

CITY OF CHESTERMERE

POLICY HANDBOOK

EFFECTIVE DATE: 2018-mmm-dd		SECTION: 500	POLICY: 501
APPROVED BY: City Council	APPROVED DATE:	TITLE OF POLICY: Winter Maintenance	
REVIEW DATE:	AMENDMENT DATE:	PAGE NO.: 1 of 4	
POLICIES AMENDED / RESCINDED:		POLICY TYPE: Development Services Community Services	

1. PURPOSE

The City of Chestermere is responsible for the maintenance of public roads and pathways within the geographic boundaries of the City excluding the Trans-Canada Highway, its associated interchanges and intersections with City roads. This document provides guidelines for winter maintenance operations within the approved budget and the terms of this policy.

The 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. Winter maintenance will be delivered in a cost effective and efficient manner.

This policy addresses most roadway and pathway winter maintenance scenarios. When unusual conditions occur, the Roads Function of Development and Infrastructure Services and the Parks Function of Community Services will use discretion, experience and judgement in the application 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.

2. DEFINITIONS

- a) Arterial and Industrial Road*: Major roadways that carry the highest traffic volumes;
- b) Emergency Route: Means roadways most commonly used by Fire Services, EMS and RCMP.

- c) Collector Road*: Roadways that carry moderate volumes of traffic; this type of roadway carries vehicles between major and residential roadways;
- d) Local Residential Road*: 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 a gravel, recycled asphalt/concrete or chip seal surface;
- f) Drop-off Zone: Sections of roadway adjacent to schools where buses drop-off/pick-up students;
- g) Continuous Snow Event: Means a situation in which more than two (2) centimetres per hour of fresh snowfall is deposited on a priority route;
- h) Impassable Conditions: Means the accumulation of more than 15 centimetres of snow on a local residential road, not including packed layers of snow and ice or ruts that exceed 15 centimetres in depth;
- i) As required: A statement which means that the level of service is not set at a predetermined number of activity occurrences per season or year;
- j) Boulevard: Means the area between a roadway curb and separate sidewalk or between a roadway curb and property line where there is no sidewalk;
- k) Pathway: 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.
- l) Rutting: Means the formation of troughs and ridges in compacted snow or ice;
- m) Ice Control: Means the application of sand-chips, salt or calcium either individually, in combination, in a mixture or any other mixture to a roadway surface to improve traction, reduce skidding or reduce ice formation.
- n) Snow Event: Means the accumulation of three (3) centimetres of newly fallen snow;
- o) Snow Plowing: Means the grading of accumulated snow from roadway surfaces to the middle or sides of a roadway or lane;
- p) Snow Removal: Means the loading and hauling of snow from roadway surfaces to a designated site;
- q) Windrowing: Means the plowing of snow into a long continuous pile for storage or to facilitate removal.

* In accordance with TAC standards and definitions

3. POLICY STATEMENT

It is the policy of the City of Chestermere 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. RESPONSIBILITIES

4.1 City Council shall:

- a) Approve by resolution this policy and any amendments;
- b) Review and adopt the Winter Maintenance budget as developed by Development and Infrastructure Services and Community Services; and
- c) Set the levels of service.

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 policies and procedures.

4.3 Director of Departments shall:

- a) Ensure implementation of this policy and related procedures;
- b) Ensure that the application of this policy is reviewed periodically; and
- c) Recommend to the Chief Administrative Officer necessary policy and/or procedure amendments.

4.4 The Roads Supervisor and Parks Supervisor shall:

- a) Implement and review the success of the Winter Maintenance policy and procedures while providing for safe roadway and pathway conditions during the winter months;
- b) Allocating and scheduling Roads and Parks Function resources; and

c) Managing the budget.

4.5 Roads and Parks Employees shall:

a) Understand and adhere to this policy.

b) Conduct any assigned duties in accordance with this policy and related procedures.

4.6 The Roads Function and Parks Function shall carry out winter maintenance in accordance with the Winter Maintenance Policy and the instructions of the Roads Supervisor and Parks Supervisor respectively, or their designate.

5. **REFERENCES**

- City of Chestermere Procedure – Winter Maintenance
- Appendix A – Roadway Snow Plowing Routes & Priorities
- Appendix B – Sidewalk and Pathway Routes
- Appendix C – Designated Snow Routes

For Council Policies:

Adopted by Council:

Resolution Number:

MAYOR

CAO

CITY OF CHESTERMERE PROCEDURE

SECTION: 500 POLICY: 501	POLICY TITLE: Winter Maintenance
DEPARTMENT: Development Services & Community Services	FUNCTION: Roads & Parks

1. Roadway Priorities and Standards

1.1 The City operates within an approved budget which are required for a number of purposes. In establishing the Winter Maintenance policy, the City must take into consideration its financial resources, its personnel and commitments under the *Municipal Government Act*. Priorities are established to provide the greatest benefit to the majority of the traveling 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 issues.

1.2 City Council has set six (6) priority ratings for roads as follows and as shown in Appendix A:

1.2.1 Priority 1: Emergency Routes, Arterial and Industrial Roads and School Zones

Roads shall be plowed and have winter maintenance activities concluded twenty-four (24) hours after the end of a snow event. Roads will be plowed to remove snow as close to the road surface as possible.

Snow removal may be initiated when snow on the road or windrows exceed one (1) metre in height or is of sufficient size to impede the flow of traffic or sight lines.

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

1.2.2 Priority 2: Collector Roads

Roads shall be plowed and have winter maintenance activities concluded forty-eight (48) hours after the end of a snow event. Roads will be plowed to remove snow as close to the road surface as possible.

Snow removal may be initiated when snow on the road or windrows exceed one (1) metre in height or is of sufficient size to impede the flow of traffic or sight lines.

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

1.2.3 Priority 3: Rural Roads

Roads shall be plowed and have winter maintenance activities concluded forty-eight (48) hours after the end of a snow event. Roads will be plowed to remove snow, but snow of varying depths may be left in accordance with what is required to minimize driving difficulties and loss of surface material.

Snow removal may be initiated so as to provide unrestricted travel lanes. Windrows will be removed only if they exceed storage capacities, cause impassible drifting, begin to interfere with lane width or create potential drainage issues.

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

1.2.4 Priority 4: City-Owned Parking Lots

Parking areas shall be plowed and have winter maintenance activities concluded seventy-two (72) hours after the end of a snow event. Parking areas having a hot mix asphalt surface will be plowed to remove snow as close as possible to the road surface. Parking areas with a surface consistent with a rural road will be plowed to remove snow, but snow of varying depths may be left in accordance with what is required to minimize driving difficulties and loss of surface material.

The current weather conditions will govern when the required maintenance is performed on parking lots. The prime objective is to schedule this winter maintenance to be completed prior to 8:30 am on regular work days or as resources permit after meeting the objectives of Priority 1-3 routes.

The Roads, Parks or Corporate Properties Function will initiate snow plowing and sanding as required to ensure a reasonable level of safety for facility user groups. Snow removal operations will be initiated when parking is compromised and ice control will be provided as required. City-owned parking areas to be maintained are shown in Appendix A.

1.2.4.1 Accumulation of snow of three (3) centimetres or less will be managed by the application of sand and/or salt.

1.2.4.2 Accumulation of snow three (3) centimetres or greater will be managed by snow plowing equipment and sanded as required.

1.2.5 Priority 5: Local Residential Roads

Roads shall be plowed and have winter maintenance activities concluded when the road is rendered impassable, extenuating circumstances exist or as determined by the Roads Supervisor. Roads may be bladed flat to minimize rutting but snowpack of varying depths will be left in accordance with what is required to minimize driving difficulty when extenuating circumstances exist.

Snow removal operations will be limited to providing for adequate sight lines when the road is rendered impassable or extenuating circumstances exist.

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

1.2.6 Priority 6: Complaints and Requests

Complaints and requests received will be investigated and appropriate action will be taken based on the outcome of the investigation and the judgement of the Roads Supervisor.

2 Snow Plowing

2.1 Snow plowing operations are governed by current weather conditions and by the priorities assigned to individual roadways.

2.2 Snow plowing operations will commence in priority order upon a snow accumulation of three (3) centimetres and in consideration of field conditions and the weather forecast. When storms are continuous or follow closely one after the other, operations will be repeated or continued on the highest priority until completed before moving on to the next priority.

2.3 Snow plowing may result in windrows on both sides of the road or to the centre of the road. As per Snow Removal Bylaw 018-11, the clearing of windrows in front of driveways left by equipment shall be the responsibility of the property owner or affected individual, company or corporation.

2.4 Varying priority routes may be combined during regular winter maintenance to reduce travel time and expense if it does not impede the conclusion target for the highest priority road receiving winter maintenance.

- 2.5 In the event where extreme conditions exist, the Roads Function will utilize road right-of-ways and public sidewalks in residential and commercial areas for snow storage during snow plowing operations. Public sidewalks within the road right-of-way will be cleared off when equipment and manpower becomes available and road conditions are stabilized as determined by the Roads Supervisor.

3 Sanding, Salting and Ice Control

- 3.1 Ice control shall begin when plowing has cleared the roads to an extent where the applied product will not be plowed off by subsequent plowing.
- 3.2 Anti-icing products may be applied to the roads prior to snowfall event at the discretion of the Roads Supervisor under the review of the forecast weather conditions.

4 Snow Removal

- 4.1 The Roads Function will implement snow removal operations when the accumulation of snow significantly impedes traffic flow and on-street parking.
- 4.2 City of Chestermere fire hydrants will be continually assessed throughout the winter season for accessibility to ensure fire protection for the community. During major snow falls where accumulation and windrows produced from equipment restricts accessibility, City operational staff will commence removal of snow.
- 4.3 The Roads Supervisor shall determine the need for; retaining, allocating and scheduling privately held resources to assist with snow removal.
- 4.4 In the event where extreme conditions exist, the Roads Function will utilize road right-of-ways and public sidewalks in residential and commercial areas for snow storage during snow removal operations. Public sidewalks within the road right-of-way will be cleared off when equipment and manpower becomes available and road conditions are stabilized as determined by the Roads Supervisor.

5 Sand and Salt Storage

- 5.1 The Roads Function will ensure that the stockpiling and storage of sand and salt and off-loading of excess materials be conducted completely within the facility provided.

- 5.2 The amount of required sand and salt for a normal winter season shall be stockpiled, mixed and in storage prior to the end of September in each calendar year.

6 Sidewalk / Pathway Snow and Ice Clearing

- 6.1 Sidewalks and pathways, as shown in Appendix B, will be plowed to remove snow as close to the road surface as possible.
- 6.2 The Parks Function will plow snow from sidewalks and pathways, as shown in Appendix B, and have winter maintenance activities concluded forty-eight (48) hours after the end of a storm event. Snow is not removed on Sundays and only priority pathways are cleared on Saturdays, see Appendix B, Monday to Saturday routes.
- 6.3 As per Bylaw 018-11, the Parks Function will not remove snow, ice or slush on sidewalks which front or abut the property of private or commercial properties.
- 6.4 Snow will be plowed on asphalt pathways and sidewalks to as close to the surface as possible when the accumulation of snow exceeds three (3) centimeters. Gravel pathways will not be cleared in the winter.
- 6.5 Due to constantly changing freezing and thawing conditions, salt and sand will not be applied by Parks to asphalt pathways or sidewalks, however residents may access sand at the City of Chestermere Public Works Building to apply on sidewalks fronting or abutting their property.
- 6.6 Windrows on sidewalks or pathways may be removed so as to provide unrestricted pedestrian travel, and will be assessed and prioritized by the Parks Supervisor or their designate.

7 Parking Bans

- 7.1 The City shall designate snow routes and mark these routes by clear signage.
- 7.2 As per Traffic Bylaw 004-11 (Section 9), after an exceptional snow event has ended, the CAO may direct the Roads Supervisor to declare a temporary parking ban on snow routes in order to complete snow removal dependant on the amount of snow accumulation.

- 7.3 Parking bans may be implemented along designated snow routes (Appendix C) or as otherwise required to provide for operations. Areas where parking is to be banned, designated or otherwise, will be signed twenty-four (24) hours in advance. Vehicles that do not adhere to the parking ban may be ticketed and/or towed and the owner of the vehicle shall be responsible for all associated costs in accordance with the Traffic Control Bylaw.
- 7.4 Parking bans shall be in effect between 8:00am and 4:30pm. Parking bans will be in effect as long as the temporary signs are in place with on-street parking permitted outside of the effected hours of 8:00am and 4:30pm.

8 Snow On-Call Schedule

- 8.1 The Roads Supervisor will develop and maintain a weekly, rotational, snow on-call schedule from Mid-October to Mid-April.
- 8.2 Two Roads operators will be on-call per shift consisting of a primary and secondary operator.
- 8.3 The primary Roads on-call operator will check the current weather conditions and determine if a visual check of the road conditions is warranted. If a visual road condition check is warranted the primary operator will conduct the condition check between 5:00 am and 6:00 am on regular work days.
- 8.4 If snow plowing is deemed necessary it is the primary Roads operators responsibility to call in the secondary operator and proceed with Priority 1 snow plowing. The prime objective is to have Priority 1 roadways passable by 8:00 am on regular work days.
- 8.5 Roads snow on-call staff shall be granted 24-hour access to City owned vehicles during their scheduled on-call shift in accordance with Policy 711.
- 8.6 Roads snow on-call staff will ensure current weather reports from Environment Canada are utilized on a regular basis.
- 8.7 The Parks Supervisor will develop and maintain a Saturday, rotational snow on-call schedule from Mid-October to mid-April, for the removal of snow from asphalt pathways and sidewalks. Two Parks operators will be on-call per shift.

9 Public Relations

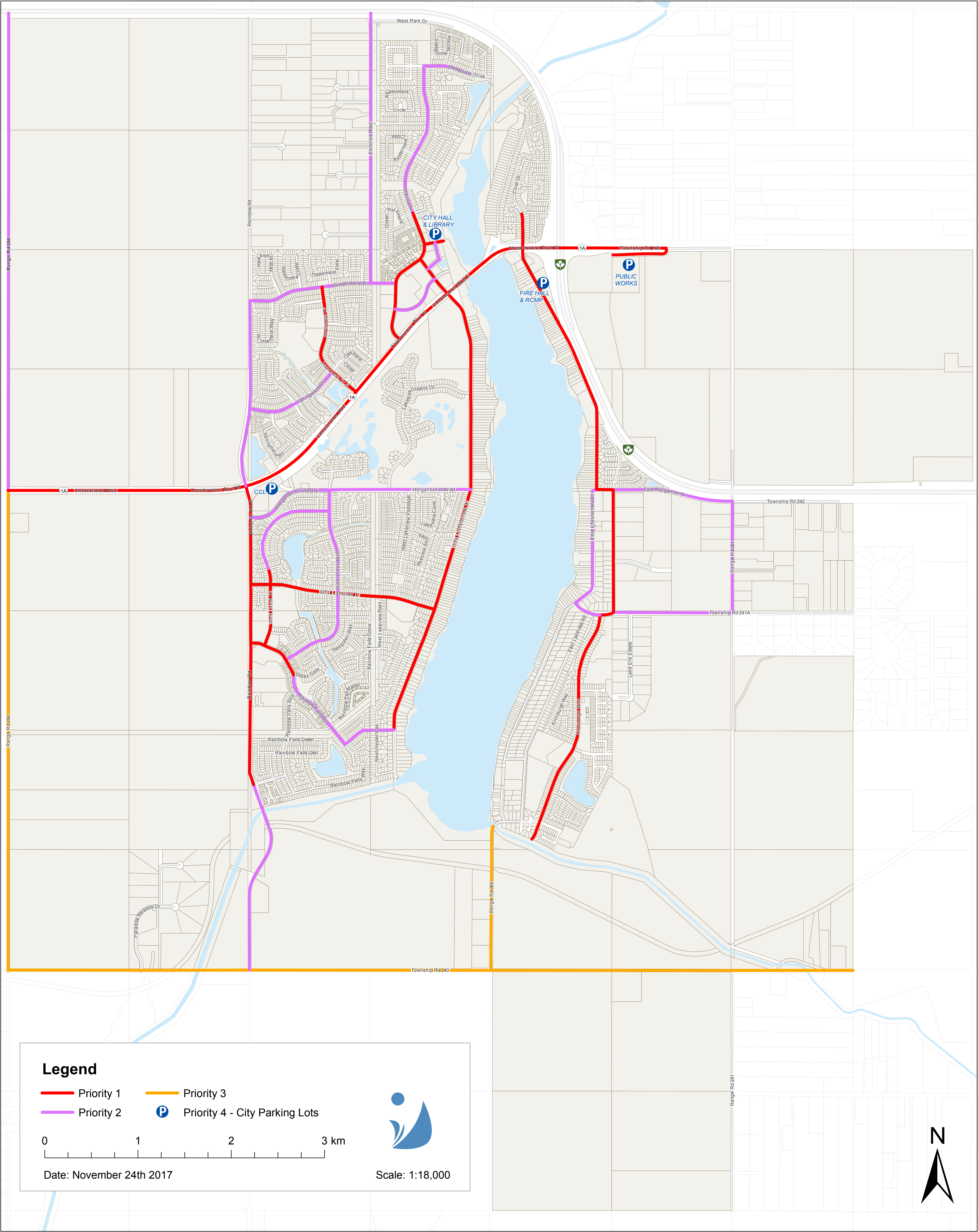
- 9.1 Public Works Administration shall handle all concerns and inquiries relating to winter maintenance.

- 9.2 The Roads Supervisor, or their designate, shall investigate complaints and requests for winter maintenance on roadways and shall respond on a priority basis.
- 9.3 The Parks Supervisor, or their designate, shall investigate complaints and requests for winter maintenance on asphalt pathways and sidewalks and shall respond on a priority basis.

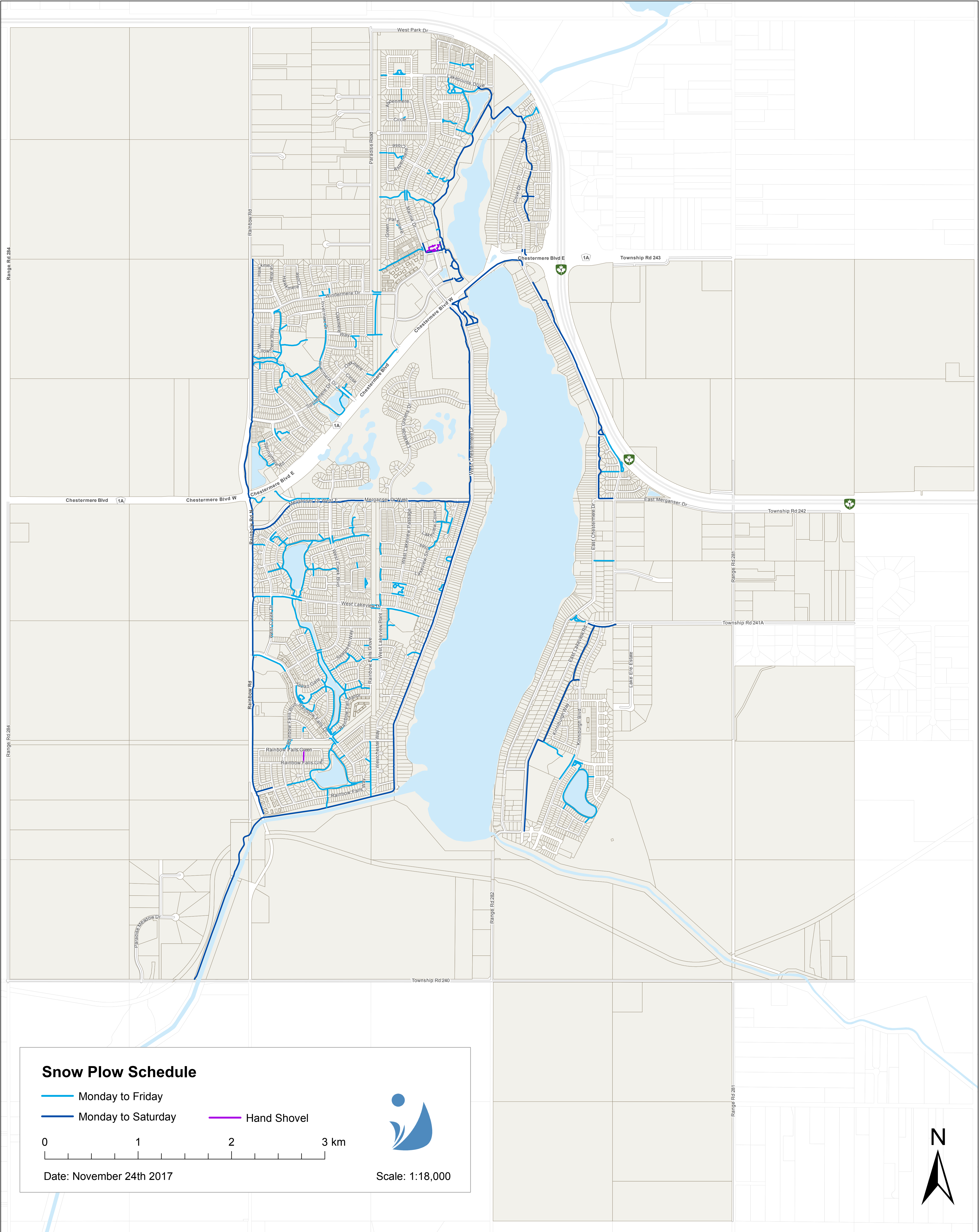
10 Unsafe Conditions

- 10.1 Blizzard conditions where visibility is limited to 30 metres or less will result in the recall of equipment and postponement of winter maintenance for operator safety. Regular winter maintenance will resume when visibility is extended to 30 metres or greater.

APPENDIX 'A'



APPENDIX 'B'



APPENDIX 'C'

