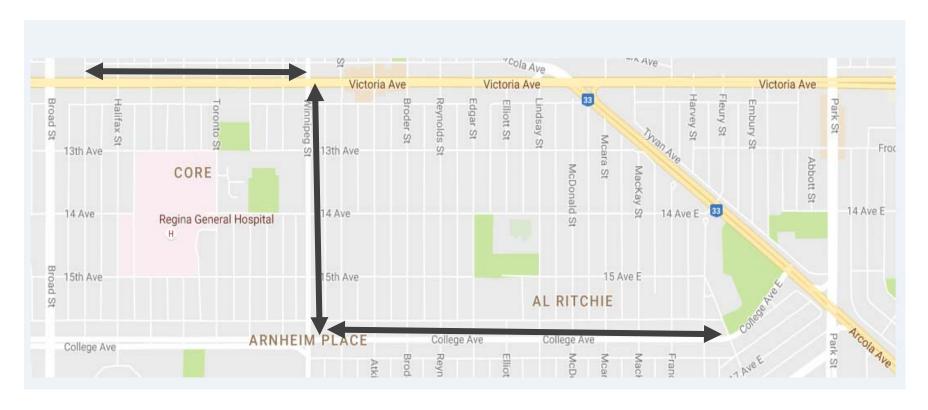
Karen Gasmo, Executive Director Transportation & Utilities

# **Appendix A: Snow Route Program Locations**

# **Map-Pilot Project Locations**

A Pilot Snow Route Program will be implemented on 5km of Category 1 and 2 streets on the following street sections during 2017-2018 winter season.

- a. Victoria Avenue (Broad Street to Winnipeg Street) Category 1
- b. Winnipeg Street (Victoria Avenue to College Avenue) Category 2
- c. College Avenue (Winnipeg Street to Abbott Road) Category 1



# **Appendix B: Snow Route Benchmark Parameters**

# Benchmark Parameters - Key Success Indicators for the Snow Route Pilot Program

Data collection will occur during each snow plow operation on each block of the sections identified for the Pilot Project, for the following winter seasons:

- 2016/2017 prior to implementation of the Pilot Project for benchmarking and comparison purposes; and
- 2017/2018 Pilot Project implementation.

	Parameters
1	Number of parked cars during parking ban
2	Number of vehicles parked for longer than 24 hours
3	Time to complete each plow
4	Minimum street clearance width (one direction) after each plow
5	Fines (revenue) paid within period
6	Number of tickets issued
7	Number of tickets paid voluntarily
8	Number of tickets resulting in appeals
9	Number of tickets where the appeal was successful
10	Number of incidents/collisions/near misses reported (Source-City staff reports/SGI)
11	Number of Service Requests received
12	End conditions-consistency of snow ridge across the blocks and quality of plowed streets
13	Reduction of parking availability (meters) due to snow ridges around parked cars
14	Number of concerns relating to accessibility issues reported
15	Travel time: Enter block time and Leave block time
16	Average speed of operation (can be calculated from travel time above)

<sup>\*</sup>Note: Above perimeters/ benchmarks are subject to change as per requirement.

#### Appendix C: Amendment to The Regina Traffic Bylaw, No.9900

The key amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 will be to add the following provisions:

- 1. Not permitting a person to park and/or stop a vehicle or permit a vehicle to be parked and/or stopped on any street or portion thereby identified as a snow route.
- 2. Prohibiting of parking and/or stopping applies only when the City Manager, or his/ her designate, has declared snow routes to be in effect.
- 3. Declaration announcing snow routes and temporary parking bans to be in effect, shall remain in effect for a period of up to 24 hours on roads, unless sooner terminated or extended by further declaration of the City Manager.
- 4. The 24 hour period commences and is effective from the time specified in the declaration.
- 5. Category 1 roads and category 2 roads shall have the same definition as in the Winter Maintenance Policy.
- 6. The City Manager, or his/her designate shall inform the general public of the existence of the snow routes and temporary parking bans declaration, using whatever means he or she may deem appropriate.
- 7. *Schedule* "K" of the Bylaw is amended to include a fine for stopping and/or parking in a snow route when a snow route is declared is \$110.
- 8. All vehicles parked on designated snow routes while a declaration is in effect may be moved, without notice, for such a distance as is necessary, or impounded by the City at the expense of the registered owner of the vehicle.
- 9. Category 1 Roads subject to a snow route are:
  - Victoria Avenue (Broad Street to Winnipeg Street); and
  - College Avenue (Winnipeg Street to Abbott Road).
- 10. Category 2 Road subject to a snow route is:
  - Winnipeg Street (Victoria Avenue to College Avenue).

# Appendix D: Snow Route Report - PWI16-7

June 9, 2016

To: Members,

Public Works and Infrastructure Committee

Re: Snow Routes Program

#### RECOMMENDATION

1. That Public Works and Infrastructure Committee approve the framework for a Snow Routes Program (Program) consisting of temporary parking bans for specified hours on Category 1 and 2 streets as defined in the Winter Maintenance Policy.

2. That Administration bring back a report in quarter 4 of this year (2016) detailing a phased in implementation plan for the Program including an initial pilot project beginning in the 2017/18 winter season.

#### **CONCLUSION**

This report is in response to PWI14-21 seeking approval for a framework for a Snow Routes Program to address challenges with on-street parking during snow plow operations.

It is recommended that Council approves Option 2, which designates snow routes with temporary parking bans for specified hours on main streets (Category 1 and 2 as described in the Winter Maintenance Policy). The option was developed based on the outcome of public consultation, feedback from engagement sessions and best practices for snow routes from other municipalities. The framework for the program is being presented for approval with the implementation plan being developed once an option has been endorsed by Committee.

The implementation that will be developed will be recommended as a phased-in approach to support the community's adjustment to the variable parking bans, to assess the appropriateness of the routes and to manage necessary operational changes to support the communication and enforcement of the Program. The first phase would include running a pilot in the winter of 2017/2018 to test the Program on a representative selection of the streets. The preparation for the pilot will involve consultation with other internal stakeholders, installation of signage, necessary amendments to *The Regina Traffic Bylaw No. 9900* (bylaw), development of a communication plan and development of budget recommendations. A detailed report on the pilot program implementation will be presented to Public Works and Infrastructure in Q4 2016. Administration will utilize the pilot program results to review the effectiveness of the proposed Snow Routes Program and report back to Committee before full implementation.

#### **BACKGROUND**

On October 3, 2014, in response to PWI14-21, the Public Works & Infrastructure Committee (PWI) provided a direction to Administration to develop and outline the most appropriate program to remove vehicles from roads for effective snow removal in a report. Research was conducted which examined the practices of other municipalities to gain insight into possible options for a Snow Routes Program. Appendix A highlights the details of the snow routes challenges other Western Canadian municipalities faced while implementing their snow route programs. The municipalities polled were Calgary, Saskatoon, Winnipeg, Brandon and Edmonton.

Key findings of the research suggest that arterial roads and transit routes are commonly declared as snow routes. In addition, implementing and operating snow routes programs has challenges and communication to the public will be essential to the success of the Program.

On December 10, 2015 Administration submitted a memo to PWI advising that a consultant would be engaged to determine whether the community supported the snow routes option. In March 2016, the consultant was hired to complete the public engagement activities and compile the unbiased results.

#### DISCUSSION

Public consultation involved a multi-modal survey and two open houses. A total of 883 surveys were completed which included 231 participants who took the survey linked to the City of Regina's website. The public engagement activity results (Appendix B) reflect a high level of support for the City to implement a designated snow route program. Participants in the public open houses and citizen survey were presented with two options for snow routes as well as an option to maintain current policy and practices.

#### Option 1: Status Quo - No snow route program

The Winter Maintenance Policy does not currently have provisions for parking bans but provides allowances for snow plowing around a parked vehicle leaving a snow ridge around them. Only nine per cent of the residents who took the survey prefer this option.

Option 2: Snow Route Declaration and Temporary Parking Ban (Recommended Option)
This option recommends the implementation of a temporary parking ban following a snow event on Category 1 and 2 streets. During a declared parking ban, City staff would ensure that the roads designated as Snow Routes are free of parked vehicles. Non-compliance would result in ticketing and towing (to a nearby location not on a Snow Route or to a pre-identified impound lot). The amount of towing would be dependent on the compliance of residents and the availability of tow trucks. Once the snow is cleared from these routes, the parking bans would be lifted. This option is supported by the majority who participated in the public engagement citizens' survey and open houses. Approximately 62 per cent of those surveyed preferred this option.

This option would result in temporary parking bans being in effect for a minimal number of days (15-20 days per season). The cost of removing vehicles found to be non-compliant would be recovered from ticketing and towing fines. As per the survey results, 40 per cent of the residents felt that the City should both ticket and tow the vehicles in violation of the designated snow route. Almost 72 per cent of the residents who participated felt that vehicle owners should pay the cost of enforcement and towing costs through tickets.

The option will also require the creation of an extensive communication plan to ensure all affected road users are made aware of changes. Public education and communication on parking ban status may require the installation of mobile applications and other appropriate communication channels. Building sufficient towing and parking enforcement capacity and the costs of installing permanent signage are also potential challenges with this option.

This option recommends the implementation of seasonal parking bans on identified Category 1 and 2 streets. This would require the installation of signage along the roadways, indicating a permanent seasonal parking ban throughout the winter months. This option was not supported by those who participated in the public engagement open houses.

Municipalities such as Winnipeg and Brandon utilize this type of Snow Routes policy, where the permanent parking ban typically takes place during the overnight hours between the months from November to March.

This option would ensure efficient plowing of Category 1 and 2 streets, and would allow for snow storage in parking lanes during the ban. However, because there are generally only 15-20 days where on-street parking would impact Winter Maintenance activities, this represents a significant impact to citizens that park their vehicles on Category 1 and 2 streets.

# **Snow Route Implementation:**

Proper implementation of a snow route program is fundamental to its success. A phased implementation approach is recommended based on research done from other Western Canadian municipalities. Introducing snow routes will be a significant change for residents and a phased approach will help address the behavioural change needed for the program to be successful. A phased approach also allows for operational areas involved in the delivery of the program to build capacity gradually.

Running a pilot now routes program on a select section of the streets in the 2017/2018 winter is recommended. The preparation for the pilot will involve consultation with other internal stakeholders, installation of signage, necessary amendments to *The Regina Traffic Bylaw No.* 9900 (bylaw) development of a communication plan and development of budget recommendations. The information from the pilot program will be useful to expand the program to a larger network of arterial streets in the City.

A detailed report on the pilot program implementation will be presented to Public Works and Infrastructure in Q4 2016. Administration will utilize the pilot program results to review the effectiveness of the Snow Routes Program and report back to Committee before full implementation.

#### RECOMMENDATION IMPLICATIONS

#### Financial Implications

Budgetary approval will be required for the installation of signage and communication to residents. As the pilot project has yet to be fully developed the costs associated are yet to be determined. However, it is anticipated the cost associated with operating this program will be partially offset by efficiency gains and recovered through ticket and towing fines.

#### **Environmental Implications**

The recommended option will have positive environmental implications by allowing comparatively unrestricted movement of traffic on the streets thereby reducing exhaust emissions and unnecessary vehicle idling. Reduced amounts of road salts and abrasives may be required as the streets will be more efficiently plowed. Increased street capacity due to enhanced snow removal on roads may help in the reduction of vehicle fuel consumption. The heavy equipment engaged in snow plowing and ice control would operate freely resulting in reduced emissions. A road network that is clear from snow will allow for unrestricted traffic flow. This may reduce pollution caused by idling. However, the program will see an increase of tow trucks on the road and this will create increased pollution as these vehicles are left idling during operation.

#### Policy and/or Strategic Implications

The recommended option will allow City of Regina Winter Maintenance crews to improve the quality of plowing operations. The implementation of a Program with temporary parking bans would require bylaw amendments. The amendments to *The Regina Traffic Bylaw No. 9900* will include the processes for enforcement, ticketing, and towing of illegally parked vehicles on designated snow routes. It will also include an amendment for the new "Snow Route" signs to be installed on the streets. Further details on these changes would be provided when the pilot program and detailed implementation plan are presented.

#### Other Implications

Implementation of a Snow Routes Program in the city will result in a more consistent level of service in accordance with the Winter Maintenance Policy. It will contribute to more efficient winter maintenance operations, provide smoother driving conditions and reduce potential claims due to property damage during maintenance activities. Snow ridges will be placed consistently in the parking lanes which will eliminate unequal distribution of snow when plowing around parked vehicles. Properly cleared streets will help create a more positive image of the City in the eyes of residents, businesses and visitors. The program will temporarily eliminate parking on affected streets for about 15 to 20 days per season.

### **Accessibility Implications**

Vehicles of residents with Accessibility Permits could be towed and returned to the previous location at no cost to the vehicle owner as long as the Accessibility/Handicap Permit is properly displayed in the vehicle. This option will be analysed as part of the pilot program.

#### COMMUNICATIONS

The Communications Department will work closely with Roadways & Transportation to develop communication plans for each the pilot and then the permanent implementation to ensure that the residents are appropriately informed on how the snow routes and temporary parking bans will work in their neighbourhoods. They will also aid in communicating any changes in the bylaws.

#### DELEGATED AUTHORITY

The recommendations contained in this report require City Council approval. City Council's approval will also be required to authorize the amendments *The Regina Traffic Bylaw No. 9900*, when presented.

Respectfully submitted,

Karen Gasmo, P. Eng. Executive Director

Respectfully submitted.

Transportation & Utilities

Norman Kyle, Engineer Licence

Director

Roadways & Transportation

January 12, 2017

To: Members

Public Works & Infrastructure Committee

Re: Snow Storage Site Fee Bylaw Amendment

#### RECOMMENDATION

1. That the City Solicitor's office be instructed to prepare amendments to Schedules "L" and "J" of *The Clean Property Bylaw*, *No. 9881* (Bylaw) to incorporate the modifications in the description of four truck categories, corresponding to the snow site user fees as indicated in the report.

2. That this report is forwarded to the January 30, 2017 meeting of the Council for approval.

#### **CONCLUSION**

Snow Storage Site fees for four different truck categories were approved at the City Council meeting held on August 31, 2015. During the Snow Storage Site fee implementation process, it was discovered that some descriptions to the defined truck categories did not include all types of vehicles used to haul snow. As a result, changes to Schedules "L" and "J" of the Bylaw are required.

#### **BACKGROUND**

A recommendation contained in report CR15-86 for the approval of the Snow Storage Site fee was to amend the Bylaw by including a fee and fine structure for different truck categories.

The original truck categories contained in the 2015 report to Council (Appendix A to this report) were defined, based on the truck count surveys conducted at the Snow Storage Site during the 2014-2015 winter season. The proposed truck categories were presented to the snow hauling contractors during stakeholder meetings conducted in 2015 and were found to be satisfactory. Based on the stakeholder feedback, the City of Regina (City) proceeded with those categories.

#### **DISCUSSION**

As customers completed the application forms in the fall of 2016, Administration realized that there were some gaps and overlaps; resulting from interpretation of the previously defined truck categories or from potentially unlisted truck/trailer configurations. It was also identified through testing that the automated system would have difficulties differentiating between some trucks falling into different categories. Therefore, changes to the existing categories are proposed.

The reasoning behind the proposed new truck categories is as follows:

- Automated system tests identified difficulties in differentiating quarter-ton, half-ton, three-quarter-ton and most one-ton trucks primarily due to similar lengths;
- the single axle truck category was meant for bigger dump trucks, but it was interpreted by some applicants as any size single axle truck. It was unclear if three-quarter ton or one-ton single axle trucks were part of this category or the category listed above; and
- a category was missing for tandem axle trucks or large single axle trucks with a trailer as this configuration was not expected based on past experience. The recent feedback received has indicated that this configuration may be used in the future.

Schedule "L" and "J" of *The Clean Property Bylaw* require amendments by replacing the current truck categories as reflected in Table 1 with new categories listed in Table 2 (Appendix B to this report). Attempting to enter the Snow Storage Site without a permit or to dispose of materials other than snow will result in a fine, dependant on the category of the violating truck as described in Table 2 above, wherein a notice of violation is issued (Schedule J, the Bylaw) and denial of future entry to the Snow Storage Site.

#### RECOMMENDATION IMPLICATIONS

#### Financial Implications

It is anticipated that there will be no major impacts to revenue as these fee changes relate to vehicle classifications not previously identified by stakeholders and administration. The changes relate to the weight of vehicles and do not impact the volumes of snow anticipated.

#### **Environmental Implications**

None with respect to this report.

#### Policy and/or Strategic Implications

None with respect to this report.

#### Other Implications

The proposed modifications to the description of truck categories will provide better clarity for customers completing permit applications and for City staff involved in the process, which would reduce administrative costs and improve service levels.

#### Accessibility Implications

None with respect to this report.

#### COMMUNICATIONS

The newly amended Bylaw will be posted on the Snow Storage Site website.

# **DELEGATED AUTHORITY**

The recommendations contained in this report require City Councils approval.

Respectfully submitted,

Norman Kyle, Director Roadways & Transportation

Respectfully submitted,

Karen Gasmo, Executive Director Transportation & Utilities

CR15-86

August 31, 2015

To: His Worship the Mayor

and Members of City Council

Re: Snow Storage Site User Fee

# RECOMMENDATION OF THE PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE - AUGUST 13, 2015

- 1. That Administration implement a pay per load fee system as described in Option 1 to align the operations of the snow storage site with *Design Regina: The Official Community Plan* (OCP).
- 2. That Administration be authorized to incur a one-time usage of the Winter Road Maintenance reserve to fund the capital cost associated with the snow storage site fee implementation.
- 3. That the City Solicitor's office be directed to prepare amendments to *The Clean Property Bylaw*, *No. 9881* to incorporate the requirements for the snow storage site in accordance with Option 1 in this report and as detailed in Appendix C.

#### PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE - AUGUST 13, 2015

Joe Luciak, representing Diggirs Dirt Works, addressed the Committee.

The Committee adopted a resolution to concur in the recommendation contained in the report. Recommendation #4 does not require City Council approval.

Councillors: Sharron Bryce (Chairperson), John Findura, Bob Hawkins and Barbara Young were present during consideration of this report by the Public Works and Infrastructure Committee.

The Public Works & Infrastructure Committee, at its meeting held on August 13, 2015, considered the following report from the Administration:

#### RECOMMENDATION

- 1. That Administration implement a pay per load fee system as described in Option 1 to align the operations of the snow storage site with *Design Regina: The Official Community Plan* (OCP).
- 2. That Administration be authorized to incur a one-time usage of the Winter Road Maintenance reserve to fund the capital cost associated with the snow storage site fee implementation.

- 3. That the City Solicitor's office be directed to prepare amendments to *The Clean Property Bylaw*, *No. 9881* to incorporate the requirements for the snow storage site in accordance with Option 1 in this report and as detailed in Appendix C.
- 4. That this report be forwarded to the August 31, 2015 meeting of City Council for approval.

#### CONCLUSION

In response to CR14-122, the information in this report was prepared by Administration to align the operations of the snow storage site with the OCP and to provide options to establish a permit process and fee structure for the City owned and operated snow storage site. Three options have been outlined below for consideration by City Council.

The recommended option, Option 1, would provide the necessary infrastructure to implement a pay-per-load system based on truck size that would allow for both City and non-City users to continue to use the site during winter maintenance activities through the use of a Radio Frequency Identification Device (RFID) system issued to users in conjunction with monthly billing based on entry to the site. This recommendation results from extensive stakeholder consultation and research done by Administration and is recommended as a fair and equitable solution for cost recovery at the snow storage site.

In order to successfully implement the recommended option, including providing for improvements to ensure the safe and efficient operation of the snow storage site that allows contractors, City staff and the public to access the site, a capital investment of \$362,000 amortized over ten years (\$36,200 per year) and an additional operating cost of approximately \$65,000 per year would be required (see Appendix A and B for further details). This investment would allow for upgrades including installation of the RFID system, installation and maintenance of proper lighting, roads, fence, gates, improved drainage and other upgrades to ensure a safe working environment for staff and visitors to the site and to ensure efficient snow storage operations. Estimated revenues generated from the implementation of the RFID system will be approximately \$528,000 per year. This constitutes a cost recovery of approximately 60 percent of the operating cost for the site which are estimated to be \$880,000.

#### BACKGROUND

This report responds to CR14-122 on November 3, 2014, that directed Administration to:

- 1. Investigate and develop an appropriate permit process and fee for commercial contractors for the use of the City of Regina's Snow Storage Site beginning November 1, 2015;
- 2. Provide a follow up report to the Public Works and Infrastructure Committee in the second quarter 2015 on the feedback received on the implementation of the fee and permit process; and,
- 3. Bring forward a report to Public Works and Infrastructure Committee in the second quarter of 2015 which contains the necessary amendments to *The Clean Property Bylaw*, *No. 9881* that include:
  - i. A fee and fine structure for all private users of the City of Regina's Snow Storage Site; and

ii. Processes for issuing permits to commercial contractors for use of the City of Regina's Snow Storage Site.

#### **Snow Storage Site**

The City's Snow Storage Site is a City-owned and operated property located on the corner of Fleet Street and MacDonald Street which is accessible free of charge to all users, 24 hours a day during the winter season. The current five-year average operating cost of the site is approximately \$620,000 and an average of 1.1 million cubic meters of snow is received and stored each season. Approximately 60 percent of all snow hauled to the site originates from commercial and private enterprises including private contractors. The remaining 40 percent results from the snow clearing activities done by Winter Maintenance crews as part of the Snow Removal program outlined in the Winter Maintenance Policy.

The City currently provides the following services at the Snow Storage Site:

- Snow Storage: Machinery such as front end loaders and dozers are used to safely store, compact, and make additional room for the snow dumped by City and contractor trucks. Site attendants are present to ensure safe and efficient service, as well as to address any concerns site users may have.
- 2. Site Cleanup and Preparation: During the summer and fall seasons, debris from melted snow is removed; crews mow, rake and level the ground, rebuild access roads, install signage and are provided with training for the upcoming season. During the 2013 summer cleanup, over 500 tonnes of debris was removed from the site and taken to the landfill, at a cost of \$50,000. The majority of this debris included concrete slabs and construction material, which would have originated from snow hauled from cleaning commercial parking lots, as well as commercial and residential construction sites.
- 3. Environmental Testing: Since 1994, the City has compiled an annual runoff and soil monitoring report. This report documents the water quality of runoff from the site and identifies any impacts to downstream receiving waters. Additionally, storm water data is used to update the City's Salt Management Plan.

#### Other Municipalities' Practice in Managing their Snow Storage Sites

In order to better understand how other municipalities manage snow storage sites, Administration engaged in outreach and research activities on best and common practices in other Canadian winter cities. Through this, Administration found many cities no longer accept snow from contractors and others have implemented fees for using city-owned sites. Table 1 below outlines practices in other winter cities.

Table 1: Snow Storage Site Practice in other winter Cities

Municipality	Practice
Saskatoon	<ul> <li>Currently provides free service to City and non-City users</li> <li>Anticipates a cost recovery fee for the service</li> </ul>
Yorkton	Annual permit system
Calgary	Does not accept snow from private contractors
Ottawa	Does not accept snow from private contractors
Red Deer	Pay-per-load system
Fredericton	Pay-per-load system

1		
Timmons	Annual/seasonal permit system	

#### Stakeholder Engagement

As part of the research done to determine the recommended option for fee and permitting at the snow storage site, Administration conducted several stakeholder engagement activities including:

- A mail out to approximately 1.200 commercial establishments that may contract out snow removal;
- Two stakeholder meetings on April 20 and June 8, 2015, open to contractors, businesses and the general public;
- An online and mail-in survey; and,
- A telephone survey.

During this time, Administration was in contact with more than 80 contractors who used the City's snow storage facility during the 2014-15 season. This included contact with members of the Building Owners and Managers Association of Regina (BOMA), Saskatchewan Construction Association, Regina Construction Association, Saskatchewan Heavy Construction Association, and Saskatchewan Trucking Association. The City encouraged the members to contact a designated City official for any questions. Engagement activities resulted in 23/80 users attending the meetings and 14/80 respondents to the survey. Results were then used to develop the recommendation for the fee structure and billing process.

Based on the stakeholders' feedback, Administration developed three options, with the recommended Option I of a pay-per-load system. Administration incorporated the stakeholders' request that the City continue providing a round-the-clock service to private haulers spanning the full winter season.

#### Key Findings from Stakeholders Engagement

The key findings from the stakeholder engagement include:

- 1. The City should continue to accept snow from private parties (contractors, businesses, commercial establishments, residents etc.);
- 2. Snow site service should be available 24 hours per day, seven days a week, for the full season (generally November through March);
- 3. Pay-per-load system is rated as the most fair and preferred billing system; and,
- 4. The City should ensure that the new billing system minimizes the delay during trucks' entry into the snow storage site.

#### **DISCUSSION**

Administration is presenting three (3) options for the implementation of a fee or permit at the snow storage site that considered the research of best practices and stakeholder engagement. Regardless of the option chosen, the snow storage site will still require capital investment to ensure environmental stewardship and workplace safety.

#### Option 1: Pay-per-Load Fee Based On Truck Sizes (Recommended)

This option maintains service levels, having the site operational 24 hours per day, seven days a week, from November to March each year. A Radio Frequency Identification Device (RFID) access control system would be implemented to record site usage information for the purpose of billing customers. This system will minimise wait times at the entry point and ensure fast and

simplified access to the site. Site users would be required to obtain a permit and an RFID device at a minimal one-time cost of \$10. The device would be placed on the windshield of the authorized vehicle. Four types of permits would be made available, corresponding to the size of vehicle and therefore the amount each load will cost, ranging from \$5 to \$35 per load. Trucks without RFID tags or improper tags will not be allowed in the site and will be diverted through the exit gate (see Appendix C). Site attendants would also remain onsite to ensure the safety of all visitors and staff.

Successful implementation of the recommended option would include providing for improvements to ensure the safe and efficient operations of a snow storage site that allows access to contractors, City staff and the public. These improvements require a capital investment of \$362,000 amortized over ten years (\$36,200 per year) and an additional operating cost of approximately \$65,000 per year (see Appendix A and B for further details). This investment would allow for upgrades including installation of the RFID system, installation and maintenance of proper lighting, roads, fence, gates, improved drainage and other upgrades to ensure a safe working environment for staff and visitors to the site and to ensure efficient snow storage operations. Implementation of the RFID system will provide cost recovery of approximately \$360,000 annually which will help offset the additional expenditure for site improvements.

Table 2 below provides the per load costs based on vehicle size. The prices are intended to reflect a five year average. These prices will remain fixed for the first two years of operation, allowing Administration to collect and evaluate data on usage patterns following implementation of a pay per load system. At that time, an amended rate, based on the five-year operating average, may be proposed. Roadways & Transportation will work with Communications to develop an effective communications plan for implementation of this new process ensuring users are fully aware of changes in the coming season.

Table 2: Per load Costs (See Appendix A & B)

Truck Categories	Radio Frequency Identification Device Tag Fees	Cost per load
¼ or ⅓ ton vehicle	\$10	\$5
Single axle truck or ¼ ton vehicle with a trailer or ½ ton vehicle with trailer	\$10	\$15
Tandem axle truck	\$10	\$25
Semi-truck	\$10	\$35

#### Advantages:

- Aligns with the OCP;
- Enhanced safety, environmental and overall site conditions;
- Cost recovery from benefiting users achieved for operation of snow site. This cost recovery is anticipated to recover annual operating costs by approximately \$360,000 (based on current expenditures);
- Permit holders are only charged when they use the service rather than paying a one-time seasonal fee that may not accurately reflect usage;
- Site availability for snow storage usage for the full winter season;
- Quicker entry into the site with minimum delays due to the use of RFID tags; and

• The use of the RFID tracking system and monthly invoicing eliminates the need for onsite cash handling.

#### Disadvantages:

- Potential for increased dumping of snow in unauthorized locations; and,
- City resources may not be fully utilized during periods where there is little snowfall accumulation.

#### Option 2: Snow Storage Site for City Use Only

As seen in some other municipalities (eg. Calgary and Ottawa), Option 2 outlines advantages and disadvantages to closing the snow storage site to non-City users. While this option reduces operating costs, it also reduces services provided by the City when there may not necessarily be private industry capacity to provide a similar function. Based on outcomes of other municipalities pursuing this option, it is likely that privately owned snow storage sites would be created eventually to accommodate the market gap. However, even with the creation of a snow storage market, there is a chance of increased dumping of snow in unauthorized locations within or outside City limits.

By restricting access, there would be a 60 percent reduction in the quantity of snow deposited at the site each season which would in turn reduce operating costs from \$620,000 to approximately \$220,000 per year. An initial capital investment of approximately \$80,000 would still be required towards site grading, drainage improvement, roads, fence, gates, lights and other improvements to ensure environmental stewardship, to prohibit unauthorized entry into the site and promote a safe workplace for City staff.

#### Advantages

- Substantially reduced costs to operate and maintain the snow storage site due to:
  - o Reduced volume of snow being deposited; and,
  - Site would only need to be in operation as needed by Winter Maintenance activities;
- Winter Maintenance resources could be reallocated when the snow storage site not is in operation.

#### Disadvantages

- Limited options for contractors to haul snow in the city at present as there are currently no organized snow storage sites; and,
- Risk of increased dumping of snow in unauthorized locations.

#### Option 3: Status Quo

The City may choose to continue operating the snow storage site as it has in the past and accept snow from contractors and residents from Regina and surrounding area free of charge. This option, however, is not in alignment with the financial principles of the OCP as the operation of the site would continue to be subsidized by taxpayers. Further, upgrades to the snow storage site would still be required to ensure environmental stewardship and a healthy workplace for City staff and visitors to the site. An annualized capital investment of \$212,000 (\$21,200 per year for

10 years) and an additional operating cost of approximately \$37,000 per year would be required (see Appendix B).

#### Advantages:

- Current users of the snow storage site would continue to benefit from services free of charge; and.
- Investment in upgrades as outlined in Option 2 could be adopted at a lesser cost than permitting system would require.

#### Disadvantages:

- Taxpayers would continue to subsidize operation of snow storage site;
- This option does not align with current OCP;
- City resources may not be utilized to full advantage; and,
- Additional investment would still be required for upgrades to ensure environmental stewardship and workplace safety that would be funded through property taxes.

The following table provides a cost comparison between the considered options (See Appendix B for the details of each calculation). Note: The capital cost is depreciated over a 10-years period.

Table 3: Cost Associated with each Option

		Breakdown		
Options	Total annualized cost (operating cost + capital cost depreciated over 10 years)	Cost	City expense	
Option 1: Pay per load fee based on truck sizes	\$879,620  Operating \$620,000  Capital \$36,200/year  Additional operating cost due to upgrades & billing \$65,000/year Corporate Overhead \$158,620	\$527,772	\$351,848	
Option 2: Snow Storage Site for City Use Only	\$228,000 Operating \$220,000 Capital \$8,000/year	0	\$228,00	
Option 3: Status Quo	\$678,000*  Operating \$620,000  Capital \$21,200/year  Additional operating cost due to upgrades \$37,000/year	0	\$678,000*	

<sup>\*</sup> Initial investment in properlighting, roads, fence, gates, improved drainage etc. is required for site safety.

Note: Corporate overhead is 22 percent charge for cost recovery initiatives undertaken by the City.

# RECOMMENDATION IMPLICATIONS

#### Financial Implications

It is estimated that the City requires an initial capital investment of approximately \$362,000 to upgrade the current snow storage facility and implement the RFID permitting system. Ten percent of this amount will be included every year for the purpose of facilities cost recovery (depreciation). An additional operating expense of approximately \$65,000 per year for the additional infrastructure to manage the site incorporating the RFID system. As per Appendix B,

with the amortized capital investment and the additional operating expense there will be an approximate annual increased expenditure of \$101,000 per year to safely maintain and operate the site for all users while practicing sound environmental stewardship.

Estimated revenues generated from the implementation of the RFID system will be approximately \$528,000 per year. This constitutes a cost recovery of approximately 60 percent of the operating cost for the site which are estimated to be \$880,000.

#### **Environmental Implications**

The proposed option, Option I, provides sufficient investment in the snow storage site to continue to maintain environmental testing, execute efficient and effective cleanup, and provide staff with necessary training to safety administer the site. This ensures that the City is not only following national standards and guidelines, but exceeding requirements for environmental stewardship in the province, while providing responsible management of our snow storage site in accordance with the City's Salt Management Plan.

A potential risk may exist when implementing a fee system as it may prompt snow haulers to dump snow in unauthorized locations within or outside city limits. This will be managed through the proposed amendments to *The Clean Property Bylaw, No.9881* and through an effective communications plan.

#### Policy and/or Strategic Implications

The recommended option, Option 1, will serve to align the operations of the snow storage site facility with the financial principles of the OCP. Goal 1.1.2 states that "Where some of the benefits of a program or service are city-wide and some of the benefits are directly attributable to specific beneficiaries, the costs are to be paid for by a combination of general revenues of the

City of Regina and user fees or other similar charges." Option 1, the recommended option, implements a fee structure that allows the City to achieve cost recovery from private snow haulers using this site while using general revenues to fund City operations. As such, this alleviates burden from residents and ensures that services that benefit the entire community while still providing services to smaller groups.

The implementation of a Snow Storage Site User Fee would have implications for *The Clean Property Bylaw*. Amendments to the current Bylaw will be required to reflect a fee structure, to enforce against potential illegal dumping on the site should a contractor utilize the site without obtaining the appropriate permit, and to reflect the increase in fines for illegal dumping outside of the site.

#### Other Implications

None with respect to this report.

#### Accessibility Implications

None with respect to this report.

#### COMMUNICATIONS

The Communications Department will work closely with the Roadways & Transportation Department to develop a communications plan to ensure that private snow clearing contractors and the community are informed of the changes to the operational practises of the snow storage site including: how to obtain permits and the roles and responsibilities of users of the snow storage site.

#### DELEGATED A L'THORITY

City Council's approval is required to authorize the new revenue, as well as to approve any potential amendments to *The Clean Property Bylaw, No. 9881*.

Respectfully submitted,

PUBLIC WORKS AND INFRASTRUCTURE COMMITTEE

Linda Leeks, Secretary

Linda Liceks

#### Appendix A: Process Used For Calculating Per Load Costs

An average cost per load was calculated for the next five (5) years (2015-2020) based on expected number of loads. The five-year average cost per load is approximately \$24.55. Calculations are shown in Figures 1 through 3, below.

Figure 1: Five Year Average Cost per Load (2016-2020)

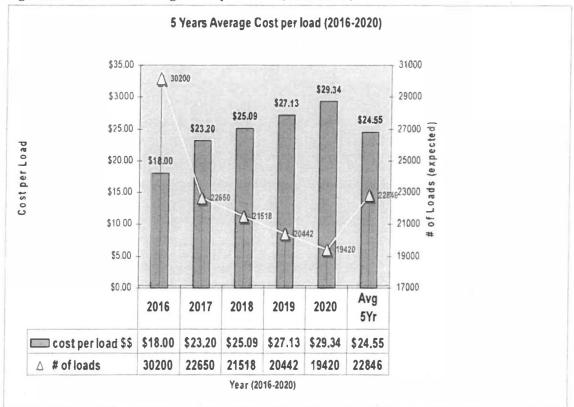


Figure 2: Snow Storage Site Usage Pattern based on Truck Sizes (Studied For 2014-15)

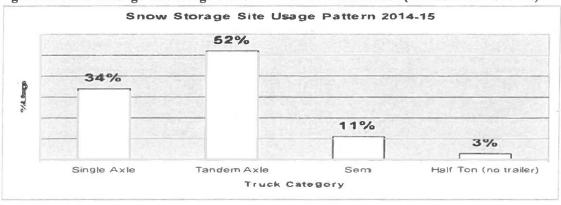
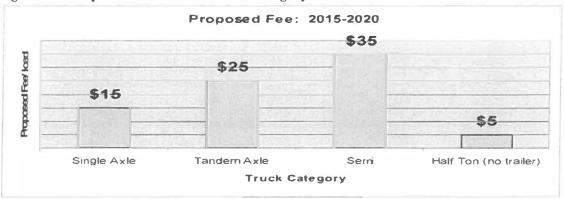


Figure 3: Cost per Load for each Truck Category



#### Appendix B: Snow Storage Site Management Costs based on Fee Options

Operational costs have been calculated based on the three options presented. Figure 1, below, provides revenue and expenditure details of those three options, namely cost recovery, City only and status quo.

Figure 1: Snow Storage Site Costing based on Fee Option

	F	EE OPTIONS	
	Option1: Cost Recovery	Option2: City Only	Option3: Status Quo
Past Annual Operative Cost (5 year avg) Additional cost including depreciated Capital cost for 10 years		\$220.000	\$620,000
(See Table 4)	\$101,000	\$8.000	\$58.000
Total- Operating & Annualized Capital Cost	3721,000	\$228.000	\$678,000
Cor orale overhead 22%	\$158,620	NA	NA
Total	\$879,620	\$228.000	\$678,000
60% cost recovery amount 40% City Expense	\$527.772 \$351.848		

Figure 2 provides details of initial capital investment and annual operating costs expected to be incurred for Option 3 (Status Quo) and Option 1 (Cost Recovery). The initial expected capital investment for Option 3 is \$212,000 which would allow for the necessary improvements to ensure environmental stewardship and workplace safety. The additional annual operating cost for Option 3 is expected to be \$37,000 to maintain site improvements.

The initial expected capital investment for Option 1 is \$362,000 with would also incorporate additional safety measures and the installation of the RFID system. The annual operating cost for Option 1 is expected to be \$65,000.

In both cases, the initial capital costs have been annualised (depreciated) over a 10 year period. For Option 1, it is expected that additional staff costs will only be incurred in the first two years but costing is extended over a five year period.

Figure 2: Capital Investment to Ensure Safe & Efficient Operation Options 3 (Status Quo)-

	linitial cost	Additional annual	
	(capital)	cost (Operation)	Total
Gates	\$8,000	\$0	
Fence	\$10,000	\$1.000	
Power connection	\$30,000	\$0	
Lights installation (one post, 2 portable @~\$10/hr)	\$55,000	\$31.000	
Utilities/ lights	\$0	\$5,000	
CB improvement	\$15,000		
Roads	\$24,000		
Grading	\$70.000		
Total	\$212,000	\$37.000	
Annualized- Depreciation-10 year period	\$21.200	\$37,000	\$58,200
Option 1 (Cost Recovery)-			
Additional Costs to accommodate Billing System:			
RFID System (controllers, antenna, camera, tags, cellular)	\$150,000	0	
Monitoring/ enforecement staff- initially	0	\$70,000	
Total	\$150.000	\$70.000	
Grand Total	\$362,000		
Annualized- Depreciation-10 year period	\$36,200	\$65,000	\$101,200
Total initial estimated capital cost	\$362.000	\$65,000	
#with only 1 light post instead of 6- (saving of \$275,000)			
Current Avg 5 year op cost of \$620,000 includes 2 portable lights cost		miles 34 condition are all and a second seco	

# Appendix C: Registration Process, Site Access & Billing for Snow Storage Site Users

#### **Registration Process:**

There will be two methods of registration for Snow Storage Site users:

#### 1. Online Registration:

Users of the snow storage site, including contractors, business owners and other users may register their vehicles through an online registration portal available on the City of Regina website. Registrants will input pertinent information including: truck type, size and license plate; business or preferred registration name; address and contact information; and, credit card information to ensure prompt and accurate invoicing.

#### 2. In-Person Registration:

Users of the snow storage site, including contractors, business owners and other users may also choose to register their vehicles by visiting a designated City of Regina location where a member of the Service Regina team will assist them in the registration process. Registrants will provide pertinent information including: truck type, size and license plate; business or preferred registration name; address and contact information; and, credit card information to ensure prompt and accurate invoicing.

Note: There will be no registrations processed nor payments taken at the snow storage site. This is to ensure the most efficient and effective operations and to ensure safety of all users and staff visiting the snow storage site.

#### Obtaining Registration Package:

A registration package will be provided to all registered RFID users of the snow storage site. Packages will be available for pickup at designated locations or mailed to registered users at a cost of \$10 per registration. Information included in the package will include:

1. **RFID** (radio frequency identification device) registration tag: A unique colour-coded identification tag will be provided per registration and will be dependent upon the type of vehicle registered. This identification will then correspond to billing based on the truck categories: semi-trucks; tandem axle trucks; single axle and half ton trucks with trailers; or, half ton trucks without trailers. Figure 1, below, provides an example of an actual RFID installed on the windshield of a vehicle.

Figure 1: Example of Coloured RFID windshield tag



- 2. **Instruction Booklet:** A user-friendly instruction book will be provided to inform registered users of the following:
  - How and where to install the RFID tag on the truck windshield;
  - How to procure and replace a damaged RFID tag;
  - How the new access system at the snow storage site will operate;

- Safety instructions:
- Billing process; and
- Proper operating procedures while at the snow storage site.

#### Accessing snow storage site:

Access to the snow storage site will be made available through gated entry on Fleet Street (north side). Trucks will move through a corridor where an RFID antenna and receiver will gather the truck information. A camera and License Plate Reader (LPR) will monitor trucks entering the premises. Figure 2, below, provides visual representation of the system.

Figure 2: RFID Access

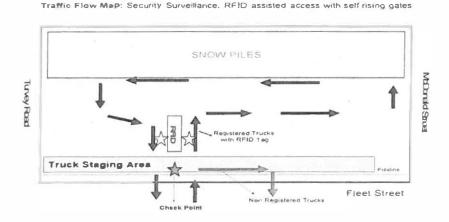




Once users have emptied their vehicles, they will exit through a separate gate. This will ensure efficient and safe operation of the site at all times and mitigate the risk of collisions onsite. Winter maintenance staff will work to ensure a smooth, safe and unrestricted truck traffic on the snow storage site. To ensure a faster unrestricted movement of the trucks at the entrance point, the trucks without RFID tags or improper tags will not be allowed in the site and will be diverted through the exit gate, as shown in Figure 3, below.

The RFID tag will be non-transferable to any other vehicle and must be used only for the vehicle it was issued for. The RFID tags shall be returned to the City if there is a request by the City to return these.

Figure 3: Traffic Flow Map



## **Billing Process:**

Monthly Invoices: Registered users will be invoiced based on data collected through the RFID system and managed through accounts receivable.

<u>Unregistered trucks</u>: Unregistered vehicles will not be permitted to enter or use the snow storage site. If users choose to forego the registration process, they may be subject to the provisions in *The Clean Property Bylaw*, *No. 9881* which prohibits dumping of snow within city limits. In the event a user attempts to use the site without a permit, City staff will direct them to the online registration process or to a designated location to register in person.

The City may deny entry to the snow storage site for any other reason that the City Administration deems appropriate.

#### Illegal Snow Dumping:

Corresponding to the proposed changes to *The Clean Property Bylaw*, *No. 9881*, those not in compliance with the rules and regulations of the snow storage site may be subject to penalties. Steps will be taken to ensure proper and safe operation of the site including the following:

- Fencing will be installed along the perimeter of the snow storage site with designated unrestricted entry points for users;
- RFID tags are to be obtained by users prior to entering the snow storage site;
- Data will be collected on deliveries for billing and future planning purposes;
- All visitors to the snow storage site will be obligated to following any rules or regulations set out in the RFID instruction booklet as well as any additional regulations that may arise during the season to ensure safe and efficient operations of the snow storage site including instructions from staff and signage;
- The person or persons whose names are mentioned in the application form for registration as a snow storage site user will be responsible for all charges incurred in relation to the RFID tag as well as all conduct by the person operating the vehicle associated with the RFID tag.
- No person shall enter the snow storage site except for the purpose of depositing snow.
   This will ensure safe and efficient operations of the snow storage site. City employees may enter the snow storage site for the purpose of carrying out their employment requirements.
- No person shall be permitted to transfer an RFID tag to another person or vehicle without the consent of the City;
- The RFID tag will remain the property of the City and the City will be able to ask for the tag back upon request of the City.
- The City may deny entry to the snow storage site if the person requesting entry has neglected or refused to pay any fees assessed pursuant to *The Clean Property Bylaw*, if the City reasonably believes that the person intends to deposit snow that contains material that is not accepted at the snow storage site, if the vehicle does not have a valid RFID tag, if the person or vehicle has breached or been used in a breach of *The Clean Property Bylaw* on a previous occasion or for any other reason that the Deputy City Manager deems appropriate.
- The City may deactivate the RFID tag if a person has neglected or refused to pay any fees assessed pursuant to *The Clean Property Bylaw* or for any other reason that the Deputy City Manager deems appropriate
- Attempting to enter without a permit or to dispose of materials other than snow will result in a minimum \$100 fine and denial of future entry to the snow storage site (see Table I, below);
- Increasing fines where notice of violation issued (Schedule J) in relation to section 7 of *The Clean Property Bylaw* relating to depositing snow from private property onto public property without consent from \$100 to \$225; and
- Removing materials from the snow storage site will not be permitted without prior permission being granted from the Deputy City Manager of City Operations or his or her designate.

Table 1 indicates the proposed fines for users found to be in violation of *The Clean Property Bylaw*, No. 9881.

Table 1: Proposed Fines for Contravening The Clean Property Bylaw, No. 9881

Truck Category	Cost per load	Fines Where Notice of Violation is Issued (Schedule J)
74 or 1/2 ton vehicle	\$5	\$100
Single axle truck or ¼ ton vehicle with a trailer or ½ ton vehicle with trailer	\$15	\$225
Tandem axle truck	\$25	\$375
Semi-truck	\$35	\$525

# Appendix B: Amendment to The Clean Property Bylaw, No. 9881 - Schedule "L" and "J"

**Table 1:** Truck categories with corresponding fees and fines currently listed in Schedules "L" and "J" of the Bylaw and the proposed new truck categories.

Truck Categories	Cost per load (user fees) (Schedule L)	Fines where Notice of Violation is Issued (Schedule J)
One-ton Pick-up or smaller truck without trailer	\$5	\$100
One-ton Pick-up or smaller truck with trailer	\$15	\$225
Tandem Axel truck or Single Axle truck bigger than One-ton (both without trailer)	\$25	\$375
Tandem Axel truck with trailer or Single Axle truck bigger than One-ton with trailer or Semi-trailer truck	\$35	\$525

.

January 12, 2017

To: Members

Public Works & Infrastructure Committee

Re: Amendments to the Regina Traffic Bylaw, 1997, No. 9900

#### RECOMMENDATION

1. That City Council approve the following amendments to *The Regina Traffic Bylaw*, 1997, *No. 9900* (Traffic Bylaw);

- a. Replace Schedule B of the Traffic Bylaw with the proposed Figure 2 (Appendix A).
- b. Revise the table for maximum allowable weights on bridges in Section 73 (Appendix B).
- c. Reduce speed limits in Section 10 from 100 km/hr to 70 km/hr on Albert Street from 200 meters south of the north city limits (Appendix C).
- 2. That the City Solicitor be instructed to amend the Traffic Bylaw to reflect the changes proposed in this report; and
- 3. That this report be forwarded to the January 30, 2017 meeting of City Council for approval.

#### **CONCLUSION**

Periodic amendments to the Traffic Bylaw are required as the City grows and traffic patterns change.

The proposed changes to the Traffic Bylaw recommended in this report are as follows:

- a. To allow heavy vehicle access to the City's new Hauled Wastewater Station;
- b. to restrict the weight of vehicles on the Pinkie Road Bridge, due to the condition of this structure and safety concerns; and
- c. to reduce the speed limit on Albert Street to align with the speed limit changes proposed by the Ministry of Highways (Ministry) for the portion of Highway #6 immediately north of the City limits, as a result of the Ministry's decision to install traffic signals on Highway #6 Industrial Drive and Armour Road.

The Traffic Bylaw Working Group, which critically reviews all sections of the Traffic Bylaw, supports the proposed changes.

#### BACKGROUND

The Traffic Bylaw Working group consists of representatives from the Regina Police Service, Office of the City Solicitor, Fire & Protective Services, Bylaw Enforcement Branch, Parking

Services Branch and Traffic Engineering Branch. It reviews the Traffic Bylaw and submits any recommended bylaw amendments for consideration and adoption to the Public Works & Infrastructure Committee (PWI) and ultimately City Council.

## **DISCUSSION**

The Traffic Bylaw Working Group considered three amendments to the Traffic Bylaw on May 12, 2016. The first amendment would add a portion of Condie Road north of Dewdney Avenue to the City of Regina's (City) new Hauled Wastewater Station as a Heavy or Long Combination Vehicle Route. The new facility will require heavy vehicle access and the City reconstructed Condie Road to support the heavy vehicles that will use the facility.

The proposed Traffic Bylaw amendment proposal is as follows (see Appendix A for further details):

• Schedule B – Heavy or long Combination Vehicle Routes & Areas – Proposed amendment adds a portion of Condie Road north of Dewdney Avenue to the Heavy or Long Combination routes, to facilitate heavy vehicle access to the City's new Hauled Wastewater Station.

"Part VII Restricted Vehicles - Section 73" addresses overweight vehicles. Within Section 73, there is a table titled "Maximum Allowable Weights in Tonnes For Bridges Over Wascana Creek". In this table, Pinkie Road Bridge is referenced with allowable weights of 10 tonnes for a single axle and 14 tonnes for a tandem. As a result of an engineering analysis of the Pinkie Road Bridge, it was determined that the Structural load carrying condition should be reduced for public safety and it is recommended that the maximum allowable weight should be 5 tonnes for both single axle and tandem.

The second proposed Traffic Bylaw amendment to support this change is as follows (see Appendix B for further details):

• "Maximum Allowable Weights In Tonnes For Bridges Over Wascana Creek" table – Proposed amendments replace the current 10 tonnes for single axle and 14 tonnes for tandem for Pinkie Bridge with 5 tonnes for a single axle and 5 tonnes for a tandem.

The third proposed amendment proposal for speed limit change on Albert Street, is to align with the speed limit changes proposed by the Ministry, as a result of the Ministry's decision to install traffic lights on Highway #6 at Industrial Drive and Armour Road (see Appendix C for further details).

## **RECOMMENDATION IMPLICATIONS**

## **Financial Implications**

None with respect to this report.

## **Environmental Implications**

None with respect to this report.

# Policy and/or Strategic Implications

The changes to Schedule B will support usage of the City's new Hauled Wastewater Station.

## **Other Implications**

The changes to Section 73 will limit the weight and type of trucks on Pinkie Road, which should reduce the overall number of trucks using this route and potentially move these trucks to other roads more suited for them.

The speed limit changes on Albert Street will align with speed limit changes the Ministry proposes for the portion of Highway #6 immediately north of the City Limits.

## **Accessibility Implications**

None with respect to this report.

## **COMMUNICATIONS**

None with respect to this report.

## **DELEGATED AUTHORITY**

The recommendation contained in this report require City Council approval.

Respectfully submitted,

Norman Kyle, Director Roadways & Transportation Karen Gasmo, Executive Director Transportation & Utilities

Respectfully submitted,

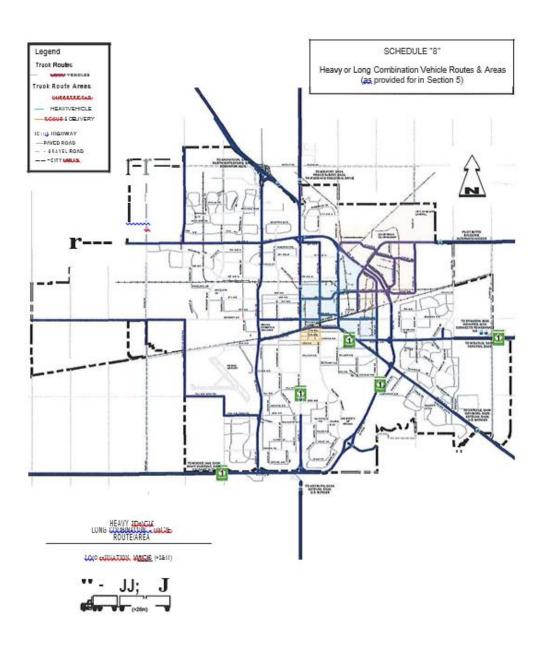
# **Appendix A: Traffic Bylaw Amendment**

## SCHEDULE B – HEAVY AND LONG COMBINATION VEHICLE ROUTES & AREAS

The main purpose of this amendment is to add the section of Condie Road between Dewdney Avenue and the City of Regina's Hauled Wastewater Station to the Heavy or Long Combination Vehicle Routes & Area map.

This change will permit heavy vehicles to access the Hauled Wastewater Station facility from Dewdney Avenue.

Figure 1: Existing Heavy or Long Combination Vehicle Routes & Areas



SCHEDULE "B" Legend Truck Routes
HEAVY VEHICLES Heavy or Long Combination Vehicle Routes & Areas (as provided for in Section 5) Truck Route Areas UNRESTRICTED HEAVY VEHICLE PICKUP & DELIVERY - PAVED ROAD - GRAVEL ROAD TO SANSATT ON SANS BOXTON SATTLEFORD IN THE SANSATT OF SANSATT - CITY LIMITS SETTING SAIL U.S. BORDES HEAVY VEHICLE LONG COMBINATION VEHICLE ROUTE/AREA LONG COMBINATION VEHICLE (>28m) City of Regina

Figure 2: Proposed Heavy or Long Combination Vehicle Routes & Areas

## OVERWEIGHT VEHICLES SECTION 73 – PINKIE ROAD BRIDGE

The purpose of this amendment is to modify the table in subsection 73(2) of *The Regina Traffic Bylaw*, 1997, No. 9900 to change the allowable weights on the Pinkie Road bridge to ensure the loadings are commensurate with the structural load carrying capability of the bridge structure and current condition.

Table 1 – Existing "MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK"

MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK					
BRIDGE	BRIDGE SINGLE AXLE TANDEM SEMI-TRAILER				
Pinkie Road	10.0	14.0	Not Allowed		
Fleet Street	10.0	14.0	Not Allowed		
11 <sup>th</sup> Avenue	10.0	14.0	*Not Allowed		

Table 2 – Proposed "MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK"

MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK					
BRIDGE	BRIDGE SINGLE AXLE TANDEM SEMI-TRAILER				
Pinkie Road	Pinkie Road 5.0 5.0 Not Allowed		Not Allowed		
Fleet Street	10.0	14.0	Not Allowed		
11 <sup>th</sup> Avenue	10.0	14.0	*Not Allowed		

# **Appendix B: Traffic Bylaw Amendment – Section 73**

## OVERWEIGHT VEHICLES SECTION 73 – PINKIE ROAD BRIDGE

The purpose of this amendment is to modify the table in subsection 73(2) of *The Regina Traffic Bylaw*, 1997, No. 9900 to change the allowable weights on the Pinkie Road Bridge to ensure the loadings are commensurate with the structural load carrying capability of the bridge structure and current condition.

Table 1 – Existing "MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK"

MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK				
BRIDGE SINGLE AXLE TANDEM SEMI-TRAILER				
Pinkie Road	10.0	14.0	Not Allowed	
Fleet Street	10.0	14.0	Not Allowed	
11 <sup>th</sup> Avenue	10.0	14.0	*Not Allowed	

Table 2 – Proposed "MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK"

MAXIMUM ALLOWABLE WEIGHTS IN TONNES FOR BRIDGES OVER WASCANA CREEK				
BRIDGE	BRIDGE SINGLE AXLE TANDEM SEMI-TRAILER			
Pinkie Road	5.0	5.0	Not Allowed	
Fleet Street	10.0	14.0	Not Allowed	
11 <sup>th</sup> Avenue	10.0	14.0	*Not Allowed	

# **Appendix C: Traffic Bylaw Amendment – Section 10**

# **MOVING VIOLATIONS - SPEED LIMITS - SECTION 10**

The main purpose for this amendment to reduce the speed limit on Albert Street from 200 meters south of the North City Limits from 100 km/hr.

This change will align with the speed limit changes proposed by the Ministry as a result of the installation of traffic signals on Highway #6 Industrial Drive and Armour Road.

**Figure 1: Existing Speed Limits** 

Description	From	To	Limit (km/h)
9 <sup>th</sup> Avenue North	Pasqua Street	West City Limit	70
12 <sup>th</sup> Avenue	Lorne Street	Scarth Street	20
13 <sup>th</sup> Avenue	150 m. West of	West City Limit	70
	Campbell Street		
25 <sup>th</sup> Avenue	Campbell Street	Lewvan Drive	70
Albert Street	South City Limit	400 m. South of Gordon Road	70
Albert Street	400 m. North of Ring Road	200 m. South of North City Limits	70
Albert Street	200 m. South of North City Limits	North City Limits	100
Arcola Avenue	50 m. East of Victoria Avenue	Hwy #1 Entrance Ramp	60
Arcola Avenue	Hwy #1 Entrance Ramp	150 m. East of	70
		Chuka Boulevard	
Arcola Avenue	150 m. East of	East City Limit	80
	Chuka Boulevard		
Broad Street	150 m. South of Hillsdale Street	23 <sup>rd</sup> Avenue	70
Campbell Street	Hill Avenue	25 <sup>th</sup> Avenue	70
Century Crescent	All	All	30
Courtney Street	Hill Avenue	Dewdney Avenue	70
Dewdney Avenue	West City Limit	Courtney Street	80
Frederick W. Hill Mall	All	All	20
Fleet Street	50 m. North of the CNR tracks	50 m north of Highway No. 46	60
Fleet Street	50 m. North of Highway No. 46	North City Limit	70
Fleming Road	Dewdney Avenue	South City Limit	60
Highway #1	780 m. East of Albert Street	Victoria Avenue	100
Bypass			
Hill Avenue	Campbell Street	Courtney Street	70
Lewvan Drive	150 m. North of	150 m. South of 13 <sup>th</sup> Avenue	80
	Parliament Avenue		
Lewvan Drive	South City Limit	150 m. North of Parliament Avenue	70

McDonald Street	East City Limit	100 m. East of Kress Street	70
Pasqua Street	150 m. North of 9 <sup>th</sup>	150 m. North of Pasqua Gate	60
	Avenue N.		
Pasqua Street	150 m. North of Pasqua Gate	North City Limit	70
Pinkie Road	Dewdney Avenue	North City Limit	70
Pinkie Road	South City Limit	Dewdney Avenue	80
Pioneer Drive	All	All	30
Prince of Wales	50 m. North of	50 m. South of Quance Street	60
Drive	Assiniboine Avenue		
Ring Road	200 m. East of Pasqua Street	Pasqua Street	70
Ring Road	Victoria Avenue	200 m. East of Pasqua Street	100
Ross Avenue	150 m. West of Park Street	150 m. East of	70
		Winnipeg Street	
Saskatchewan	150 m. West of	Lewvan Drive	70
Drive	McTavish Street		
St. Chads	All	All	40
Crescent			
Victoria Avenue	East City Limit	150 m. East of Park Street	70
Wascana Parkway	150 m. North of Grant Road	23 <sup>rd</sup> Avenue	70
Winnipeg Street	50 m. North of 9 <sup>th</sup> Avenue N.	North City Limit	60

**Figure 2: Proposed Speed Limits** 

Description	From	То	Limit (km/h)
9 <sup>th</sup> Avenue North	Pasqua Street	West City Limit	70
12 <sup>th</sup> Avenue	Lorne Street	Scarth Street	20
13 <sup>th</sup> Avenue	150 m. West of	West City Limit	70
	Campbell Street		
25 <sup>th</sup> Avenue	Campbell Street	Lewvan Drive	70
Albert Street	South City Limit	400 m. South of Gordon Road	70
Albert Street	400 m. North of Ring Road	200 m. South of North City	70
		Limits North City Limits	
Albert Street	200 m. South of North City	North City Limits	<del>100</del>
	<b>Limits</b>		
Arcola Avenue	50 m. East of Victoria Avenue	Hwy #1 Entrance Ramp	60
Arcola Avenue	Hwy #1 Entrance Ramp	150 m. East of	70
Arcola Avenue	150 m. East of	East City Limit	80
	Chuka Boulevard		
Broad Street	150 m. South of	23 <sup>rd</sup> Avenue	70
	Hillsdale Street		
Campbell Street	Hill Avenue	25 <sup>th</sup> Avenue	70
Century Crescent	All	All	30
Courtney Street	Hill Avenue	Dewdney Avenue	70
Dewdney Avenue	West City Limit	Courtney Street	80
Frederick W. Hill	All	All	20
Fleet Street	50 m. North of the	50 m north of Highway	60
	CNR tracks	No. 46	

Fleet Street	50 m. North of Highway No.	North City Limit	70
Fleming Road	Dewdney Avenue	South City Limit	60
Highway #1	780 m. East of Albert Street	Victoria Avenue	10
Hill Avenue	Campbell Street	Courtney Street	70
Lewvan Drive	150 m. North of	150 m. South of 13 <sup>th</sup> Avenue	80
Lewvan Drive	South City Limit	150 m. North of Parliament Avenue	70
McDonald Street	East City Limit	100 m. East of Kress Street	70
Pasqua Street	150 m. North of 9 <sup>th</sup> Avenue N.	150 m. North of Pasqua Gate	60
Pasqua Street	150 m. North of Pasqua Gate	North City Limit	70
Pinkie Road	Dewdney Avenue	North City Limit	70
Pinkie Road	South City Limit	Dewdney Avenue	80
Pioneer Drive	All	All	30
Prince of Wales Drive	50 m. North of Assiniboine Avenue	50 m. South of Quance Street	60
Ring Road	200 m. East of Pasqua Street	Pasqua Street	70
Ring Road	Victoria Avenue	200 m. East of Pasqua Street	100
Ross Avenue	150 m. West of Park Street	150 m. East of Winnipeg Street	70
Saskatchewan	150 m. West of	Lewvan Drive	70
Drive	McTavish Street		
St. Chads Crescent	All	All	40
Victoria Avenue	East City Limit	150 m. East of Park Street	70
Wascana Parkway	150 m. North of Grant Road	23 <sup>rd</sup> Avenue	70
Winnipeg Street	50 m. North of 9 <sup>th</sup> Avenue N.	North City Limit	60

January 12, 2017

To: Members

Public Works & Infrastructure Committee

Re: Bridge Underpass Clearance Signs – Imperial and Metric Dimensions

#### RECOMMENDATION

1. That the posting of dual Imperial and Metric underpass clearance signs not be approved;

2. That item PWI16-11, Underpass Safety - Bridge Underpass Traffic Signs, be removed from the outstanding item list.

#### **CONCLUSION**

The posting of both Imperial and Metric underpass height clearance signage is not recommended at this time, as it would not provide a simple clear message that would be easy for drivers to comprehend. Additionally, the posting of signs in both Metric and Imperial units is not consistent with City of Regina and national standards.

## **BACKGROUND**

At the June 20, 2016 Public Works & Infrastructure Committee meeting the following motion (PWI16-11), was passed:

- 1. That the Administration provide a report back to this Committee in Q4 of 2016 on the feasibility of having the relevant traffic signs in both the Metric and Imperial Systems; and
- 2. that the report also include other possible solutions to this issue for consideration.

#### DISCUSSION

The existing City of Regina (City) standards for underpass clearance signs were compared with recommended standards and technical guidelines from the Manual of Uniform Traffic Control Devices for Canada (MUTCDC), and were found to be comparable.

Historical research of Canadian legislation for measurements was also performed to determine the permissibility of installing traffic signs in imperial units. In 1970, changes in legislation resulted in the amendment of the Weights and Measures Act which recognized the International System of Units (SI Units), based on metric units, as the official units of measurement in Canada. In 1984, changes in government led to less stringent metric regulations and therefore, enforcement policies to fully convert to metric units had weakened. However, since 1977, it has been a common practice to install traffic signs in Canada in metric units. Furthermore, the City asked municipalities across Western Canada about their current practices with regards to signage

for underpass clearances. All municipalities that responded to the inquiry (Saskatoon, Winnipeg, Surrey, and District of West Vancouver) are currently following MUTCDC standards and installing metric signs only.

Human factors and signage principles advise that traffic signs should fill a need, convey a clear and simple meaning, minimize reading time and provide adequate time for a response. Posting of multiple signs to deliver a single message of underpass clearance, fails to meet this advice and could cause message confusion for drivers and extra reading time could cause slower driver response times to traffic events. Consistency in traffic control signs within a jurisdiction and across jurisdictions, assists the delivery of positive guidance to drivers. Signage displaying both Imperial and Metric clearance heights would not contribute a positive benefit or consistent messaging.

The Administration performed data analysis for some of the most frequently hit low clearance overpasses in the city to understand the primary causes of crashes. The available data proved insufficient to assign to specific underpass locations and lacked detail to support the root causes of trucks striking underpasses. Also, many bridge crashes that involve only minor damage to vehicle or bridge are not always reported. Detailed data analysis, through engagement with SGI, requires driver profile (local vs. non local, experience), time of day, weather conditions, sequence of events, contributory causes, etc. for each reported crash to understand the scope of the problem.

The Administration will continue to monitor underpass incidents and provide assessments on specific locations, to determine the root cause of these types of incidents. Where deemed appropriate, site specific modifications, signage, warning devices or other means will be considered for implementation.

#### RECOMMENDATION IMPLICATIONS

The recommendation to not install both Imperial and Metric signage is consistent with both City Standards and those developed by the Transportation Association of Canada's MUTCD.

#### ENVIROMENTAL IMPLICATIONS

None with respect to this report.

#### POLICY AND/OR STRATEGIC IMPLICATIONS

None with respect to this report.

#### OTHER IMPLICATIONS

None with respect to this report

# **ACCESSIBILITY IMPLICATIONS**

None with respect to this report.

# **COMMUNICATIONS**

None with respect to this report.

# **DELEGATED AUTHORITY**

The disposition of this report falls within the authority of the Committee.

Respectfully submitted,

Norman Kyle, Director Roadways &

Transportation

Respectfully submitted,

Karen Gasmo, Executive Director Transportation &

Utilities

January 12, 2017

To: Members

Public Works & Infrastructure Committee

Re: Impact Report - Removal of Bus Lanes 11Th Avenue and 12Th Avenue

#### RECOMMENDATION

That item #CR15-38, amendments to the *Regina Traffic Bylaw*, 1997, No. 9900, be removed from the list of outstanding items.

#### CONCLUSION

The removal of the bus lanes on 11<sup>th</sup> Avenue and 12<sup>th</sup> Avenue has not had any detrimental impact on the delivery of transit services or overall traffic operations during peak hour traffic time periods, based on feedback provided by Transit Services.

## **BACKGROUND**

The Public Works and Infrastructure Committee (PWI) presented amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 to the City Council meeting held on April 27, 2015 - Report CR15-38. The amendments included the removal of bus lanes on both sides of 11<sup>th</sup> Avenue (from Albert Street to Broad Street) and on both sides of 12<sup>th</sup> Avenue (from Albert Street to Lorne Street).

The Council record for this agenda item is:

#### Recommendation:

- 1. That City Council approve the amendments to *The Regina Traffic Bylaw*, 1997, No. 9900 (the "Traffic Bylaw") contained within Appendix A to this report;
- 2. That the City Solicitor be instructed to amend the Traffic Bylaw to reflect the changes proposed in Appendix A to this report; and
- 3. The City Solicitor be instructed to amend *The Regna Traffic Bylaw*, 1997, No. 9900 (the "Traffic Bylaw") by removing Sections 84 Impoundment.

The Administration was directed to bring a report to the PWI Committee with an update regarding the impact of removing bus lanes on 11<sup>th</sup> and 12<sup>th</sup> Avenue.

#### DISCUSSION

This impact report comprises a qualitative, not quantitative assessment of the effects of the bus lane removals from Transit Services and the Traffic Branch. Transit Services has provided

feedback from both management and operators, that they have not experienced any negative impact to downtown operations and traffic operations has not been adversely affected with the removal of dedicated bus lanes on 11<sup>th</sup> and 12<sup>th</sup> Avenue in the downtown core. There also has not been public or customer expressions of complaint or concern associated with the removal of dedicated bus lanes on 11<sup>th</sup> and 12<sup>th</sup> Avenues.

Further to the removal of designated bus lanes, the Regina Downtown Business Improvement District (RDBID) approached the Administration to remove peak hour parking controls on 11<sup>th</sup> Avenue between Albert Street and Lorne Street, to support increased availability of curbside parking to serve surrounding businesses.

At the time the bus lanes were removed, peak hour parking controls were imposed on 11<sup>th</sup> Avenue, to continue the availability of two lanes in each direction to support the level of service for both traffic and bus movements. These controls were placed on the south side of 11<sup>th</sup> Avenue from Albert Street to Lorne Street and the north side of 11<sup>th</sup> Avenue from McIntyre Street to Lorne Street for the hours of 7:00 a.m. to 8:30 a.m. and 3:30 p.m. to 5:30 p.m. Monday to Friday.

An examination of the traffic volumes along 11<sup>th</sup> Avenue during the peak hours, indicated that the majority of the peak hour parking controls can be removed and an acceptable level of service to traffic and bus movements can be maintained. As a result, the Administration advised the RDBID that various peak hour parking controls would be removed, which would serve to provide parking for the surrounding businesses. Action has been taken to remove the peak hour parking controls, except for a portion of the north side curb between Smith Street and Lorne Street, which continues to support transit services.

## RECOMMENDATION IMPLICATIONS

#### Financial Implications

None with respect to this report.

#### **Environmental Implications**

None with respect to this report.

#### Policy and/or Strategic Implications

None with respect to this report.

## Other Implications

None with respect to this report.

## Accessibility Implications

None with respect to this report.

# **COMMUNICATIONS**

None with respect to this report.

# **DELEGATED AUTHORITY**

The disposition of this report falls within the authority of the Committee.

Respectfully submitted,

Respectfully submitted,

Norman Kyle, Director Roadways & Transportation Karen Gasmo, Executive Director Transportation & Utilities