




PUBLIC WORKS DEPARTMENT
SNOW REMOVAL AND ICE CONTROL
POLICY AND PROCEDURE
2019-2020



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SNOW REMOVAL AND ICE CONTROL POLICY

SNOW REMOVAL AND ICE CONTROL PROCEDURE

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EMERGENCY SNOW ROUTES MAP

CITY OF GRAND ISLAND
SNOW REMOVAL AND ICE CONTROL POLICY

OBJECTIVE

The objective of the Snow and Ice Removal Policy is to define the major components of the City's Snow and Ice Removal Procedure and to identify public responsibilities that affect its efficiency.

SNOW AND ICE REMOVAL PROCEDURE –

The purpose of the snow/ice removal procedure is to maintain safe driving conditions for the motorist or to return the City streets to a safe, usable condition in as short a time period as possible during a major storm event. It is important to leave flexibility within the procedure to deal with varying weather conditions, emergency situations, and special circumstances.

As general guidance, snow plowing will take place on Snow Emergency Routes when there is an accumulation of 2 inches of snow within a 24-hour period. Residential and local streets will be plowed once there is 3 inches of snow accumulation within the same period of time.

Per an Interlocal Agreement with Hall County, approved by Resolution No. 2017-274 in October 2017, some Snow Emergency Routes will be treated based on Hall County's Winter Operations plan and policy.

ICE CONTROL –

Overpasses and underpasses are the most dangerous when icy and therefore are treated first. Snow Emergency Routes are also treated as part of the ice control operations.

SNOW REMOVAL –

The City of Grand Island has classified the streets into several categories based on emergency vehicles routes, school bus routes, and amount of traffic. These categories guide the sequence of snow removal, listed below:

1. Snow Emergency Routes
2. Residential and School Routes
3. Downtown Hauling
4. Other

SNOW ALERT/EMERGENCY –

A snow alert/emergency may be declared by the Mayor or his/her designated representative with a time of effect. During a declared Snow Alert/Emergency parking is prohibited on Snow Emergency Routes.

PUBLIC NOTIFICATION –

The public will be notified of a snow emergency by means of local television, radio, newspaper, and other means of social media.

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PARKING –

Snow Emergency Routes: Snow Emergency Route parking is prohibited during a declared snow alert/emergency. See City Code Section 22-113.

Downtown Streets: Some Downtown streets may be restricted between the hours of 12 a.m. and 8 a.m., from October 15 through April 15. See City Code Section 22-112.

Residential Streets: Residential streets may be restricted during a snow alert/emergency. If parking restrictions are put into effect the public will be notified of the time, date, and exact restrictions. See City Code Section 22-115

STALLED VEHICLES –

Snow Emergency Routes: Vehicles should not be abandoned on snow emergency routes. The owner/operator of the vehicle needs to push or tow the vehicle to the nearest appropriate location. See City Code Section 22-113

Removal of Stalled or Parked Vehicles: If a City of Grand Island employee encounters a stalled/abandoned vehicle during snow plowing operations, they will first check for occupants and if occupants are found the city employee will make the necessary notifications based on the situation. See City Code Section 22-119

If no occupants are found, the city employee will mark the vehicle checked by them and the owner of the vehicle will try to be contacted to get it moved. If an emergency exists, the vehicle may be removed using the best method possible.

Stuck Vehicles: If a city employee encounters a stuck vehicle with occupants in it and is asked for assistance, there shall be a police officer present to record the condition of the vehicle prior to being towed.

COMMUNITY RESPONSIBILITIES –

Sidewalks: It is the property owner's or occupant's responsibility to clear sidewalks of snow and ice within 24 hours after the snowfall has stopped. See City Code Section 32-73.

Blowing or Shoveling Snow into Street: Blowing, Shoveling, or Plowing snow into a city street is a hazard to motorists and a violation of City Code Section 32-74.

Mailboxes: Remove enough snow to allow mail truck drive-up delivery. Ensure mailbox position meets the USPS requirements; typically 6"-8" behind the face of curb or edge of pavement). The City is not responsible for damage to mailboxes located within the City Right-of-Way.

Fire Hydrants: Clear snow so fire hydrants are visible and accessible.

Catch Basins: Clearing snow and ice from catch basins help drain the roads and properties once the snow and ice begin to melt.

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SECTION 1 – OPERATION INITIATION AND TERMINATION

1.1 Guidelines for Operation Initiation

1.1.1 Ice Control

Ice Control operations should be initiated if the roadways have become slick with ice/freezing snow or vehicles are having difficulty stopping without sliding.

Underpasses, Overpasses, and Bridges typically become hazardous before other sections of roadways. To treat these areas before 7am then operations, generally, need to be initiated by 5am.

If above areas and arterial roadways need to be treated for ice before 7am then operations, generally, need to be initiated by 3am.

1.1.2 Snow Removal

Snow removal on snow emergency routes should be initiated if any of the following conditions occur:

- Two inches of snow have accumulated on City streets,
- Snow has started and there is a forecast for two or more inches of accumulated snow.
- Changes in actual snowfall that could affect scheduled removal to allow for maximum preparation time.

To clear snow emergency routes before 7am then operations, generally, need to be initiated by 3am.

1.2 Request for and Notification of Operation Initiation

1.2.1 Grand Island Police Department

The Grand Island Police Department (GIPD) Shift Sergeant will notify the Emergency Center of the need for snow removal or ice control. The Emergency Center shall notify the Streets Division of said request per the Streets Division call-out chart.

Once operations have commenced, the Streets Division shall notify the Emergency Center so they may advise the On-Duty Shift Sargent.

1.2.2 Grand Island Streets Division

Snow removal or ice control operations initiated by the Streets Division, prior to official request by the Police Department, shall be reported to the Emergency Center with scheduled start time. The Emergency Center shall be notified again when operations actually begin.

The Emergency Center will advise the On-Duty Shift Sergeant of such scheduled work and actual start time.

1.3 Operation Termination or Status Change

The Streets Division will notify the Emergency Center when operations have been terminated, due to completion or operational changes, and of any significant operational status changes (i.e. ice control to snow removal).

The Emergency Center will advise the On-Duty Shift Sergeant of such operation termination or status change.

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SECTION 2 - GENERAL OPERATING PROCEDURES

Maintaining the streets in a safe and passable driving condition is the Streets Division's primary purpose for conducting snow removal and ice control operations. This general operating procedure is to be used as a guide for snow removal and ice control operations; as each winter weather event is different the procedure will be adjusted as necessary to accomplish the goals set forth.

2.1 Winter Weather Preparations

2.1.1 Snow Fence

Erection of snow fence is begun around October 31st each year. Install snow fence 50 to 75 feet from the street, using five posts per 50-foot roll of fence. Hand-stretch the fence between posts and secure with wire ties at the top and bottom of each post. When the fence is erected in a park or elsewhere where people need to walk, leave an offset gate every 150 feet. The fence is to be checked periodically and repaired as needed.

2.1.2 Winter Roadway Condition Warning Signs

Winter roadway condition warning signs, such as *Bridge Ices Before Road*, are erected during the winter months to warn drivers of possible pavement conditions.

2.2 Ice Control

Ice Control operations will proceed as directed by the Street Superintendent and Streets Supervisor on-duty from the Streets Division office at 1111 W. North Front Street.

2.2.1 Overpasses, Underpasses, and Select Intersections

Typically only one salt truck will be used to treat overpasses, underpasses, and select intersections. Select intersections are determined by the Grand Island Police Department and Streets Division based on weather conditions and traffic patterns.

Pretreatment of the 2nd St Overpass and/or other select locations with granular material may be performed if weather forecasted conditions or actual conditions warrant as determined by the Street Superintendent.

2.2.2 Extensive Ice Conditions

Four salt trucks will be used during extensive ice conditions as determined by the City of Grand Island Police Department and Streets Division. Ice control operations will follow established salt routes with immediate attention on known high priority areas.

2.2.3 High Priority Areas

- Overpass on 2nd St.
- Overpass on Hwy 30/ Hwy 281
- Underpass on Eddy St.
- Underpass on Sycamore St.
- Curve at 1st and Greenwich
- Stuhr Rd. from Hwy 30 to Swift Rd.

These areas have been designated high priority based on historical conditions. Other areas may become high priority depending on weather conditions and traffic patterns.

2.2.4 Staff

Salt truck operators will be assigned to a specific route and equipment per instructions from the Streets Division Supervisor. On occasion personnel from other departments may be needed to perform ice control operations and will receive instruction from the designated Streets Division Supervisor.

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2.2.5 Salt Application

Salt truck operators should drive in the center of a two-lane street and in the center of the left lane of a four-lane street. When directed to treat entire salt routes, the entire route will be driven and inspected to determine if salt is required, unless otherwise directed.

The spreading rate shall be 200 pounds per lane mile. A pattern no wider than a salt truck should be placed as close as practical to the crown of the road. This placement will allow the liquid material to flow into the gutter leaving minimal amounts of residual material on the roadway.

2.3 Snow Removal

Snow removal operations will proceed as directed by the Street Superintendent and Streets Supervisor on-duty from the Streets Division office at 1111 W. North Front Street

2.3.1 Priorities

Priority 1 - Emergency Snow Routes

This phase of the snow fighting operation is very critical as far as timing is concerned. If weather conditions are such that snow accumulations are not very fast, the plowing operation can wait until approximately two inches have accumulated. On the other hand, if the storm is such that the snow is falling quite heavily, plowing operations should begin immediately. The decision to begin will be made by the Street Superintendent.

Snow removal operations will then continue throughout the duration of the storm until the job has been completed. Based on the timing and severity of the storm, the Street Superintendent will decide what type of operation is to be used. At the onset of a heavy and/or expected long duration storm, the Streets Division will prepare for a two-shift operation.

Designated motor grader and truck plow emergency snow routes will be plowed before any other streets are begun. If the snow is still falling heavily after completion of the first round, the routes will be plowed again. This procedure will continue until the storm subsides. At that time the plows may begin residential street plowing upon instructions by the designated Street Supervisor.

Motor grader routes vary from one to three graders. All truck plow routes are to be plowed in tandem to completely clear each street as soon as possible and to reduce the covering of sidewalks. It is also advantageous if one unit develops mechanical problems or becomes stuck, to have a unit in the immediate area to assist.

Heavy drifting may require alternative plowing assignments, see Section 3.

Priority 2 - Residential Streets and School Areas

Residential and School areas will be plowed once when snow has accumulated to three inches or more in depth and following the completion of emergency snow routes.

Typically, only one unit will be assigned to each residential area. Driving a truck plow within six to twelve inches of the curb and traveling at 15 mph, the snow can be moved a considerable distance behind the curb.

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It is extremely important for both the truck plows and motor graders to remove the snow all the way to the curb-line to accommodate successive snowfalls, clear storm drains, allow for on-street parking, and allow mail carriers to reach mailboxes from their vehicles.

While the residential streets are being cleared by truck plows and motor graders, front end loaders and the one-ton truck will be clearing cul-de-sacs, unless other equipment is available. Typically one loader will clear the north area a second loader will clear the south areas.

Priority 3 - Hauling Snow, Downtown and Other Areas

Hauling of snow from downtown streets is accomplished after residential areas are complete.

Other areas may require snow to be hauled away to return the streets to safe driving conditions. These areas will be determined based on historical knowledge and existing conditions.

Snow is to be hauled to the designated snow pad currently located at 2930 E. Bismark Rd. Snow may be hauled to the parking lots at L. E. Ray Park, Ryder Park or Ashley Park if necessary.

2.3.2 Operation Objectives

Objectives of snow removal operations are as follows:

- Emergency Snow Routes open within four hours of cessation of snowfall.
- Residential areas substantially plowed within sixteen hours of cessation of snowfall.
- Haul snow out of downtown within forty-eight hours of cessation of snowfall.

2.3.3 Duties

With evening and night snowfall, every effort will be made to complete the clearing of snow from the Emergency Snow Routes by 7:00 am. The intention is to clear streets for the morning traffic as well as to avoid plowing snow onto already cleared sidewalks.

Below are specific duties and details of designated personnel:

Street Superintendent and/or Shift Supervisor

- Supervise all snow and ice control operations in accordance with the plan unless otherwise directed by the Public Works Director.
- Declare snow emergencies when required.
- Notify personnel to begin operations and advise them if there are any plan changes.
- Notify outside contractors to obtain assistance based on the situation.
- Ensure that an adequate number of personnel are available for the two-shift operation.
- Record salt and gravel quantities, mileage/hours of equipment usage, and rental unit/contractor time.
- Determine when tandem plowing should cease to decrease the turn-around time for driving lanes.

Fleet Services Foreman and/or Mechanics

During snow plowing and hauling operations it is essential that the Repair Shop be adequately staffed to ensure that operable equipment is available for the snow crews. Upon notification that snow operations will commence, the Repair Shop Foreman will notify appropriate personnel.

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Equipment Operators

- Check equipment to verify it is in good operating condition at all times. Immediately report any equipment problems to the Repair Shop.
- Fully understand the procedures and routes outlined in this plan.
- Report to the designated Shift Supervisor at all check points or as requested.
- Make every effort to minimize the negative impacts of snow removal on residents.

Status Officer

- Track and record the status of the snow removal operations including: Snow Emergency Routes, residential areas, missed streets, abandoned vehicles, and snow drifting.
- Assist with calling out personnel and contractors as well as informing public of declared snow emergencies.
- Serve as radio operator to receive reports on snow removal status and pass along instructions.
- Call in field checkers for residential streets.

Field Checkers

- Check residential areas and report whether or not any of the streets or cul-de-sacs still require work.

SECTION 3 - SPECIAL EVENTS

3.1 Equipment Breakdown

In the event of equipment breakdown, the operator will see if it is something they can quickly repair themselves. If they cannot do so, they will either return to the Repair Shop or call for assistance.

If a truck plow breaks down while performing tandem plowing, the other operator will continue to plow alone as soon as the broken down truck leaves for the Shop or their call for assistance has been acknowledged. A reserve truck plow will then be dispatched to catch up with the truck plow that continued alone. The reserve truck plow will meet that plow wherever it happens to be at that time. No attempt will be made to make up the sections where tandem plowing was not done. Widening of the area not tandem plowed will be done on the next round.

3.2 Illegally Parked Vehicles

When a snow alert/emergency is in effect, no vehicles may be parked on the City's snow emergency routes. The Police Department will start checking the emergency routes when an alert/emergency takes effect and will continue checking for illegally parked vehicles until the alert/emergency expires.

Illegally parked vehicles that are not moved after ticketing, and continue to adversely affect plowing operations will be towed off the emergency snow routes. A police officer will be requested to record the condition of the vehicle, license number, make, model, and location. If an officer is not available, the tow truck operator will record the same information.

3.3 Abandoned or Stalled Vehicles

Operators shall check abandoned/stalled vehicles for occupants according to the Snow and Ice Removal Policy. The designated Shift Supervisor may need to mobilize personnel and equipment specifically to remove abandoned or stuck vehicles on a case by case basis.

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If vehicles are towed it shall be to the nearest side street. Operators must exercise extreme caution to avoid damaging abandoned vehicles. DO NOT attempt to tow the vehicle by hooking onto the bumper. Use a suitable tow point on the frame or chassis.

A police officer will be requested to record the condition of the vehicle, license number, make, model, color, and location. If an officer is not available, the loader operator will record the same information.

3.4 Outside Contractors

When outside contractors are called to assist in residential areas, they may begin plowing residential areas before the Emergency Snow Routes have been completed to avoid interference with the City's operations.

3.5 Drifting

Whenever it snows so hard that the streets are drifting in between snow removal rounds, double tandem runs on wide streets such as Custer, Webb Road, Stolley Park Road, etc. will cease. This is to speed up the turn-around time in an effort to keep a driving lane open on the routes, continuously. When the snowfall intensity lessens, tandem runs will resume.

If the drifting is causing vehicles to get stuck on the Emergency Snow Routes, loaders with buckets will be used to assist in re-opening the drifted snow routes, clearing around stuck vehicles, and eventually removing stuck vehicles.

3.6 Roadway Closures

3.6.1 Interstate or Highway Closure

If Interstate or Highway closures will impact traffic flow into or through the City of Grand Island, the Streets Division will work with the partnering agency to find designated routes to send traffic. In the event that semi-truck traffic is directed to exit the interstate at Grand Island, Gold Core Road will be the designated city-owned street for semi-truck storage/parking until the interstate is re-opened.

3.6.2 City Street Closures

During certain winter storm events it may become necessary to close streets or portions of streets to traffic. The City of Grand Island Police Department may restrict the type of vehicles that may be operated on city streets during severe weather conditions and may order that certain streets be closed. Every effort will be made to alert the public of any restrictions and/or closures through the news media, community contacts, and posted on the city's web site; this action will only be taken if extreme weather conditions deem an area of the city unsafe for travel.

In some instances a City-Wide Street Closure may be required to ensure motorist safety. The Mayor may declare a City-Wide Street Closure caused by the following:

- Snow plowing operation is no longer making a positive impact on the roadways and continuing snow clearing has become more dangerous than the alternative.
- Emergency Services has determined call response times are too long and snow plows have been requested to accompany Emergency Service vehicles to calls received.
- Police Department has become overwhelmed with stranded vehicle calls and private tow truck companies have stopped operations due to the weather.

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SECTION 4 – EXTREME WEATHER OPERATIONS

4.1 Definition

Any time the National Weather Service forecasts blizzard conditions with high winds and expected accumulations of snow reaching 12” or more within the next 24-hour period, the extreme conditions operational procedures shall supplement the general operating procedure.

4.2 Emergency Operations Meetings

Emergency Operations Meetings shall be scheduled by the Emergency Operations Manager. These meetings should occur at regular intervals until the event has passed or it has been determined that the storm will not come to fruition and general operating procedures are adequate.

4.2.1 Required Attendees

- Emergency Operations Director or representative
- Street Superintendent or representative
- Public Works Department representative
- Police Department representative
- Fire Department representative
- Utilities Department representative

4.2.2 Department Representative Qualifications

Department representatives should have a good working knowledge of winter operational procedures as they apply to their respective departments. Representatives shall also have the authority or ability to make operational procedure changes based on the outcomes of each meeting period.

4.3 Operational Period Goals

During each operational period priorities and specific goals for the snow clearing operation shall be set. These priorities shall be documented as part of the Emergency Operations Meeting notes.

4.4 Areas of Concern

Each area of concern shall be discussed and an alternative plan be implemented during times of extreme conditions. Below is a list of potential areas of concern and suggested solutions:

4.4.1 Traffic Signals – covered lights, power outage, flash status or knock-down.

Utilities Overhead Division, if available, respond to traffic signal emergencies

4.4.2 Traffic Signs – stop sign, yield sign knock-downs

Utilities field crews, if available, respond to traffic sign emergencies. Temporary signs and barricades need to be made available and easy to retrieve.

4.4.3 Emergency Services Vehicles stuck and snow plows are unavailable

Utilities Overhead Division, if available, to pull out emergency vehicles with “Monster” truck.

4.4.4 At-Grade Railroad Crossings become hazardous or impassable

Police Department requested to monitor status. Crossings should be closed with barricades on each side if/when deemed no longer safe to cross with a motor vehicle. If plowing operations are halted, consideration should be given to closing at grade crossings prior to Streets Division staff taking rest period.

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4.4.5 Stranded Vehicles

See City Street Closures, Section 3.7

4.4.6 Mail Delivery Services

After emergency routes are clear, mail services should be restored as soon as possible.

4.4.7 Trash Services and Alleys

After emergency routes are clear, call trash service providers and request any streets that they are having difficulty getting to/from.

Alleys can be plowed/hailed after snow hauling operations are complete. This can be done for all alleys or on a request basis. Once this point has been reached, the amount of time that has passed should be considered. Some alleys will have been cleared by residents and they may not want any additional plowing to take place.

SECTION 5 – PUBLIC NOTIFICATION

5.1 Media Notification

A News release shall be made by the Street Superintendent or, in his/her absence, the Emergency Center whenever any of the following circumstances occur.

5.1.1 Snow Alert/Emergency based on Forecast

Any time the National Weather Service forecasts a winter storm warning a Snow Emergency based on Forecast may be issued.

5.1.2 Snow Alert/Emergency based on Accumulation

Any time plows are used to clear emergency snow routes a Snow Emergency based on Accumulation may be issued.

5.1.3 Snow Removal in Residential Areas

As soon as the decision is made to clear residential areas, a press release will be made to notify the public and to advise them to wait until the snowplows have passed before shoveling sidewalks and driveways.

5.2 Digital and Social Media Notification

In addition to notifying the City's media partners, public notification of a Snow Emergency effective beginning and ending time shall be posted in the following locations:

- City of Grand Island Website – www.grand-island.com
- Facebook - <https://www.facebook.com/GI.PublicWorks>
- Twitter - <https://twitter.com/gipublicworks> (@GIPublicWorks)

SNOW EMERGENCY ROUTES

CITY OF GRAND ISLAND, NEBRASKA

