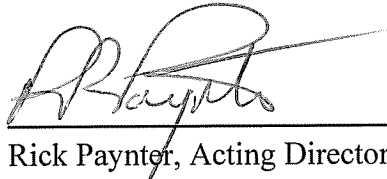


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**Halifax Regional Council**  
**November 19, 2002**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**



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Rick Paynter, Acting Director of Public Works & Transportation

**DATE:** November 12, 2002

**SUBJECT:** Bucket Plows and Sidewalk Snow Removal

## **INFORMATION REPORT**

### **ORIGIN**

Halifax Regional Council meeting of September 17, 2002, item 10.3.2.

### **BACKGROUND**

At the Halifax Regional Council meeting held on September 17, 2002, Councillor Smith requested a staff report regarding the use of bucket plows for sidewalk snow removal. It was requested that the report include information regarding property damage and subsequent costs relative to the use of this equipment. This report is in response to that request.

**DISCUSSION**

For the East region specifically, sidewalk plow damage costs were \$25,232 for approximately 280 kilometres of sidewalk. There are 22 separate routes, 17 of which are contracted. Four of the routes are done by in-house staff using trackless equipment and a combination of angle plows, v-plows and blowers. All remaining sidewalks are done with bucket plows and blower combination. Property or sod damage was equally spread throughout the region and the four (4) routes. All contractors are responsible for any damage they cause in the course of their operations. There was more property/sod damage sustained during the winter of 2001/02 than in previous winters because (1) there were more plowing events, particularly in the early part of winter, and (2) there was no substantial frost in the ground under the snow, thus leaving the grass areas very soft and wet. All plows, whether bucket, angel v-plows or snow blowers will dig into the grass rather than ride over it.

Currently, we are going into the 3<sup>rd</sup> year of a 3 year contract with our contracted sidewalk equipment. Our specifications give the contractors some flexibility with regards to various types of plows that can be used. Both plow and bucket, must however, be between 54" and 60" wide.

Depending on conditions, certain plow types have advantages over other plow types. This is illustrated in the following table:

<b>PLOW TYPE</b>	<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
Bucket plow	able to work in deepest and heaviest snow	more susceptible to property/sod damage
	more versatile in cleaning up intersections and crosswalks	
	more machines available from private sector	
	able to clean up and remove snow from bus stops	
	cleans down to surface more uniformly	
	gives full width clearing	

<b>PLOW TYPE</b>	<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
Angle /V-Plow	plows faster in light snow	limited to pushing snow
	causes less property damage	cannot clean up intersections or crosswalks well
		cannot make any progress in heavy snow
		cannot get snow back off sidewalk once snow banks are present
		sidewalks narrow up over course of winter causing heavy ice conditions
		no down pressure on plows to be able to scrape off hard packed snow

In conclusion and as outlined in the above charts, there are advantages and disadvantages attributable to both types of sidewalk plowing mechanisms. However, from experience, the bucket plow equipment provides the most advantages for sidewalk snow plowing. The experience of the equipment operator and the state of the frost conditions are also key factors in minimizing sod damage.

### **BUDGET IMPLICATIONS**

There are no budget implications at this time.

### **FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### **ALTERNATIVES**

There are no recommended alternatives.

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:

  
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