

Windrow Free and School Drop Off Zone

(M. Walters)

Recommendation:

That the October 28, 2015, Transportation Services report CR_2694, be received for information.

Report Summary

This report outlines current practices and alternative scenarios for windrow snow removal in school zones.

Previous Council/Committee Action

At the July 7, 2015, City Council meeting, Councillor M. Walters made the following inquiry:

As part of last year's budget deliberations, Council amended the City of Edmonton's Snow and Ice Control Policy C409H to include the following:

Remove snow from roadways in the designated windrow free zone adjacent to schools on both sides of the roadway, after every major snowfall when a full plowing cycle is completed.

Based on this amendment, can Administration please provide information on the following:

1. Administration's understanding as to what differentiates a "windrow free zone", and "school drop off zone" both in terms of definition as well as operational practices for snow removal.
2. The City of Edmonton's current timelines to remove snow on both sides of the roadway adjacent to windrow free zones and school drop off zones after a snow event.
3. The potential resources needed to improve the time in which it takes to remove windrows on both sides of the road in windrow or school drop off zones.

Report

Windrow Free and School Drop Off Zone: Definition and Snow Removal Practices

A drop off zone is typically designated with Loading Zone Only signage, supplemented with No Parking signage and typically restricted to the area from 7 a.m. or 8 a.m. until 4 p.m. This signage is intended to facilitate the arrival and departure of students.

A Windrow Free Zone is an area identified for removal of snow windrows adjacent to schools, to facilitate access to schools where a designated drop off zone exists (see Attachment 1). Windrow free zones are identified by windrow free signs, but do not have

a legal designation for enforcement (sign only for operational purposes). Snow controls at schools have historically consisted of plowing snow away from school drop off zones to facilitate passenger movement in school areas. As part of the Snow and Ice Control Policy review (2014), this operation was extended beyond the limits of the drop off zone, creating windrow free zones. As a result, snow is removed from the school side of the road and windrows are placed across the street from schools, which are later removed when snow plowing operations are completed on arterial and collector roads. This existing level of service costs \$400,000 per snow removal event, and its start is subject to equipment and manpower becoming available from other higher priority snow and ice control activities. For example, a continuous storm event can impact the start of windrow removal activities.

The difference between the windrow free and the drop off zones is that windrow free zone covers a larger area than the drop off zone, i.e. usually extending to the intersections or end of the school field along the school frontage.

Windrow free and School Drop Off Zones: Snow Removal Timelines After a Snow Event

Windrow free zones are kept without a windrow after plowing, for arterial and collector roads and blading for residential roads. Currently windrow removal operations are initiated once all arterial and collector plowing and blading operations have been completed and resources become available. With the existing staff and equipment resources (five crews), the level of service provided consist on the completion of the city's school inventory within five days.

Options for Improving Windrow Removal in Windrow Free and School Drop Off Zones

Attachment two summarizes the current level of service and the potential scenarios to improve service. Resource planning is driven by the current level of service, where windrows are removed when resources are freed up from arterial and collector plowing, with an operating cost of \$400,000 (approximately \$1,475 per school) per removal event. If the level of service is improved, and windrows are removed after a first cycle of arterial and collector plowing is completed (regardless if plowing and blading continuous), a capital investment of \$2,000,000 (\$400,000 per crew for five crews) would be required. A further enhancement to the level of service would be to remove windrows after a first cycle of arterial and collector plowing is completed (regardless if plowing is continuous) and complete the windrow removal within 48 hours. This last option will require ten crews, with the same cost per crew, for a total capital cost of \$4,000,000 and an operating cost of \$800,000 per removal event.

Policy

Snow and Ice Policy C409H:

Remove snow from roadways in the designated windrow free zone adjacent to schools on both sides of the roadway, after every major snowfall when a full plowing cycle is completed.

Budget/Financial Implications

Any change to the Snow and Ice Control policy based on information provided in this report would require Administration to prepare a capital profile for purchase of new equipment in the range of \$2,000,000 to \$4,000,000, for City Council approval.

Attachments

1. Example of Windrow location across St. Bonaventure School
2. Scenarios for Windrow Removal across Windrow Free Zones

Others Reviewing this Report

- T. Burge, Chief Financial Officer and Treasurer