

Document Number: 3231
Document Name: Winter Operations
Effective Date: December 7, 2022
Document Status: Approved

1. PURPOSE

- 1.1 This policy establishes and outlines procedures for winter operations on municipal roadways within Woodlands County.

2. POLICY DETAILS

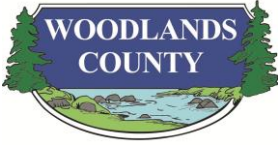
Woodlands County's strategy for snow removal and ice control is to remove as much snow or ice as possible with suitable plowing equipment and then to treat any remaining snow or ice with sand, salt, or a sand/salt combination to achieve good winter driving conditions within the required time frames. Plowing and de-icing activities continue as weather and operational conditions permit with the goal of achieving bare pavement.

Snow Plowing

- 2.1 The County commences snow removal on municipal roads when:
 - a. 7.5cm of snow accumulation on gravel-surfaced roads
 - b. 2.5cm of snow accumulation on paved/based-surfaced roads
 - c. Manager, Infrastructure Services or Area Supervisor considers the road surface unsafe for the travelling public, in which case appropriate action shall be taken as deemed necessary

Based/ Paved Roadways

- 2.2 Snow removal and ice control on based/paved roadways shall be as follows:
 - a. Removal of as much snow and/or ice as possible shall be done with suitable plowing equipment;
 - b. Treatment of remaining snow and/or ice with sand, salt or sand/salt combination shall be done to achieve good winter driving conditions;
 - c. Plowing and de-icing activities shall continue as weather and operational conditions permit.
- 2.3 Priority shall be given to higher volume highways as traffic dictates, with special consideration given to steep hills, curves, important intersections, and areas where drifting occurs.
- 2.4 When good winter driving conditions have been achieved along all routes, cleanup activities will commence (plowing of approaches, intersections, and winging of shoulders).
- 2.5 If visibility is reduced below 75m, or when in the opinion of the Operator, and the Area Supervisor, it is too hazardous to continue snowplowing, the equipment shall be removed from the roadway to a safe location.



3231 – Winter Operations

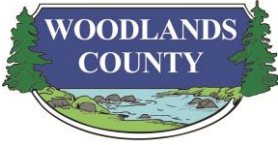
- a. RCMP detachment and radio stations shall be notified that snow clearing activities have ceased and will continue when safe to do so.
- 2.6 Ground engaging equipment will not be utilized when temperatures drop below -32°C.

Gravel-Surfaced Roadways

- 2.7 Snowplowing of gravel-surfaced roads shall commence as noted in Section 2.1a; however, if drifting conditions prevail, plowing operations may be commenced earlier at the discretion of the Area Supervisor.
- 2.8 With a snowfall greater than 7.5cm, the main priority shall be to clear the roadways sufficiently to allow traffic movement.
- 2.9 Graders and Plow Trucks shall feather out snow as they pass approaches to prevent the formation of a windrow. When a windrow of 15cm or greater is present, approaches will be cleared immediately prior to proceeding.
- 2.10 Plowing of driveways and special requests shall commence only when plowing of all roadways, approaches and turnarounds have been completed.
- 2.11 Should roadways become slippery due to compacted snow or ice; ice blading shall be done to roughen the surface for improved traction in critical areas such as hills, curves, and intersections.
 - a. Intersections shall be ice bladed for approximately 200 meters from the center of the intersection, in each direction to provide greater stopping distance. Care shall be taken when ice blading to minimize gravel loss.
- 2.12 The County will make reasonable effort clear all roadways within 96 hours (4 days) of a snow fall ending. In cases where there are consecutive snowstorms, crews will plow roads on a rotating basis until all are cleared.
- 2.13 Sidewalks in the hamlets of Blue Ridge and Fort Assiniboine will be cleared within 48 hours of a snowstorm ending.

Sanding and Salting

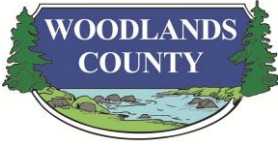
- 2.14 Winter sanding and salting is to be carried out on all paved surfaces as deemed necessary by the Area Supervisor. The approach leading onto paved roads are to be sanded and salted as required.
- 2.15 Gravel roads will not normally be sanded; icy hills, intersections, and railway crossings will be chipped or graveled when required.
- 2.16 Sanding and salting commences once snow has been removed from the driving surface.
- 2.17 When roadway temperatures are too cold for the use of salt (below -20°C), only winterized sand is applied.
- 2.18 Sanding operations are carried out regardless of the temperature.



- 2.19 Should visibility be reduced below 75m, or when the Operator and the Area Supervisor deem it is too hazardous to continue snowplowing, the equipment shall be removed from the roadway to a safe location.
 - a. RCMP detachment and radio stations shall be notified that snow clearing activities have ceased and will continue when safe to do so.

3. DEFINITIONS

- 3.1 Anti-icing: means the application of liquid de-icers directly to the road surface in advance of a winter event.
- 3.2 Approach: means an access location on a roadway; private driveway, public road.
- 3.3 Arterial Roads: means roads that deliver traffic from collector or rural roads to numbered highways. Arterial roads receive a high volume of non-local commercial vehicles and other non-local traffic compared to other roads.
- 3.4 Beats: are the portions of County Road network that a single plow truck or grader or other equipment is responsible for providing snow/ice clearing.
- 3.5 Continuous Winter Event Response: is a response to a winter event with full deployment of manpower and equipment that plow/salt/sand the entire road system.
- 3.6 County – Woodlands County as a municipal corporate and the geographical area within its jurisdiction boundaries, as the context requires.
- 3.7 De-Icing: the application of solids, liquids, pre-treated material to the road surface after the on-set of a winter event.
- 3.8 Gravel-Road: a road made up of any combination of a loose mixture of pebbles and rock fragments (aggregate) coarser than sand.
- 3.9 Highway: includes common and public highway, street, avenue, parkway, bridge, or any part of which is intended for or used by the public for the of vehicles and includes the area between the lateral property lines.
- 3.10 Ice Blading: means the removal or roughing of ice and packed snow. Ice blading may be conducted when sanding is not effective.
- 3.11 Paved Road: is a road with an asphalt surface, concrete surface, composite pavement, or Portland cement.
- 3.12 Pre-Treat: means the application of liquids (calcium chloride, sodium chloride, etc.) to dry sand or salt prior to being loaded for storage or applied to the road surface.
- 3.13 Pre-Wetting: means the application of liquids (calcium chloride, sodium chloride, etc.) at the spinner of the truck just prior to application to the road surface.
- 3.14 Snowplow Flag: are Woodlands County flags provided to residents, for a fee, that identifies a driveway to be cleared by County operators.
- 3.15 Surface Treated Road: is road with bituminous surface treatment comprised of one or two applications of asphalt emulsion and stone chips over a gravel road.
- 3.16 Winter Event: is a weather condition affecting roads such as snowfall, wind-blown snow, freezing rain, frost, black ice, etc. to which a winter event response is required.



- 3.17 Winter Event Response: is a series of winter control activities performed in response to a winter event.
- 3.18 Winter Event Response Hours: the total number of person-hours per year (plowing, salting/sanding, winging back, etc.) to respond to winter events.

4. ROLES AND RESPONSIBILITIES

4.1 Area Supervisor

- a. Shall communicate to the Manager, Infrastructure Services and all active Operators when activities are to cease due to hazardous conditions and direct to the same when it is safe to resume operations.
- b. Shall ensure employee do not operate equipment beyond a maximum of 13 continuous hours or as outlined in the National Safety Code, except in extreme emergencies.
- c. Shall notify via email, the applicable RCMP detachment(s) and radio stations when snow clearing activities have ceased due to hazardous conditions and will continue when safe to do so.

4.2 Chief Administrative Officer

Occasionally severe storms require that local road closures be implemented. Under the Highway Traffic Act, the Chief Administrative Officer has the authority to close highways. The public must be advised of road closures through the media. It is important to ensure that news of the road re-opening is transmitted to the public promptly.

4.3 Council & Administration

Submit service requests online <https://woodlands.ab.ca/p/service-request> as received by the public in accordance with Policy 1216 – Service Tracker.

4.4 Director, Infrastructure Services

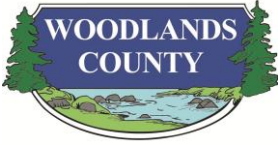
Shall communicate to the Chief Administrative Officer extraordinary or exceptional circumstances that may arise that are outside of items addressed in this policy.

4.5 Equipment Operator

- a. Snow plowing operations are carried out under adverse driving conditions making safety precautions necessary. Lights and warning flags must be checked frequently to ensure they are in good condition, operating properly and as visible as possible.
- b. Shall carry the on-call mobile phone for after hours call-outs.

4.6 Manager, Infrastructure Services

Shall communicate to the Director, Infrastructure Services extraordinary or exceptional circumstances that may arise that are outside of items addressed in this policy.



5. RELATED POLICIES AND DOCUMENTS

5.1 Draft Policy 3232 – Private Driveway Plowing & Grading

5.2 Policy 1216 - Service Request Tracking