



TOWN OF UXBRIDGE
DEPARTMENT OF PUBLIC WORKS
SNOW AND ICE CONTROL PROGRAM & GUIDELINES



SNOW AND ICE CONTROL PROGRAM & GUIDELINES

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GENERAL OVERVIEW

Winter weather in New England is difficult to predict. There are many variables affecting winter maintenance operations such as type of precipitation, air and pavement temperature, traffic, wind, time of day and day of week. Winter maintenance is considered an art, not a science.

The Town of Uxbridge snow and ice control program has been based for many years on the goal of obtaining bare and dry pavements at the earliest practical time following the ending of a storm. It is virtually impossible to provide bare pavement during a winter storm and the Town does not attempt to do so. Judgement based on experience is essential in conducting and timing remedial work to overcome snow and ice hazards. As each storm situation varies, it is important to emphasize that this program be used as a guideline to assist staff in making well informed, judgment decisions in the exercise of their snow removal and ice control responsibilities. The Department of Public Works (DPW) recognizes that a rigid application of this policy is impossible given the varying conditions that exist in each storm, as well as across the entire town. No policy could be prepared that could dictate set procedures under all the variants. Any attempt to dictate the timing of various winter maintenance operations from other than the specific location could create disastrous results. At many locations in Town the same problem does not exist within a single section let alone an entire Town as a whole.

The purpose of this guide is to provide a general overview of the Town of Uxbridge, Massachusetts snow and ice control program, establish procedures for our snow and ice management on public ways, to provide safe traveling conditions for pedestrians and motorists, to assist Public Safety services in fulfilling their duties, review important bylaws, answer frequently asked questions, and most importantly, seek your support in providing safe streets during snow and ice events. The intent of establishing such a program is to provide a uniform understanding of the priorities and procedures used to combat snow and ice related conditions and create reasonable expectations.

SNOW AND ICE OPERATIONS

The responsibility for providing snow and ice management for the Town of Uxbridge infrastructure, including over 100 miles centerline miles/200 lane miles of roadways (primary, secondary, cul-de-sacs and dead ends) rest entirely with the DPW. The DPW also provides snow and ice management to a number of municipal buildings including the schools. Snow and ice management is considered emergency work in that pavement must be cleared any time of the day or night. The DPW will treat the roadways during ice and wet snow storms and plow snow off the roadways during the more significant storms. During a typical Uxbridge winter, the DPW averages over 2,900 tons of salt used to keep the roads safe for all drivers.

The Town's snow and ice management strategy has been prepared to meet the needs of the community. The resulting plan follows clearly identified routes when focusing on snow and ice from streets, sidewalks and Town parking areas. The DPW performs all of the salting and sanding operations in Town. For snowplowing and snow removal work, the DPW utilizes staff from the Highway, Water and Wastewater Divisions and local contractors to complement the Town's fleet of snow fighting equipment.

Snow and Ice Event

The snow season is defined as October 15th to May 15th. A snow and ice event may be called



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at any time during these months. The responsibility for ordering personnel and equipment into service for a snow and ice event rests primarily with the Highway Supervisor or his designee. The Uxbridge Police Department, during off hours, keeps watch and assists in notification to the Highway Supervisor or his designee of needed service. There are two stages of readiness that will be maintained by the DPW.

Stage 1: Chemical, Abrasive or Chemical/Abrasive mixture Application

Stage 2: Plowing Operations

When a snow or ice event is declared, the DPW will change its snow removal operations to respond to conditions according to the following guidelines. During these events, DPW crews will be augmented with equipment and crews from the Water and Wastewater Divisions. During Stage 2 snow and ice events, the Town may utilize private contractors to further expand snow and ice fighting events.

Roadway Classification/Level of Service

It is impractical to develop specific rules on winter maintenance operations due to the numerous variables involved in winter storms. The judgment of the Highway Supervisor governs the type, quantities and application schedule of materials used to control snow and ice. It is the intent of DPW to use the minimum deicing or anti-icing material needed to restore safe travel conditions as soon as practical following termination of winter storms. Salting and sanding units are usually equipped with calibrated mechanical spreaders that accurately control the application rates of materials. Employees are instructed in the proper dispensing of the necessary quantity at the appropriate time.

The Town's roadway system is comprised of four priority types defined as follows:

1. Main Roads, Hills, Fire station, Police station
2. Secondary Roads
3. Residential Streets
4. Parking Areas and other Municipal Buildings

These designations have been determined by traffic volume primarily but have been modified to include consideration of posted speed, roadway grade, truck volume, accessibility to essential and emergency services, special events, and major commercial traffic generators as well as to establish continuity throughout town.

Salting Operations

If conditions require it, the Highway Division controls the accumulation of snow and ice using chemical methods. The application of salt provides safer conditions for pedestrians and motorists. The Highway Division stores salt (sodium chloride or calcium chloride) at the highway garage located at 145 Hecla Street.

If salting becomes necessary, the Highway Supervisor will inform the foreman on duty and will call out the designated crews for salting. The Highway Division has divided the Town into twelve (12) designated salting routes.

The Department has assigned specific crews and vehicles to each of the areas. The Highway



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Division loads each spreader with salt. The crew then drives their assigned vehicles on the salting routes in their assigned areas.

If conditions are extreme, the DPW may switch and/or place traffic signals in the flashing mode so the salting vehicle can continue through intersections without stopping. Salt crews will use extreme caution in these circumstances.

Call Out Determination

The purpose of the salting operation is to put down salt:

- When there is freezing rain or sleet by themselves or mixed with snow
- At the time of "black ice," or
- When a glazing snow pack occurs.

The DPW initiates the operation, notifying the appropriate crews. The Police Department may notify the Highway Supervisor of conditions that require salting. Conditions may vary depending on the location. Therefore, the DPW Director or designate must verify the condition before calling out the crews. If the DPW receives requests for salting from other individuals, the DPW Director will evaluate the reported conditions for the need to salt.

Locations

The Department performs salting operations using the same priority list as for snow removal. However, salting may only take place on approaches to controlled intersections, (stop signs, yield signs or signals), in school crosswalks, and on curves and hills. The length of the approach that the crew will salt depends on the amount of traffic using the approach. Major roads, schools, and emergency routes have first priority. The DPW Director or designee has the authority to order salting for other locations.

Conditions

The Department usually applies a treated rock salt until the temperature reaches 20 degrees Fahrenheit. The amount of moisture in the snowfall and the temperature has a direct bearing on the effect of the salt. Below 20 degrees Fahrenheit, the Department may use a mixture of sodium chloride and calcium chloride. Calcium chloride works to a lower temperature of approximately - 30° F. Sustained temperatures below 0 degrees generally require the use of straight calcium chloride.

Snow Plow Operations

Generally, DPW crews are on the roadways when 2 to 3 inches of snow has accumulated or more is expected. The response time will depend on the moisture of the snow, timing of the storm, duration, freezing rain and blowing snow. Snow has different weight and compacting properties. A fluffy, dry snow requires less salt, sand and plowing than a heavy, wet snow. Wet snow may result in very slippery conditions especially when the newly fallen snow freezes on the pavement. Uxbridge endorses a "bare pavement" policy to snow removal. This does not mean bare, dry pavement should be expected after each snowfall or ice storm. Furthermore, this does not mean that the streets will be free of ice and snow. It does mean that our snow and ice management techniques are geared toward reaching dry pavement. Expect major roads which receive priority treatment and substantial traffic volume to be clear first.



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Secondary and neighborhood roads may take several days after a storm to clear. The time of a storm can also determine when crews will begin their cleanup. Certain areas of the Town have a greater intensity of use and priority for maintenance to serve the users. The concern of safety, general welfare and duration of travel necessitate that priority be given to certain areas over others. During high commuting times, crews will make every effort to keep the major roadways and school bus routes clear of snow and ice. Secondary and side streets will be cleared as soon as possible. Sidewalks are the last priority. Top priority will be given to the heavily traveled roads to ensure everyone's safety.

Snow that falls on these roads often becomes packed by cars, making it more difficult to scrape off. During evening and early morning storms, DPW crews usually will have ample time to prepare the roads for the commuting hours. Be aware, however, that storms extending over 12 hours or more will require rest periods to ensure the safety of both our drivers and the public. In these cases, rests periods will be scheduled accordingly. Typically, we will be complete with primary response 3 to 4 hours after most snow accumulation has stopped.

The duration of the storm also plays an important role in snowplowing and salting operations. Storms of extended duration tax all available resources (salt, sand, equipment, and employees) to keep the roads open over an extended period of time. Four inches of snow that falls over a 24-hour period will require more salt, sand and manhours than six inches of snow that falls over an eight-hour period. DPW crews will be immediately dispatched with sand and salt when freezing rain falls. Motorists and pedestrians are advised to stay off the road ways until the pavement can be treated. This is also true for sidewalks. Because of high sun, snow that falls in late February and March will melt much faster than snow that falls during December and January, thereby decreasing the plowing, salting and sanding time. Residents are responsible for snowplowing and snow removal on their own property including all private roadways in Town.

The DPW will plow (and/or remove the snow) from parking areas associated with Town Hall, Police, Fire, Library, Senior Center, Schools, Water, and Wastewater Facilities. Snow and ice management on walkways and entry ways also is done by the DPW (or contractors) for most of the public buildings. The School Department use their own staff and contractors to clear walkways and entryways around their buildings.

The Highway Division has divided the Town into thirteen (13) designated plowing routes.

Snow Emergencies

If a severe snowstorm occurs, the Town Manager will declare a "Snow Emergency." The municipality will advise motorists to remove their vehicles from designated "snow emergency" routes. The Town of Uxbridge may remove unattended vehicles of motorists who do not move them. During a declared "snow emergency," the DPW Director or Designee will coordinate emergency snow and ice removal operations. This individual will coordinate all snow removal tasks using all available staff and equipment to accomplish necessary snow removal operations with the following priority:

1. Main Roads, Hills, Fire station, Police station
2. Wastewater Treatment Facility & Water Division Wells and Tanks
3. Secondary Roads
4. Residential Streets



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5. Parking Areas and other Municipal Buildings

Once operations are complete, the DPW Director or Designee will declare the snow emergency over and the DPW and other responsible departments will revert to normal winter operations.

Special Attention For Bridges

Bridge decks normally freeze or glaze sooner than adjacent pavement sections, especially in the late fall and early winter. Special care and good judgment are required in the use of de-icing chemicals on all bridge decks.

Accumulations of snow along gutter lines and sidewalk or catwalk areas of all bridges should be removed when accumulation of snow and/or ice affects highway safety. Removal operations should commence on the high side of bridges on banked curves to minimize snowmelt and re-freezing or glazing of the travel lanes.

SIDEWALK PLOWING

The DPW will plow sidewalks along central routes that are heavily traveled by in the downtown area and children on their way to and from school ("the walking route").

Sidewalk plowing will not begin until after the snow and ice event has ended and plowing has ceased. If we have back to back storms, extended storms, or equipment problems, we may not clear sidewalks immediately after the storm. DPW crews are not required to chemically treat sidewalks. Your assistance is important in making sure snow is cleared from the sidewalk in front of your property for streets not listed above.

FIRE HYDRANTS & CATCH BASINS

During winter months, fire hydrants must be accessible and catch basins must be kept free and clear of snow and ice. This ensures the safety of your neighborhood in the event of an emergency. Keeping catch basins clear of snow and ice will reduce the possibility of street flooding during heavy rains or snow melting periods. As a result of this along with normal duties, snow removal around hydrants will occur only when snow depths make it very difficult to locate and access them. Under such conditions, the Water Division often works with the Fire Department, however it is a time consuming and slow process.

Your assistance is important in making sure snow is cleared from hydrants. Please shovel the hydrant nearest your house after each storm to ensure your property's protection. If you see a flooded or blocked storm drain, please contact the DPW Administration office at 508-278-8616 or the Highway Division at 508-278-8626. For your safety, please do not attempt to clear the drain yourself.

PROPERTY DAMAGE

During the course of operations throughout any given winter, a certain amount of damage to Town and private property may be incurred by the snow removal forces.

It is the policy of the Town of Uxbridge to perform snow removal and ice control operations in a consistent and impartial manner throughout the Town. There are a few plowing procedures that are frequently misunderstood. In an attempt to clarify our actions, the



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following policies and procedures are explained.

Mailboxes And Other Items Within The Right-Of-Way

Occasionally mailboxes or other devices are damaged by snow plowing operations due to poor visibility, the mailbox being buried in a snow bank or the weight/volume of the snow being plowed. This damage is not deliberate and in most cases is unavoidable. If a Town plow or truck damages a mailbox through direct contact, the Town may authorize a reimbursement up to \$30.00. The Board of Selectmen adopted a Mailbox Policy outlining the process for requesting consideration for replacement. Mailboxes struck more than once a season should be relocated or constructed in a manner not susceptible to damage by plowing. In addition to mailboxes, a property owner who installs any decorative materials or vegetation within the Town's right-of-way, does so at his/her own risk. The Town is not responsible to repair, replace, or compensate for any such items placed in the public way. Be aware that this area may extend 5 to 10 feet or more off the actual paved road surface. You can help minimize damage by putting up roadside markers about a foot off the pavement. This helps the drivers know where the edge of pavement is during severe storms.

Widening Or Pushing Back Snow Banks

Following storms with heavy snowfall or when several storms result in substantial snow bankings, the DPW will undertake a roadway widening procedure, which will push back the snow banks. This is a necessary operation because it accomplishes the following:

1. Provides room for future snow storage.
2. Reduces or prevents melted snow from running out onto the roadway pavement and creating icing conditions.
3. Increases safe sight distance at intersections and driveways.
4. Maintains a uniform line by eliminating protrusions at driveways and intersections.

Unfortunately, there is no way to prevent depositing snow in previously cleaned driveways or walkways except to leave a hazardous projecting mound of snow. With thousands of driveways of all sizes and descriptions along our roadway system, it is impossible to clear these individual drives as the cost would be prohibitive and would probably result in complaints of highway funds expended for the benefit of certain individuals.

BY-LAW

The Town of Uxbridge General Bylaws Chapter 327 Vehicles and Traffic include specific language relative to obstruction of public ways. The following is an excerpt from the bylaws.

§327-3. Obstruction of public ways.

No person shall place snow, ice or any other materials, including leaves, gravel, sand, or similar debris from private property onto the traveled portion of a public way or sidewalk so as to impede or obstruct the use of such public way or sidewalk or so as to create a hazard or unsafe condition on such a public way or sidewalk. This provision shall be enforced by the Uxbridge Police Department. Whoever violates this section shall be punished by a fine of not more than one hundred and fifty dollars \$150.00 per violation. Each day, or portion thereof, after the issuance of



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a violation notice hereunder during which the violation remains unresolved shall be considered a new violation.

OVERNIGHT WINTER PARKING BAN

The Board of Selectmen approved a winter parking ban which becomes effective December 1st through April 1st on street parking will not be permitted during the hours of 1:00 AM through 6:00 AM daily. Residents are reminded that vehicles parked on the street during those hours will be tagged, and if such parking interferes with snow removal, they will be subject to being towed. **PARKING ON SIDEWALKS**-Parking on sidewalks is illegal and prevents clearing of snow and ice.

CLOSING REMARKS

The Town recognizes that the conditions maybe so unusual or unexpected that a departure from these general policies should be authorized. Therefore, when conditions warrant, the Public Works Director in consultation with the Highway Supervisor or his/her designee may order a departure from these general rules when in the opinion of the Director, condition requires such action.

Further information on snowplowing, snow removal, parking regulations and suggestions can be directed to the DPW at 508-278-8616 (Administration) during normal business hours or 508-278-8626 (Highway Division) during a snow emergency. For storm watch information concerning school or business closing, listen to local radio stations.