



TOWN OF MINTO

DATE: August 30, 2017

REPORT TO: Mayor and Council

FROM: Mike McIsaac, Roads Foreman

SUBJECT: Winter Operational Improvements

STRATEGIC PLAN:

11.0 Maintain and enhance infrastructure to protect public health and safety, prevent property damage, maintain high quality of life, and effectively manage financial resources to ensure Minto is an attractive and viable community for family living and business investment.

BACKGROUND:

The Town Winter Control operating budget of \$480,000 provides services according to the attached Snow Removal Policy approved by Council in 2015. The budget and policy must ensure the Town meets minimum maintenance standards set by the Province. In almost all cases the Town exceeds these standards when conducting winter control operations.

Currently during any winter event 13 Full time/part time staff use 12 pieces of equipment to provide winter control operations generally between 3:00am and 1:00pm with one operator from 5:30pm to 7:00pm to cover the maintenance requirements with Wellington County for CR 2 & 3. Equipment used during an event is as follows:

- 1 patrol pick- up truck equipped with a plow and sander
- 3 tandem axle plow trucks
- 1 grader
- 4 single axle plow trucks
- 3 sidewalk units.



Current routes are outlined in the Snow Removal Policy. Beginning October 1 Town staff must patrol roads every morning documenting weather, road temperature and condition, and other information to determine whether crews should be called out for winter patrol. This process continues by regulation through to April 30. Town patrol at 3:00am during a snow event would have plows on the road by no later than 4:00am most days. Urban areas

are cleared by early morning and sidewalk routes to schools prepared before 8:30am weekdays. Rural areas are plowed through early morning hours.

In addition to regular routes the Town contracts out snow bank removal in parts of Harriston, Palmerston and Clifford when banks exceed 1.0 metre in height. Town staff also plows, sand and salt municipal and facility parking lots; previously the Town contracted out snow removal on municipal and facility parking lots with Town staff sanding and salting after the contractor removed the snow.

Staff historically receives a few complaints about winter operations. Our ability to respond is dictated by the Snow Removal Policy and minimum maintenance standards. While budget to actual often varies from year to year depending on the intensity of the weather, staff realizes there is a limit to funding. One common complaint is a lack of attention to rural roads later in the afternoon. This has become more apparent over the years with the changing lifestyle of the general public. In rural areas there is consistent pressure for a higher level of service particularly later in the afternoon and evening. Some business owners in Palmerston believe snow banks in the urban areas should be removed before they are 1.0 metre high.

COMMENTS:

Efforts are constantly being made to maximize the most efficient use of staff and equipment to provide a high level of service to enhance public safety. Staff has looked at operations as described by the snow removal policy, minimum maintenance standards and efficiency of its available equipment. For the 2017-18 winter season staff proposes to extend operator presence during the weekdays to the rural area by adding a second shift. This will provide a total service timeline of 3:00am to 11:30am and 2:00pm to 10:30pm Monday to Friday. Weekends will be patrolled with call in as required once daily between 3:00am to 11:30am.

To accommodate the second shift and increase rural coverage 14 Full time/part time staff using 12 pieces of equipment will be deployed daily. Equipment used by the first shift during an event would then be as follows:

- 1 patrol pick- up truck equipped with a plow and sander
- 2 tandem axle plow trucks
- 2 graders
- 3 single axle plow trucks
- 3 sidewalk units
- 2 backhoes (with snow pusher attachment)

During the second shift two staff will use the 2 tandem plow trucks to provide afternoon service to rural hardtop roads only. New routes have been developed with urban snow removal continuing as per current procedures

These changes improve staff availability from 14 hours a day to a maximum of 21 hours daily from 14 hours. The Lead Hand and Roads & Drainage Foreman will be available daily from 7:00am to 3:30pm in addition to the coverage outlined.

By deploying the two backhoes and both graders in the snow removal process staff eliminates the need for one tandem plow truck and one single axel plow truck. The Town already owns the backhoes and the graders, but by surplussing a tandem and single axel the Town saves over \$600,000 in capital equipment purchases every 10 years and upwards of \$20,000 in annual maintenance. Off winter season these two vehicles are rarely used.

While there is added use of the backhoe under this approach, the winter deployment does not change their replacement schedule (6-8 years) and they can be replaced for 40% less than the plow trucks. Backhoes are also regularly used off winter for numerous projects as are the Town graders. Graders have a 16-18 year replacement period and are comparable in price to a tandem plow truck.

By using the same number of units, just different equipment, maximizes Town capital and operational resources. Using the 2 graders to 100% service all gravel areas provide a higher level of service to residents as well as improved safety to our operators. Clearing gravel roads with plow trucks has high potential for operator error particularly in icy conditions.

Municipal and facility parking lots will be cleared with the 2 backhoes and one extra staff member will accommodate an earlier completion time as well as leaves potential opportunity to attend to downtown snow on a daily basis during a normal snowfall. That staff member will also be able to help speed up operations in other parts of the Town to improve response. Deploying the backhoes for municipal and facility parking lots may be controversial with some snow removal contractors who had hoped the Town might revert back to contracting this service out. It should be clear that the new process does not increase the fleet and that the added staff person will be seasonal part time and not a permanent full time staff member..

FINANCIAL CONSIDERATIONS:

It is not proposed to change the 2018 winter control budget due to these internal operating improvements. Staff would buy a snow pusher attachment for the current John Deere backhoe for \$14,000. A similar attachment was included with the new JCB backhoe.



There are unspent funds in the capital equipment budget to outfit the second backhoe on a full time basis this year.

It is proposed Council support purchasing the attachment so that Town staff can apply the new snow removal strategy this winter. The

Snow Removal Policy would not be changed until after the winter control season when staff will provide a report to Council on the overall success of the program. The single axel and tandem plow trucks would not be considered surplus until Council and staff are comfortable with the new system.

RECOMMENDATION:

That Council receives the Road Foreman's Report dated August 30, 2017 regarding Winter Operational Improvements and Council approve the implementation of the winter operational changes for 2017-18 and purchase of a snow pusher attachment, and that staff report back in spring 2018 on the results of the new strategy.

Mike McIsaac
Road Foreman