



**City of Mt. Pleasant**  
**Administrative Memo #1-85**

**Issued: January 1, 1985**

**SUBJECT: Snow and Ice Control Policy**

**SUMMARY:**

The intent of this policy is to construct a basic guideline to effectively and efficiently control snow and ice conditions throughout the winter, while prioritizing different aspects the routine. Although most conditions are covered by this policy timing, personnel, and equipment could alter the procedures of the policy.

**MEMO:**

- I. Procedures for Treating Icy Roads (salting and sanding)
  - A. Priorities
    1. Major streets, Central Business District (CBD) and school bus routes.
    2. Local streets
    3. Downtown parking lots
  - B. Ice Control Operations
    1. Salt is normally spread on an overtime basis in the morning hours from approximately 5:00 a.m. to 8:00 a.m. depending on the weather conditions and timing of the precipitation. (see attachment A).
    2. Typical duration
      - a. It takes approximately three hours to salt the entire city, depending on traffic conditions and congestion.
      - b. A minimum lee-way of one hour for notification to contact personnel for salting operations in needed.
    3. Sanding is done in extremely cold conditions when salt is rendered ineffective, an abrasive material will be applied to icy areas as required.

C. Equipment and Manpower

Usage to include any and all equipment as deemed necessary.  
(see attachment B).

D. Ice Control Methods

Areas to be salted are ahead of stop or yield signs on paved streets, 50 feet either side on intersections, all downtown intersections, the center drive lanes of parking lots, and hills, curves, 90 degree bends, railroad crossings, and turn lanes.

II. Procedures for Snow Storms 2" to 5"

A. Priority for Plowing of Salting

1. Major streets and school bus routes.
2. Parks and Buildings and Grounds personnel to be notified.  
(see attachment F).
3. Downtown streets plowed to the center and parking lots piled.
4. Local streets. (Note: Cul-de-sacs will be plowed with the snow being deposited between driveways at the ends of the cul-de-sacs. Snow will not be hauled away, unless areas between drives become full).
5. Haul snow from CBD streets. Subcontractors may be utilized.
6. Alleys shall be plowed.
7. Second CBD snow clean-up policy. (see attachment C).

B. Time Frame

1. By priority ranking with major concentration on Item II (A) (1-5).
2. Normally such work would be completed no later than 24 hours after storm conditions have terminated.

C. Equipment and Manpower (see attachment B).

D. Method of Operation

1. Plowing operations greatly depend on the anticipated duration of the storm, the temperature conditions, wind conditions, and time of the day the storm begins and is expected to end.
2. Plowing and salting operations will follow the priority listing under Item II(A).

### III. Procedures for Snow Storms 5" to 10"

#### A. Priority Plowing or Salting

1. All major streets and school bus routes.
2. Parks and Buildings and Grounds personnel to be notified. (see attachment F).
3. Downtown streets plowed to center and parking lots piles.
4. Local streets. (Note: See Item II(A)(4).) Haul snow from CBD streets with City Personnel and subcontractors.
5. Alleys.
6. Second CBD clean up. (see attachment C).
7. Miscellaneous clean-up of intersections and cul-de-sacs.

#### B. Time Frame

1. By priority ranking with major emphasis on item III(A) (1-6).
2. Normally, such clean-up with the exception of removal of accumulated snow from downtown parking lots and the additional cleaning of intersections, would be completed no later than 48 hours after the storm has subsided. Item III(A) (7) and would be completed no later than 72 hours after the storm has subsided.

#### C. Equipment and Manpower

See attachment B.

#### D. Method of Operation

1. Normal plowing operations would take place based on the priorities set under Item III (A), followed by salting operations.
2. Subcontractors may be utilized during this operation based on available personnel and weather conditions.

### IV. Procedures for Heavy Snow Storms or Blizzards over 10"

#### A. Priority Plowing or Salting during the Storm

1. Major streets and major connectors will be kept open with a minimum of 1 travel lane for emergency access.
2. Parks and Buildings and Grounds personnel to be notified. (see attachment F).
3. Emergency assistance made available to utilities, ambulance, police and fire units.
4. Local streets will be kept open with a minimum of 1 travel lane for emergency access.

B. Priority of Plowing Following the Storm

1. Same procedure used for snow storm of 5" to 10".
2. Salting operations will follow after the snow.

C. Time Frame

1. Major emphasis will be to keep streets open during the storm and to follow priorities as outlined in Item III(A).
2. Normally, clean-up would be completed no later than 72 hours after the storm has stopped, depending on existing weather conditions.

D. Equipment and Manpower

1. See attachment B.
2. Subcontractors will be utilized.
3. Other City personnel may be utilized, as needed.

E. Method of operation

1. Use of any City personnel for snow removal operations under the supervision of the Street Superintendent or his/her designee.
2. Utilization of subcontractors, as needed.
3. The use of any available state, county, or university personnel, as needed.

V. Airport Snow Removal Policy

See attachment E, Airport snow removal policy.

**Salting Application Requirements**

<p><b><u>Condition 1</u></b>  <b>Temperature</b>                  Near 30  <b>Precipitation</b>                  Snow, Sleet or Freezing Rain  <b>Road Surface</b>                  Wet</p>	<p>If snow or sleet, apply salt at 500 lbs. per two-lane mile. If snow or sleet continues and accumulates, plow and salt simultaneously. If freezing rain, apply salt at 200 lbs. per two-lane mile.</p>
<p><b><u>Condition 2</u></b>  <b>Temperature</b>                  Below 30 or falling  <b>Precipitation</b>                  Snow, Sleet or Freezing Rain  <b>Road Surface</b>                  Wet or Sticky</p>	<p>Apply salt at 300-800 lbs. per two-lane mile, depending on the accumulation rate. As snowfall continues and accumulates plow and repeat salt application. If freezing rain, apply salt at 200-400 lbs. per two-lane mile.</p>
<p><b><u>Condition 3</u></b>  <b>Temperature</b>                  Below 20 and falling  <b>Precipitation</b>                  Dry Snow  <b>Road Surface</b>                  Dry</p>	<p>Plow as soon as possible. Do not apply salt. Continue to plow and patrol to check for wet, packed or icy spots; treat them with heavy salt applications.</p>
<p><b><u>Condition 4</u></b>  <b>Temperature</b>                  Below 20  <b>Precipitation</b>                  Snow, Sleet or Freezing Rain  <b>Road Surface</b>                  Wet</p>	<p>Apply salt at 600-800 lbs. per two-lane mile, as required. If snow or sleet continues and accumulates, plow and salt simultaneously. If temperature starts to rise, apply salt at 500-600 lbs. per two-lane mile, wait for salt to react before plowing. Continue until safe pavement is obtained</p>
<p><b><u>Condition 5</u></b>  <b>Temperature</b>                  Below 10  <b>Precipitation</b>                  Snow or Freezing Rain  <b>Road Surface</b>                  Accumulation of Packed Snow or Ice.</p>	<p>Apply salt at a rate of 800 lbs. per two-lane mile. Or salt treated abrasives at a rate of 1500-2000 lbs. per two-lane mile. When snow or ice becomes mealy or slushy, plow. Repeat application and plowing as necessary</p>

**Note:** The light, 200-lb. application called for in Conditions 1 and 2 must be repeated often for the duration of the condition.

Attachment B

**Snow and Ice Control Equipment and Manpower**

<b><u>Vehicle No.</u></b>	<b><u>Description</u></b>	<b><u>Attachments</u></b>	<b><u>Uses</u></b>
168	HD Dump Truck	N.A.	Hauling
256	HD Dump Truck	Salt Spreader Front Line Plow	Plowing Salting Hauling
280	HD Dump Truck	Underbody Snow Blade Salt Spreader Front Plow	Plowing Salting Hauling
297	HD Dump Truck	Salt Spreader Underbody Snow Blade Front Plow	Salting Plowing Hauling
315	HD Dump Truck	Salt spreader Underbody Snow Blade Front Plow	Salting Plowing Hauling
337	HD Dump Truck	Salt Spreader Underbody Snow Blade Front Plow	Salting Plowing Hauling
393	HD Dump Truck	Salt Spreader Underbody Snow Blade front Blade	Salting Plowing Hauling
372	HD Dump Truck	Salt Spreader Underbody Scraper Front Blade	Salting Plowing Hauling
381	HD Dump Truck	Salt Spreader Underbody Snow Blade Front Blade	Salting Plowing Hauling
318	4X4 Pickup	Front Plow	Plowing
351	4X4 Pickup	Front Plow	Plowing
336	4X4 Pickup	Front Plow	Plowing
382	4X4 Pickup	Front Plow	Plowing
093	Grader	Grader Blade	Plowing
346	Front-end Loader	Snow Bucket	Piling & Loading Snow
357	Front-end Loader	Snow Bucket	Piling & Loading Snow
285	Salt Spreader	N.A.	Salting

<b><u>Vehicle No.</u></b>	<b><u>Description</u></b>	<b><u>Attachments</u></b>	<b><u>Uses</u></b>
348	Salt Spreader	N.A.	Salting
298	Salt Spreader	N.A.	Salting
314	Salt Spreader	N.A.	Salting
324	Salt Spreader	N.A.	Salting
319	Backhoe and Front-end Loader	Front Bucket	Piling or Loading Snow
366	Backhoe and Front-end Loader	Front Bucket	Piling or Loading Snow
329	International 3488 Hydro.	Rear P.T.O.	Implements
358	Case Tractor	Back Blade	Plowing
373	Kubota Tractor	Front Bucket	Loading
246	Bobcat Uni-loader	Front Bucket	Piling Hauling

Personnel

Street Department: 2 Supervisors and 12 employees

Water Department: 2 Supervisors 7 amount of employees

WWTP: 2 Supervisors 6 amount of employees

Parks/ Buildings and Grounds Department: 2 Supervisors 3 amount of employees

## Attachment C

### **Central Business District (CBD) Snow Removal**

It appears that the best and most cost-effective method of snow removal in the CBD is the presently used method of withdrawing the snow and loading out with the loaders. As conditions dictate, we will arrange a second curbside cleanup in the CBD the day following the first cleanup. This second cleanup does place a burden on the property owners to remove snow from their sidewalks in a timely manner to enable street crews to haul the snow from the CBD and to clear gutter lines and catch basins. The second cleanup would be a 4-person operation using two front-end loaders and two dump trucks. The duration of the second cleanup should normally take no more than three hours and would be done in the early morning hours between 4 and 8:00 a.m. This second cleanup would alleviate the accumulation of snow and ice along the gutter lines and over catch basin and at the same time encourage the shoveling of sidewalks in a timely manner.

## **Municipal Airport Snow Removal Policy**

### **I. General Procedure**

All snow and ice control services at the Mt. Pleasant Municipal Airport shall begin only upon the direction and approval of the Airport manager or his designee, who in turn will notify Public Works, during normal office hours, of such action. Airport management shall be responsible for monitoring all time and equipment used and shall verify by signature, each statement for services rendered before submitting such a statement to Public Works for payment.

### **II. Scope of Work**

- A. The order of priority for snow and ice control is:
1. Main Runway
  2. Taxiways
  3. Ramps
  4. Parking area

Sidewalks are not to be plowed by the contractor. Snow along lighted runways and taxiways shall be pushed back behind the lights so as not to obstruct the view of approaching traffic. Snow in all areas shall be deposited so as not to block any paved travel way, tie down area, hangers or parking area.

### **III. Typical Procedures**

- A. 1 to 2 inches of snow:  
Plow all areas in normal order of priority.
- B. 2 to 4 inches of snow:
1. If snow removal begins at the end of a storm, plow in normal order of priority.
  2. If snow removal begins during the storm, the main runway shall be initially opened for any air traffic and then other areas shall be done before returning to the main runway for final snow removal once the snow subsides.
- C. 4 to 6 inches of snow
1. Continuous snow removal necessary on main runway and taxiways.
  2. All other areas shall be plowed as storm intensity and time permit.
- D. 6+ inches of snow
1. Continuous removal of snow on the main runway and one taxi way.
  2. Keep a drive way clear for emergency vehicles from the runway to the terminal and entrance at airport road.

3. Clear all other areas when the storm's intensity subsides and as time permits completion of ramp areas and parking areas shall be done within 48 hours of the time the storm subsides.

NOTE: Conditions may vary at any time causing a change in procedure. The Airport Manager may request the contractor to change its procedure as conditions warrant. In cases of emergency, Public Works will assist if equipment is available.

## Attachment F

### **Parks and Cemetery Snow Removal Policy**

This policy affects Parks and Buildings and Grounds personnel in the event of a major snow storm or routine snow removal.

#### I. Personnel

- A. Available personnel on call-in basis will be all Buildings and Grounds I and II positions.
- B. Seasonal, part-time and other laborers are available from 7:30 a.m. to 4:00 p.m.

#### II. Equipment

- A. The department has 1 four-wheel drive with blade and grounds tractor with bucket and backblade is available. Other equipment available will be snow blowers, shovels and salt.

#### III. Snow Removal Priorities

- A. Public Safety Building
- B. City Hall
- C. Veteran's Memorial Library
- D. City Parks
- E. Mission Creek Sledding Hill

#### IV. Major Responsibilities

- A. In case of a major storm, all Buildings and Grounds I & II positions should be called in to assist Street Department Crews.
- B. All personnel will schedule time with the appropriate Street Department personnel to ensure proper attention is given to all priorities listed above during a major storm.

## Attachment G

### **Street Department Call-in for Snow and Ice Removal**

The Street Department depends upon the Police Department for notification during non-working hours when snow and ice removal may be necessary. The following guidelines are provided to assist the Police Department in determining when conditions warrant notifying the Street Department to begin snow and ice removal operations.

- A. Snow removal is most easily accomplished during early morning hours while parking restrictions are enforced and traffic is light.
- B. Salting operations for icy conditions can be done at any time of the day without major problems.
- C. During periods when the Street Department is not normally scheduled to work, the Street Department should be notified to begin removal operations under the following conditions:
  - 1. If intersections are icy and total snowfall is expected to exceed two inches, notify the Street Department immediately.
  - 2. If intersections are extremely icy and snow is continuing to fall with expected accumulation to be over 2 inches, notify the Street Department.
  - 3. The Street Department Supervisor will begin salting operations and inform the Police Department when snow removal operations will begin.
  - 4. If loose snow is accumulating at intersections without any icy conditions and total accumulation is expected to exceed two inches, notify the Street Department when the depth of the snow reaches 2 inches.