

**CITY OF JOHNSTON
DEPARTMENT OF PUBLIC WORKS**

SNOW AND ICE CONTROL PROCEDURES

October 2008

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The purpose of this Snow and Ice Control Manual is to establish the City's policy and level of service in respect to clearance of snow or ice and maintenance of its road system during the winter months. It will also serve as a practical guide for cost effective snow removal operations in the City of Johnston. This Manual supersedes all previously written policies of the City on snow and ice control operations.

1. IMPLEMENTATION

This Manual will be in effect during normal winter operations at times when weather conditions could cause accumulation of frost, sleet, ice, snow or other occurrences on the streets and public parking lots of the City of Johnston.

2. DEFINITION OF SUPERVISOR

When "Supervisor" is used in this Manual it is defined as the person who is on duty at the time directing the snow/ice removal operations for the Department of Public Works. These individuals include: Director of Public Works, Superintendent of Public Works, Crewleader, and/or any other individual who may be assigned the responsibility of Supervisor.

3. WEATHER FORECASTING

Weather information is essential for good planning of snow and ice control operations and other weather-related emergencies. An effective weather service must provide information on the storm sufficiently in advance so that plans and preparations can be made.

The City will continue to rely upon information from the National Weather Service, the Police Department, and the Iowa Department of Transportation as it relates to snow and ice conditions during the winter months. TV and radio stations, along with various Internet sites, may also be monitored to gather current weather information.

4. MONITORING AND NOTIFICATION OF ICE AND SNOW ACTIVITY

Public Works and Police shall monitor anticipated inclement weather and when necessary coordinate with each other regarding event intensity and action. During normal Public Works Department working hours (7:00AM to 3:30PM Monday through Friday) the observations of the Public Works Crews or Police may alert the first crew response for snow and ice removal.

During off duty hours, weekends and holidays, the on-call Supervisor and Police Department will monitor weather reports and road conditions. In the event of inclement weather, the on-call Supervisor will initiate the appropriate response action.

5. COMMUNICATIONS

All operators of snow and ice control equipment will keep in communication with the Public Works Supervisor at all times.

The Public Works Supervisor on duty will be the main line of communication between the Department of Public Works and the Police Department. The Police Department will keep the Department of Public Works advised of current road conditions. It will be the sole responsibility of the Public Works Supervisor to direct the operations of snow removal for the Department of Public Works.

The media notification of emergency parking bans, snow emergency declarations, road closures, and other media contact inquiries on road conditions will be made by the Public Works Department.

6. CITIZEN INQUIRIES

All citizen issues concerning snow and ice control efforts will be routed to the Public Works Department. The Supervisor on duty will determine appropriate follow-up responses to citizen inquiries.

7. BOUNDARY STREET JURISDICTION AND RESPONSIBILITY

The following jurisdictions are responsible for Johnston boundary streets. The jurisdictions listed below have first response maintenance responsibility. If Johnston has its snow routes open and serious problems remain on boundary streets, Johnston snow plows may assist based upon the judgment of the Supervisor on duty, with the exception of Interstate roadways.

Street Segment	Responsibility	Telephone Number
NW 66th Avenue- from River To NW Beaver Drive	Polk County	286-3705
NW Beaver Drive from NW 88th Ave to Johnston City limits	Polk County	286-3705

8. PRIORITIES FOR SNOW AND ICE CONTROL OPERATIONS

In order to make the most efficient use of available resources, we have established priorities using the assumption that the severity of a storm is not beyond the normal capabilities of the City’s snow removal resources. Depending on the nature of the snowstorm, deviations could occur. The established priorities are as follows:

Arterials	1st Priority
All remaining streets including cul-de-sacs	2nd Priority
Parking lots and sidewalks	3rd Priority

9. EMERGENCIES

Emergencies are defined as follows, but not necessarily limited to:

1. Immediate need for Police, Fire and/or Emergency Medical assistance. If City emergency personnel asking for assistance must leave the public right-of-way to

respond to an emergency, snow removal crews may provide necessary assistance such as opening a driveway or parking area to give access to them.

2. Isolated problem area where access is urgently needed before all other areas are handled.
3. Icy conditions due to a water main break or clearing of streets due to debris blocking streets or access.

10. ICE CONTROL PROCEDURES

The objective of ice control is to provide a safe pavement surface for vehicular traffic by attempting to prevent a build up of snow and ice on the pavement. Ice control also includes attempting to remove any buildup that may occur. This is typically done through an application of chemicals and the use of snow plows and underbody scrapers.

During winter operations the City of Johnston will treat arterial roadways with salt brine if pavement temperature is 15 degrees or above prior to the approaching winter storm. This operation involves applying liquid salt brine to dry pavement and allowing the salt brine to dry before the precipitation starts. The Public Works Department will monitor weather forecasts and pavement temperature forecast in making decisions for the application of anti-icing materials. Advantages of anti-icing include keeping the roadway wet longer into the storm, and prevents the bonding of snow and ice to the pavement, and a quicker return to normal driving conditions after clean up.

11. USE OF ABRASIVE MATERIAL AND CHEMICAL MIXTURES

Under certain conditions it may be desirable to use straight salt or a mixture of salt greater than that found in a typical salt/sand stockpile mix. Such mixtures can work faster and at lower temperatures than typical stockpile mixes. Different proportions may be used depending on the temperature, time, and nature of the storm and road conditions.

Using salt or a sand/salt mix pre-wetted with liquid de-icers has several advantages such as quicker melting; melting at lower temperatures, reduction in the amount of material needed and less salt waste. Based upon conditions, Supervisors will have discretion as to what materials are used during a storm event. Materials will be applied on all priority streets in a manner to attempt to achieve bare pavement when possible. Other streets will have material spread only at intersections, hills, and curves. Materials on those streets may also only be applied at spot locations to allow tracking and clearing of streets, rather than uniformly.

New Streets: New residential streets poured after July 1 will not receive any application of salt or a salt/calcium mixture the first winter.

12. SNOW CONTROL PROCEDURES

The depth and time of snow accumulation, along with volume of traffic, will normally dictate when snow plowing operations will begin. Plowing will take place during a storm as needed in an attempt to keep the accumulation on the pavement surface less than desired guidelines.

Snow plowing operations will be carried out in accordance with the guidelines established for the various street classifications as set forth in the Snow Manual. Such plowing operations may often times be done in conjunction with ice control activities.

Normally on major snow routes, plow trucks will operate in teams. Team plowing may consist of two or more plows operating together to provide for the swift removal of snow from the street between the centerline and the curb line in one pass. This eliminates the need to make repeated passes to plow the streets to the curb line. On local residential streets when only one snow plow is used, it may be necessary to make two or more passes in each direction to completely clear the street of accumulated snow.

13. SNOW FENCE

The Department of Public Works may place snow fence where it may be of assistance in preventing blowing snow from accumulating on the pavement. The snow fence will be placed on private property only with mutual consent between the property owner and the City. The City will have sole discretion as to when and where to place snow fence.

14. EQUIPMENT AVAILABLE

The primary equipment available to remove snow and ice will be supplied by the Public Works Department or its contractors. The Public Works Department will remove snow from public parking lots and City maintained sidewalks and trails.

15. MANPOWER AVAILABLE

The primary staffing for snow removal and ice control will be supplied by the Department of Public Works. During major events, personnel from other City departments and contracted entities may assist with removal efforts.

16. TYPE OF EQUIPMENT

The City utilizes many different types of equipment during its snow and ice control operations. The equipment to be used is chosen to fit the job that must be performed at that time. For ice control operations the City typically utilizes tailgate and center dump spreaders.

For snow plowing activities the City typically utilizes reversible plows, “V” plows, “under body” plows, as well as plows mounted on front end loaders. In addition, the City has the capability of utilizing both “leveling” wings and “patrol” wing plows. For blowing or physical removal of snow, the City utilizes a blower mounted on a skid loader which can load snow directly into dump trucks or place it on adjacent right-of-way.

17. EQUIPMENT MAINTENANCE AND REPAIR

As in all maintenance operations, successful snow and ice control depends upon skillful use of manpower, personnel, equipment, and material. The efficient and economical control of ice and snow especially depends on the availability and use of the proper equipment. This availability does not just happen. It involves a well planned program that is in progress during each season of the year. It also includes a program of routine inspection, maintenance,

and repair of equipment utilized in snow removal operations. As such, the City will schedule a mechanic to be on duty in its shop located at the Public Works Facility whenever the snow removal assignments go into effect. In addition, it may be necessary to have mechanics on duty at other times. Such a determination will be made by the Supervisor on duty at the time.

18. TOWING VEHICLES ILLEGALLY PARKED-DECLARATION EMERGENCY PARKING BAN

Cars parked on the streets during a snow removal effort may be ticketed and /or towed away in accordance with section 10.48.020 of the Snow Removal Ordinance. A Snow emergency parking ban is in effect from October thru May, anytime snow removal efforts are required.

19. SIDEWALK-PRIVATE RESPONSIBILITY

All sidewalks adjacent to private property are the responsibility of the property owner. The City's responsibility is to plow the streets and keep them open to traffic.

Due to the location of some sidewalks and the volume of snow being moved off of the streets, there may be occurrences when plowing operations may deposit significant amounts of snow onto the sidewalks. When this occurs, it is still the responsibility of the property owner to remove all snow from their sidewalk. Property owners must clear their sidewalks within 48 hours of a snowfall. If a resident fails to clear the sidewalk a 24 hour notice will be posted. After that 24 hour period if the sidewalk has not yet been cleared the City will issue a simple misdemeanor for which the property owner will be fined \$100. The City may remove the snow/ice and bill the property owner at the rate of \$65 per hour. This fee will be collected in the same manner as a property tax.

20. DRIVEWAYS - PRIVATE

City snow plows will not clear private driveways except under emergency conditions and with the approval of the Supervisor on duty. The snow placed in driveways by City plows is the responsibility of the property owner to remove. Snow from a private driveway may not be placed on or pushed across a City Street in accordance with section 10.28.070 "Dumping of Snow" of the City Code. Any person violating this may be ticketed according to the municipal code.

21. PLOWING PRIVATE PROPERTY

The City will not plow or clear snow or ice from private property unless it must be done to allow emergency vehicles access to private property for Fire, Police, or EMS calls.

22. MAILBOXES

The City will plow the snow within the confines of curb line to curb line of a street. During frequent periods of heavy snowfall accumulations when storage areas for snow on the right-of-way are limited, there may be times when City plows cannot physically place the snow from the curb line of the street up onto City right-of-way. The adjacent resident will be responsible for cleaning snow around their mailbox to assure delivery of mail. The resident is also responsible for assuring that the mailbox is properly installed as required by the United

States Postal Service Guidelines. This requires the face of the mailbox to be installed 6” behind the back of the curb and it should be constructed to be able to withstand snow cleaning efforts by the City.

During preliminary routine inspections city staff will notify citizens when potential problems are observed with the location or if improvements to the structural integrity of their mailboxes need to be made prior to winter plowing operations. It will be the responsibility of the residents to properly relocate or improve the structural integrity of the mailbox prior to winter plowing operations. The City will document the mailbox locations that have been tagged for improvements.

The City will not be responsible for damage to mailboxes which have not been relocated or repaired after the notification has occurred.

Mailboxes meeting the above requirements relating to placement and structural integrity that are damaged during snow removal will be replaced with a standard curbside mailbox as stated in section 12.32.060 of the City Code. In the event that the standard curbside replacement mailbox is not acceptable to the resident, they may be reimbursed a fee not to exceed the amount to purchase a curbside mailbox with a breakaway support as defined in Sections 12.32.020 1 & 2 of the City Code.

23. DISCLAIMER

This Manual may be affected by at least one or more of the following events which could delay or alter snow and ice control by the City.

1. Equipment breakdown
2. Vehicles disabled in deep snow
3. Weather so severe as to cause work to be stopped for the safety of all personnel
4. Unforeseen conditions and emergencies

24. DISTRIBUTION OF MANUAL

This Manual shall be distributed to the following:

1. Mayor and City Council
2. City Administrator
3. Public Works Supervisors
4. Chief of Police
5. Fire Chief
6. Building Inspection Division
7. City Clerk
8. City Clerk’s Office