

Council Policy C002-2024

Winter Maintenance

Approval Date: October 7, 2024 Review by Date: October 7, 2028

1. Policy Purpose:

The Town of Irricana is responsible for maintaining public roads and pathways within the town's geographical boundaries. This policy provides guidelines for winter maintenance operations within the approved budget and terms of this policy.

The *Municipal Government Act*, Section 18(1), gives the municipality the direction, control and management of all roads and publicly owned pathways within the municipality.

Objectives of this policy are; to provide the travelling public and pedestrians with adequate mobility under prevailing winter conditions, help minimize or reduce accidents or injuries due to winter conditions, provide for the operation of emergency services, minimize economic loss to the community resulting from restricted transportation routes and set the level of service for winter maintenance for routes dependent upon their priority ranking.

This policy addresses most roadway and pathway winter maintenance scenarios. When unusual conditions occur, the Town's Public Works will use discretion, experience and judgments regarding the application of this policy.

2. Definitions:

- a. Arterial and Industrial Road*: Major roadways that carry the highest traffic volumes;
- b. <u>Emergency Route</u>: Means roadways most commonly used by Fire Services, EMS and RCMP.
- c. <u>Collector Road</u>*: Roadways that carry moderate volumes of traffic; this type of roadway carries vehicles between major and residential roadways;
- d. <u>Local Residential Road</u>*: A roadway that provides direct access to and collects traffic from abutting residential properties and distributes this traffic to higher standard roadways;

- e. *Rural Road*: A road that is not hard-surfaced with Hot Mix Asphalt, typically consisting of gravel, recycled asphalt/concrete or chip seal surface;
- f. <u>Drop-off Zone</u>: Sections of roadway adjacent to schools where buses drop-off/pick-up students;
- g. <u>Continuous Snow Event</u>: Means a situation in which more than 2.5 centimetres / 1 inch per hour of fresh snowfall is deposited on a priority route;
- h. <u>Impassable Conditions</u>: Means the accumulation of more than 25 centimetres / 10 inches of snow on a local residential road, not including packed layers of snow and ice or ruts exceeding 25 centimetres / 10 inches in depth;
- i. <u>As Required</u>: A statement which means that the level of service is not set at a predetermined number of activity occurrences per season or year;
- j. <u>Boulevard</u>: Means the area between a roadway curb and separate sidewalk or between a roadway curb and property line where there is no sidewalk;
- k. <u>Pathway</u>: A trail or walkway which is typically made of hard packed gravel or has an asphalt surface, intended to promote active transportation such as walking or cycling throughout the community.
- I. *Rutting*: Formation of troughs and ridges in compacted snow or ice.
- m. <u>Ice Control</u>: Means the application of sand-chips, salt or calcium either individually, in combination, in a mixture or any other mixture to a roadway surfaces to improve traction, reduce skidding or reduce ice formation.
- n. <u>Snow Event</u>: Means the accumulation of 7.5 centimetres / 3 inches of newly fallen snow;
- o. <u>Snow Plowing</u>: Means the grading of accumulated snow from roadway surfaces to the middle or side of the roadway or lane.
- p. <u>Snow Removal</u>: Means the loading and hauling of snow from roadway surfaces to a designated site;
- q. <u>Windrowing</u>: Means the plowing of snow into a long continuous pile for storage or facilitate removal.

^{*} In accordance with TAC standards and definitions

3. Policy Statement:

It is the policy of the Town of Irricana to: provide the travelling public and pedestrians with adequate mobility under prevailing winter conditions, help minimize or reduce accidents or injuries due to winter conditions, provide for the operation of emergency services, minimize economic loss to the community resulting from restricted transportation routes and set the level of service for winter maintenance for routes dependent upon their priority ranking. Winter maintenance will be delivered in a cost effective and efficient manner.

4. Policy Details:

4.1 Council shall:

- a) Approve this policy and any amendments through resolution.
- b) Set the level of service; and
- c) Review and adopt the associated budget as developed by Administration.

4.2 Chief Administrative Officer shall:

- a) Implement this policy and approve procedures; and
- b) Ensure policy and procedure reviews occur and verify the implementation of
- c) policies and procedures.

4.3 Manager of Public Works shall:

- a) Ensure the implementation of this policy and related procedures.
- b) Ensure that the application of this policy is reviewed periodically; and
- Recommend to the Chief Administrative Officer necessary policy and/or procedure amendments;
- d) Implement and review the success of the Winter Maintenance policy and procedures while providing for safe roadway and pathway conditions during the winter months;
- e) Allocate and scheduling Public Works resources; and
- f) Manage the budget.

4.3 Public Works Staff shall:

- a) Understand and adhere to this policy; and
- b) Conduct any assigned duties in accordance with this policy and related procedures.

4.4 The Town's Public Works shall carry out winter maintenance in accordance with the Winter Maintenance Policy and the instructions of the Public Works Manager or designate.

5. Enactment:

Resolution 140:24 was passed by Council on October 7, 2024 to enact Policy C002-2024, being the Council Policy on Winter Maintenance.

'Original Signed'

Jim Bryson

Mayor

REFERENCES:

Town of Irricana Procedure – Winter Maintenance

Appendix 'A' – Priority Snow Clearing Routes

Appendix 'B' – Designated Snow Routes



Procedure

Winter Maintenance

Approval Date: October 7, 2024 Review by Date: October 7, 2028

1. Roadway Priorities and Standards

- 1.1. The Town operates within an approved budget which is required for a number of purposes. In establishing the Winter Maintenance policy, the Town takes into consideration its financial resources, its personnel and commitments under the Municipal Government Act.
- 1.2. Priorities are established to provides the greatest benefit to the majority of the travelling public. In setting priorities, consideration is given to criteria such as traffic volume, road classification, road geometrics, terrain, emergency services, drift exposure, and potential drainage concerns.
- 1.3. The Town has established three priority ratings for roads, as generally depicted in Appendix 'A':

1.3.1. Priority 1: Emergency Routes and Arterial Roads

Roads shall be plowed and have winter maintenance concluded twenty-four hours after the end of a snow event. Roads will be plowed to removed snow as close to the road surface as practical.

Removal of windrows may be prioritized if they exceed one meter in height or if sufficiently sized to impede slight lines or the flow of traffic.

Ice control will be provided at major intersections, railway crossings, hills, and curves.

1.3.2. Priority 2: Collector Roads

Roads shall be plowed and have winter maintenance concluded forty-eight hours after the end of a snow event. Roads will be plowed to removed snow as close to the road surface as practical.

Removal of windrows may be prioritized if they exceed one meter in height or if sufficiently sized to impede slight lines or the flow of traffic.

Ice control will be provided at intersections, playground zones, hills, and curves.

1.3.3. Priority 3: Local Roads

Roads shall be plowed and have winter maintenance concluded forty-eight hours after the end of a snow event. Roads will be plowed to removed snow as close to the road surface as practical.

Removal of windrows may be prioritized if they exceed one meter in height or if sufficiently sized to impede slight lines or the flow of traffic.

Ice control will be provided at intersections, railway crossings, hills, and curves.

1.4. Town Managed Parking Lots

Parking areas shall be plowed and have winter maintenance concluded fortyeight hours after the end of a snow event, subject to prevailing weather conditions, the completion of Priority 1 and Priority 2 roadways. Parking areas will not be prioritized outside of normal operating hours or on weekends.

Parking areas with an asphalt surface will be plowed to remove snow as close to the parking lot surface as practical. Parking areas with soil, aggregate, or other unpaved surfaces will be plowed so as to minimize driving difficulties and loss of surface materials.

Ice control will be completed on an as-needed basis, determined by Public Works staff, to provide a reasonable level of safety for facility users.

- 1.4.1. Snow and ice accumulation of three centimeters or less will be managed through the application of sand and/or salt.
- 1.4.2. Snow and ice accumulation greater than three centimeters will be managed through mechanical means (e.g., plowing) and the application of sand and/or salt, as required.

1.5. Undesignated Roads

Roads shall be plowed and have winter maintenance concluded when the road is rendered impassible. Subject to the discretion of the Manager or Public Works, undesignated roads will receive service only following completion of Priority 1,

Priority 2, and Priority 3 roads, and subject to the availability of Public Works resources.

Snow removal operations will be limited to flat-blading roads to provide an operable lane, provide for adequate sight lines, and minimize rutting.

1.6. Requests and Complaints

Requests and complaints will be reviewed by the Manager of Public Works who shall determine what, if any, action is to be taken to provide for public safety and reasonable site access.

2. Snow Plowing

- 2.1. Snow plowing operating are governed by current weather conditions and the priorities assigned to individual roadways.
- 2.2. Snow plowing will commence in priority order following a snow event and in consideration of field conditions and the seventy-two hour weather forecast.

When snow events are continuous or occur in close proximity to one another, operations will be repeated or continued on the highest priority until complete before moving the next priority / activity.

- 2.3. Snow plowing may result in windrows on one or both sides of a road and may spill onto adjacent sidewalks.
 - 2.3.1. Public Works will take reasonable precautions and attempt to minimize the placement of windrows which may hinder vehicle access alongside roadways while emphasizing the expedited removal of snow from roadways.
 - 2.3.2. Public Works will take reasonable precautions and attempt to minimize the spilling of snow onto sidewalks while emphasizing the expedited removal of snow from roadways.
 - 2.3.3. The clearing of snow and ice which spills onto sidewalks is the responsibility of the adjacent property owner, as described in the Community Standards Bylaw (Bylaw 007:2012).
- 2.4. Priority routes or portions thereof may be combined to reduce travel time and expense if doing so does not materially impede the conclusion target for the highest priority road receiving service.

2.5. Where extreme conditions exist, or at the discretion of the Manager of Public Works, road rights-of-way and public sidewalks, in residential or non-residential areas, may be used for temporary snow storage during snow plowing operations.

Temporary snow storage will be removed as equipment and manpower becomes available and road conditions are determined by the Manager or Public Works to be suitable.

3. Sanding, Salting and Ice Control

- 3.1. Ice Control shall begin when snow plowing has been completed and roads are cleared to an extent where the applied product will not be plowed off by a subsequent plowing.
- 3.2. Anit-icing products may be applied to roadways prior to the snow event at the discretion of the Manager of Public Works.

4. Snow Removal

- 4.1. Public Works will implement snow removal operations when the accumulation of snow *significantly* impedes traffic flow and on-street parking, subject to established priorities.
- 4.2. Fire hydrants will be routinely assessed throughout the winter season for accessibility. During a significant snow event where accumulation and / or windrows could reasonably restrict access to hydrants, Public Works will undertake snow removal so as to eliminate the restriction.
- 4.3. Internal resources will be used to conduct Winter Maintenance activities; The Manager of Public Works may, at their discretion, identify, retain, and allocate external resources to augment internal resources.
- 4.4. Where extreme conditions exist, or at the discretion of the Manager of Public Works, road rights-of-way and public sidewalks, in residential or non-residential areas, may be used for temporary snow storage during snow removal operations.

Temporary snow storage will be removed as equipment and manpower becomes available and road conditions are determined by the Manager or Public Works to be suitable.

5. Sand and Salt Storage

- 5.1. Public Works will ensure the availability of an adequate supply of sand and salt for Winter Maintenance operations. The estimated volume required for a normal winter season shall be stockpiled, mixed, and be made available by October 1 each year.
- 5.2. The stockpiling, storage, and off-loading of excess materials shall only occur within the designated location(s).

Should sand or salt be found to have leeched, drained, or otherwise been discharged into a public waterway, Public Works will take reasonable action to limit the exposure and report the event to Alberta Environment and Protected Areas (AEPA) immediately.

6. Pathway / Sidewalk Snow and Ice Clearing

- 6.1. Pathways and sidewalks adjacent to Town operated facilities shall have winter maintenance concluded forty-eight hours after the end of a snow event. Snow will be removed as close to the surface as practical.
- 6.2. Public Works will not remove snow, ice, or slush on sidewalks which front or abut private property, including residential and non-residential property.
- 6.3. Windrows on pathways or sidewalks may be removed, at the discretion of the Manager of Public Works, so as to provide reasonable unrestricted pedestrian access.

7. Parking Bans

- 7.1. The Town may designate snow routes and mark these routes with clear signage.
- 7.2. The Chief Administrative Officer may, at their discretion, declare a temporary parking ban, on designated snow routes or other roads, in order to facilitate winter maintenance.
- 7.3. Areas impacted by a parking ban will be signed twenty-four hours prior to winter maintenance, with parking bans in effect from 8:00am to 4:00pm; Parking bans remain in effect until signage is removed.
- 7.4. Vehicles that remain parked on a roadway during a parking ban may be ticketed and / or towed, at the expense of the registered owner, in accordance with the Traffic Bylaw or other local ordinances.

8. Snow On-Call

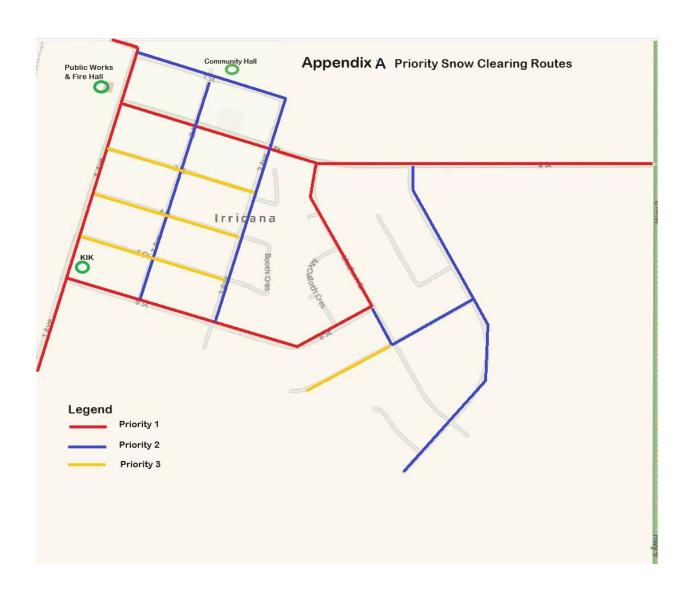
- 8.1. The Manger of Public Works, at their discretion, shall schedule the necessary internal resources beyond normal work hours to ensure that service levels are met from October 15 to April 15 annually.
- 8.2. Internal resources will be scheduled to ensure that Priority 1 roadways are passable by 8:00am on regular workdays.
- 8.3. Public Works staff will have unrestricted (i.e., 24-hour) access to Town resources, including vehicles and equipment, in order to achieve winter maintenance service levels.

9. Unsafe Conditions

9.1. Winter maintenance will not be conducted in conditions that are deemed unsafe by the Manager of Public Works.

Generally, unsafe conditions are those which limit visibility to 30 meters or less, expose Public Works staff to temperatures below -25 degrees Celsius for a prolonged period, or are likely to have an undue impact to vehicles and equipment or impact their safe operation.

APPENDIX 'A' Priority Snow Clearing Routes



APPENDIX 'B'

Designated Snow Routes

