City of West Des Moines

2021

SNOW AND ICE CONTROL POLICY MANUAL

THE CITY OF
West Des Moines

www.wdm.iowa.gov

Public Services

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The City of West Des Moines is preparing to provide standard-setting snow removal services for our community this winter. We developed this Snow and Ice Control Policy Manual to help us continually refine our snow and ice removal program.

The public depends upon the use of streets and highways during all types of weather related events. When the transportation system is shut down or the capacity is reduced, there are typically severe impacts. The public also utilizes public buildings, sidewalks and trails during and after storm events. Accidents due to snow and ice can result in property damage, personal injuries, and fatalities. Weather delays and inconveniences also play a role in driver attitudes and quality of life.

Included in the Manual are policies and level of service guidelines for carrying out the snow and ice control program for the City of West Des Moines. For more detailed information concerning our snow and ice control program, please do not hesitate to contact us.

Sincerely,

Bret Hodne

Bret Hodne
Director of Public Services

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CITY OF WEST DES MOINES
SNOW AND ICE CONTROL POLICY
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OVERVIEW

The purpose of the West Des Moines Snow and Ice Control Policy Manual is to establish the City's policies and level of service goals with regards to the management of winter weather conditions. This Manual and the practices herein are designed to provide for efficient and cost-effective snow and ice removal operations. This Snow and Ice Control Policy Manual supersedes all previous versions.

IMPLEMENTATION

This Manual will be in effect during normal winter operations at times when weather conditions could create accumulation of frost, ice, snow or other hazardous conditions on City streets and public infrastructure that the City maintains.

DEFINITION OF SUPERVISOR

When "Supervisor" is used in this Manual it is defined as the person who is on duty at that time directing the winter weather operations for the City. These individuals include: Director of Public Services, Deputy Public Services Director, Public Services Superintendent, Public Services Managers, and/or any other individual who may be assigned the responsibility of Supervisor.

WEATHER FORECASTING

Weather information is an essential component for the management of winter storm events. The City will utilize a professional road weather forecasting contractor during the snow and ice season. This provider will be responsible for delivering timely and accurate weather information regarding the impacts present and forthcoming weather will have on City streets and applicable infrastructure.

MONITORING AND NOTIFICATION OF ICE AND SNOW ACTIVITY

City staff will monitor weather related road conditions. During off-duty hours, weekends and holidays, the on-call Supervisor, Police Department, and contract weather service provider will monitor weather and road conditions. In the event of inclement weather, the On-Call Supervisor will initiate the appropriate response action.

EMERGENCIES

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

1. Immediate need for Police, Fire and/or Emergency Medical assistance. If crews 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 provide access for Public Safety equipment and staff.
2. Isolated problem areas 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 vegetation or other types of debris blocking streets or access.

PRIORITIES FOR SNOW AND ICE CONTROL OPERATIONS

To make the most efficient use of available resources, the City has established priorities using the assumption that the severity of a storm is not beyond the normal capabilities of the City's snow and ice control resources. Depending on the nature of the storm event, deviations could occur. The established priorities are as follows:

Arterials Streets	1st Priority
Collector Streets	2nd Priority
Local Streets	3rd Priority
Unimproved Roads/Alleys	4th Priority
City Parking Lots/Trails/Sidewalks	5th Priority

SNOW AND ICE CONTROL

The objective of snow and ice control is to provide a safe pavement surface for vehicular traffic by attempting to prevent and/or remove accumulations of snow and ice. This is typically done with the utilization of mechanical snow removal equipment and deicer products.

The City may also apply liquid chemical deicers on designated streets prior to, and during storm events to prevent the bonding of snow and ice to the pavement. This activity is known as anti-icing. The effectiveness of deicers used in this process is directly related to pavement temperatures and weather conditions. Based upon conditions, Supervisors will have discretion as to when and where to implement this activity and the deicer products which will be utilized.

SNOW CONTROL PROCEDURES

The depth and timing of snow accumulation along with predicted weather conditions will normally dictate when snow plowing operations will begin. Snow plowing operations will be carried out in accordance with the guidelines established for the various street classifications as set forth in the Snow and Ice Control Policy Manual.

On arterial streets, plow trucks typically will operate in teams. Team plowing consists of two or more trucks operating together to provide for the removal of snow from the street from the centerline of the street to the adjacent right-of-way. On lower priority street classifications, it is typical for one plow truck to be assigned to the respective zones. In some areas it may be necessary to make two or more passes in each direction to completely plow the street.

If weather forecasts indicate a significant increase in pavement temperatures during or after a storm event, Supervisors will have discretion regarding plowing and/or deicer applications. If forecasts indicate that the snow and/or ice will dissipate in a time period deemed reasonable by the Public Services Director or their designee, applicable procedures will be implemented. With the environmental and budgetary impacts of winter storm management, Supervisors will utilize industry "best practices" in the decision making process.

USE OF SALT AND ABRASIVE MATERIALS

Granular and liquid deicer products are typically utilized in the City's snow and ice control program. The City will typically apply snow and ice control materials in accordance with recommended rates. Application rates and locations may vary depending upon the conditions associated with the storm. Supervisors will have discretion as to what materials are utilized, application rates and when they are applied.

During some winter storm events it may be desirable to also utilize abrasives when pavement temperatures inhibit the effectiveness of deicer materials. While abrasives do not have the ability to melt snow and ice, they can provide traction in certain types of conditions. Due to the high overall costs associated with the use of abrasives and the associated environmental impacts, Supervisors will have discretion with regards to where aggregates will be applied to pavements and when to utilize them.

STAFFING

The primary staffing for snow removal and ice control activities will be supplied by the Public Services Department and private contractors. During extraordinary winter weather storm events, personnel from other City departments and additional contract crews may be utilized to assist with snow and ice control efforts.

SHIFTS

For major winter weather events, two (12) hour shifts will be established at the discretion of the Public Services Director or their designee.

COMMUNICATIONS

The Supervisor or Public Services Dispatcher will be the main line of communication between applicable City staff and the Police Department. The Police Department will assist in advising the Supervisor or Dispatcher with regards to current road conditions. It will be the sole responsibility of the Supervisor to direct the winter maintenance operations.

Media notifications of emergency parking bans, snow emergency declarations, road closures, and other information regarding road conditions will be initiated by the Public Services Department.

EQUIPMENT AVAILABLE

The primary equipment available to remove snow and ice will be supplied by the City and/or its contractors.

TYPE OF EQUIPMENT

The City deploys various types of equipment during snow and ice control operations. 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 utilizes wing plows for more efficient and effective plowing operations. For blowing or physical removal of snow, the City utilizes snow blowers mounted on front end loaders and tractors. This equipment can load snow directly into trucks or to place it on adjacent right-of-way.

EQUIPMENT MAINTENANCE AND REPAIR

As in all maintenance operations, successful snow and ice control depends upon the skillful use of personnel, equipment, and materials. Operational proficiency 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 typically schedule Fleet staff to be on duty whenever 12-hour shift assignments go into effect. It may also be optimum to have Feet staff on duty at other times during winter operations. Such determination will be made by the Fleet Manager and/or Supervisors.

DECLARATION—SNOW EMERGENCY PARKING BAN

Cars parked on City streets during a snow removal effort may be ticketed and/or towed in accordance with Section 6-6-7 Snow Removal and Section 6-2-3-6c Impounding Vehicles Snow Removal of the City Code dated 2004 as amended. A snow emergency parking ban may be declared by the Director of Public Services or the Director's designee. The Police Department and media will be notified when the parking ban is initiated.

SIDEWALKS – PRIVATE RESPONSIBILITY

All sidewalks adjacent to private property are the responsibility of the respective property owner. The City's responsibility is to plow City streets in an effort to keep them open for traffic. Due to the location of some sidewalks and the volume of snow being removed from the street network, there will be occurrences when plowing operations will deposit snow onto the adjacent sidewalks. While the City will attempt to minimize the impacts associated with plowing operations, it shall be the responsibility of the adjacent property owner to remove snow accumulations from the sidewalks impacted from snow plowing operations. All complaint calls about sidewalks not being cleared will be routed to the City's Community Compliance Division for complaint follow-up and enforcement.

DRIVEWAYS – PRIVATE

City snowplows will not clear private driveways except under emergency conditions and the approval of a Supervisor. The snow placed in driveways by City plowing operations shall be the responsibility of the private property owner to remove. Snow from private driveways may not be placed on or pushed across a City street in accordance with Section 7-1-4C "Dumping of Snow" of the City Code dated 1993 as amended.

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 emergencies.

INTERSECTIONS AND RIGHTS-OF-WAY

After frequent heavy snowfall accumulations, the City may elect to remove snow from designated intersection rights-of-way to minimize sight obstructions. The decision to initiate this operation will be dependent upon an analysis conducted by the Public Services Department. Operational priorities will be assigned to intersections based on street classification, traffic volumes and severity of sight restrictions. Snow will only be removed from intersections where public streets intersect. This operation will typically be conducted after other higher priority post storm activities have been completed. Under normal circumstances, the loading and hauling of the snow will be conducted during regular work hours. Crews may also plow back snow deposited on City rights-of-way in designated areas of the City to make space for future storage of plowed snow from City streets.

MAILBOXES

The City will typically plow snow within the confines of the curb lines of a street. During frequent periods of heavy snowfall accumulations when storage areas for snow on City rights-of-way are limited, there may be times when snowplows cannot effectively place all of the snow from the street onto the adjacent City right-of-way. When this occurs, the resident will be responsible for cleaning snow around their respective mailbox to ensure delivery of their 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 the mailbox to be adequately constructed to withstand snow cleaning efforts by the City. During preliminary route inspections, City staff will typically notify residents when potential problems are observed with the location of their mailbox or if improvements to the structural integrity need to be made prior to winter plowing operations. It will be the responsibility of the resident to properly relocate or improve the structural integrity of their 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 structurally improved after the notification has occurred.

SNOW FENCE

The Department of Public Services may elect to place snow fence where it could potentially minimize blowing snow from accumulating on the road surface. 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 is placed.

REPORTS

A storm record will be completed by the Department of Public Services for each snow event. This record should contain information such as shift schedules, weather conditions, and resources committed.

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 operations conducted 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 personnel.
4. Unforeseen conditions and emergencies.
5. Significant medical related issues.

CITIZEN INQUIRIES

All public inquiries regarding snow and ice control efforts will be routed to the Public Services Department. Supervisory staff will be responsible for determining appropriate follow-up responses.

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SNOW PLOWING GUIDELINES
FOR CITY STREETS AND ALLEYS

Classification	Snow Depth at Which Plowing Typically Will Begin		Full Pavement Width that Typically will be Cleared After Storm Ends
	Desirable	Maximum	
Arterial Streets	*1”	*3”	*4 hours
Collector Streets	*1”	*4”	*8 hours
Local Streets	*1”	*4”	*16 hours
Unimproved Streets/Alleys	*2”	*6”	*24 hours

***The snow depths for plowing listed above are guidelines and may not be adhered to for each storm event. The Public Services Director or their designee will have discretion with regards to plowing based upon current and forecasted weather and road conditions.**

BOUNDARY STREET JURISDICTION AND RESPONSIBILITY

The following table outlines the agency responsible for maintaining the streets and roads bordering the West Des Moines corporate limits. In the event West Des Moines has its snow routes open and serious problems remain on these boundary streets, West Des Moines snowplows may assist based upon jurisdictional requests and the judgment of the Supervisor, except for Interstate roadways.

Street Segment	Responsibility
S. 1st St. (63rd St.) (Hwy 28) - Walnut Creek to Veterans Pkwy.	IDOT
SE 1st St - cul-de-sac. to SE Willow Creek Dr.	West Des Moines
University Ave. – 22nd St. to West Corporate Limits of Clive	Clive
University Ave. – East Corporate Limits of Clive to 98th St.	Waukee
Veterans Pkwy - SE Orilla Rd to SW Grand Prairie Pkwy.	Wes Des Moines
98th St. – Ashworth Rd. to University Ave.	West Des Moines
S Grand Prairie Pkwy– Mills Civic To I-80	Waukee
Mills Civic Pkwy – S Grand Prairie Pkwy to Wendover Road	West Des Moines
SE County Line Rd. – SE Orilla Rd St. to SE 5th St.	West Des Moines
SE Orilla Rd – SE County Line Rd. to South Corp Limits	West Des Moines
SE/SW Adams St. – SE Orilla Rd to SW Warren Ave.	West Des Moines
SE 35th – SE Adams to South Corp Limit (N Fernwood Dr)	West Des Moines
Ashworth Rd. – 88th St to 98th St.	West Des Moines
SE Maffitt Lake Dr – SW 56th to west side of lake dam	West Des Moines
SE Double Eagle - North and South of Pine.	West Des Moines
SE 50th St. (S 20th)- South Corp Limits to SE Adams St.	West Des Moines
SW Warren Ave. – SW Adams to Cumming Ave.	West Des Moines
SW 60th St— Veterans Pkwy to SW Kerry St.	West Des Moins
SW Grand Prairie Pkwy - South Corp Limit to Veterans Pkwy.	West Des Moines
SW Kerry St (110th) - SW Warren Ave. to Woodland Ave.	West Des Moines
Ventura Ct - Madison Ave to Dead End	West Des Moines
Raccoon River Dr. – West Corp Limit to Booneville (R-22)	West Des Moines
Center Street from 8th St. to approx. 550’ East of Hoak Dr.	West Des Moines

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LEVEL OF SERVICE GOALS

LEVEL OF SERVICE DETERMINATION

In an effort to promote operational awareness, level of service goals have been established for the various street classifications within the City. While these goals have been developed by the City based on various types of criteria, they are primarily defined for the benefit of the City employees who have responsibility for performing the maintenance duties associated with snow and ice events throughout the winter.

Factors such as service level expectations, responsible use of deicer chemicals, road safety, and industry "best practices" are just some of the criteria considered in the development of these goals. While the City will strive to meet these goals, it is important to understand that the time it may take to achieve them will be dependent upon weather conditions and other factors that may be outside the control of the City.

Major Arterial Street

Significant Portion of Pavement is Bare

Collector Street

Some Bare Pavement—Focus on Wheel Paths

Residential Street

Streets will have residual snow—minimal bare pavement.

Unimproved Street

Plowed Only — Minimal Bare Aggregate Surface

CITY OF WEST DES MOINES
TRAIL PLOWING

Depending on weather conditions, trails along City streets and greenways will typically be plowed after 1" of accumulation.

TRAILS

Existing constructed trails that are waiting to be connected to the trail system will typically not be plowed. Additionally, trail spurs that dead end off the plowed trail system, or those that have mid-block closures, will not be plowed. Exceptions may be made to trails that serve a specific purpose or serve the greater public.

Examples of these types of sections:

Grand Avenue west of S 50th Street
Stagecoach west of 88th Street
Grand at Interstate 35
Veterans Parkway

RACCOON RIVER PARK

The gravel section of the trail, that loops Blue Herron Lake, will not be plowed. Portable restroom service will be limited to times that access is possible and damage will not occur to the trail.

PARKS

Interior sidewalks in City parks will not be plowed or shoveled. Interior City park loop trails will be plowed as time permits. Maintenance on these sections may be delayed during significant snowfall events.

ORDINANCE REFERENCES

6-6-7: SNOW REMOVAL:

No person shall park, abandon, or leave unattended any vehicle on any public street, alley, or city owned off street parking area during any snow emergency proclaimed by the mayor, public works director, or their respective designees. A snow emergency parking ban shall continue from its proclamation through five o'clock (5:00) P.M. the following day. The mayor, public works director, or their respective designees may extend the duration of the parking ban if conditions require additional time to clear the snow and ice. Notice of an extension shall be posted in the same manner as a proclamation of snow emergency and shall contain the date and time the parking ban shall expire. Such a parking ban shall be of uniform application. The city shall publish information regarding the responsibilities of vehicle owners under this section in the fall and/or winter editions of the "WDM Magazine" distributed to city residents, as well as post such information on the city of West Des Moines website in the fall and/or winter of each year. When predictions or occurrences indicate the need, the mayor, public works director, or their respective designees, shall proclaim the snow emergency and direct the appropriate city employee to post said proclamation on the city of West Des Moines website and forward notice of the proclamation to at least two (2) radio and two (2) television stations that broadcast their signals into the city of West Des Moines. Such emergency may be extended or shortened as the emergency warrants or when conditions warrant. This section shall not be construed as suspending parking limitations or restrictions imposed by any other section of this title. In addition to enforcement of this section by police officers, code enforcement officials and public works employees have the authority to enforce the provisions of this section. The code enforcement officials and public works employees shall have the power to issue citation-complaints for violations of this section and impound vehicles found in violation of this section as provided in subsections 6-6-15A and G of this chapter. (Ord. 1844, 10-5-2009)

6-2-3-6: IMPOUNDING VEHICLES:

A police officer is hereby authorized to remove, or cause to be removed, a vehicle from a street, public alley, public or private parking lot, or highway to the nearest garage or other place of safety or to a garage designated or maintained by the city under the circumstances hereinafter enumerated:

C. Snow Removal: When any vehicle is left parked upon a street during a snowstorm or immediately following a snowstorm, when it is deemed advisable that snow removal apparatus must be used on said street.

6-6-15: PARKING VIOLATIONS; FAILURE TO PAY:

A. Notice On Illegally Parked Vehicles: Whenever any motor vehicle without a driver is found parked or stopped in violation of any of the restrictions imposed by this chapter or any other city ordinance or by state law, police officers, code enforcement officers, and any other city employees designated by the police chief finding such vehicle shall take its registration number and may take any other information displayed on the vehicle which may identify its owner or user and shall conspicuously affix to such vehicle a citation-complaint, in writing, on a form as provided by this code for the owner to appear to the charge against him or her at the city's finance department. In addition to enforcement of this chapter by police officers, code enforcement officials, and designated city employees, fire department officials and any other city employees designated by the fire chief shall have the authority to enforce the provisions of this chapter for fire lane violations. Also, in addition to enforcement of this chapter by police officers, code enforcement officials, and designated city employees, public works employees shall have the authority to enforce the provisions of this chapter for snow ordinance violations.

G. Removal and Impoundment Of Illegally Parked Vehicles: The police department may remove and impound vehicles or cause vehicles to be removed and impounded, when the vehicles are stopped or parked in violation of this chapter or other city ordinances and, in so doing, may employ such means as are reasonably necessary. Impounded vehicles shall be stored in a location designated by the city.

7-1-4: ENCROACHMENTS:

C. Dumping Of Snow: It shall be unlawful for any person to throw, push or place or cause to be thrown, pushed or placed, any ice or snow from private property, sidewalks or driveways onto the traveled way of streets so as to obstruct gutters or impede the passage of vehicles upon the street or to create a hazardous condition therein; except where, in the cleaning of large commercial drives in the business district it is absolutely necessary to move the snow onto the streets temporarily, such accumulation shall be removed promptly by the property owner or his agent, and only after first making arrangements for such prompt removal at the owner's cost of the accumulation within a reasonably short time. (1985 Code §8-1.0110)

DISTRIBUTION OF MANUAL

This Manual shall be distributed to the following:

Mayor and City Council

City Manager

Deputy City Manager

City Attorney

Assistant City Attorneys

City Clerk

Finance Director

Public Services Director

Public Services Supervisors

Chief of Police

Director of Parks and Recreation

Superintendent of Parks and Recreation

Fire/EMS Chief

WestCom Chief

Communication Specialist