# Snow Plowing and Snow Removal

# Standard Operating Procedures Exeter, New Hampshire

No: 09 Date: 11-14-11

Policy: Snow Removal and Ice Control

Governing Laws: RSA 231:92-a, RSA 507-B:2-b; Town ordinances #501 #502 #101.3 #102.2 #102.6

Approval Date:

Next Review Date: September 11-14-11

**OBJECTIVE**: It is the goal and intent of the Town of Exeter, New Hampshire to provide timely, efficient and cost-effective winter maintenance, snow removal and ice control on the roadways of the municipality for the safety and benefit of the Town's residents and the general motoring public.

**PROCEDURE**: The objective stated above will be achieved by implementation and execution of the procedures and tasks outlined in the Town Winter Operations Snow Removal and Ice Control Procedures. Due to the many variables that are inherent in New England weather, each storm and/or weather event may require different levels of effort and/or emphasis on any number of maintenance tasks, which together, determine the overall winter maintenance, snow removal or ice control strategy.

**LEVEL OF SERVICE**: It is not possible to maintain snow and ice-free roads or sidewalks during a winter storm. The Town will make every effort possible to provide unobstructed and clean roadways in order to facilitate safe transportation.

It is our policy to start to conduct snow plowing upon accumulation of two or more inches of snowfall. The Highway Superintendent or Public Works Director may, at his or her discretion based upon weather information reports, elect to not remove snow until greater or lesser accumulations.

Pre-treatment and ice control may be initiated prior to the actual storm beginning, during the actual storm as deemed effective, and following the storm. It should be noted that salt has a much slower effect on melting snow and ice at temperatures below 20 degrees, and may not be applied until the temperature is 20 degrees or higher.

Sidewalk snow clearing operations on select sidewalks will be conducted during winter storms. Personnel and equipment availability and the needs to maintain safe roadways may delay sidewalk cleaning operations.

**COMMAND**: Direction of all winter maintenance activities for the Town is vested with the Highway Superintendent or his/her designee.

**EXECUTION**: The policy outlined above is intended to serve as the normal operating procedures for winter maintenance, snow removal and/or ice control for the Town. One or more of the following, which may delay or prevent the implementation of this policy, may affect all or any part of this Policy:

- Equipment Breakdown
- Snow Accumulation in Excess of 1" Per Hour
- Freezing Rain or Other Icing Conditions
- Traffic Congestion
- Emergencies
- Personnel Illness

**ADOPTION**: The Town has adopted the Winter Operations Snow Removal and Ice Control Policy effective 11/14/2011,. All residents are encouraged to familiarize themselves with the content as it describes the condition that one might expect to encounter before, during and following a winter storm event.

**WINTER OPERATIONS SNOW REMOVAL AND ICE CONTROL PROCEDURES** (Includes Highway, Sidewalks, and Parking Areas)

**EQUIPMENT**: The Highway Department utilizes all the assets of the Public Works as needed to address snow and ice emergencies.

**ROUTES**: The Town is divided into 20 major plow routes and 6 treatment routes, (2 salt only and 4 sand/salt).

The Town uses several pieces of heavy equipment including wheeled loaders, Graders Wing and plow trucks and one ton trucks The Town has 3 sidewalk snow plows/blowers used for assigned sidewalks.

**MATERIALS**: The Department uses rock salt and sand for de-icing operations. The sand is used as an abrasive and is applied to the road to improve the public's motor vehicle traction. Salt is employed by the Department as a de-icing and anti-icing agent. Unless weather conditions require a different approach, winter maintenance routes are treated with salt and or a mixture of sand and salt as needed. Salt will be applied at a rate not to exceed 300 pounds per mile. The sand salt mixture used on residential and country roads is maintained at a minimum of one part salt to 4 parts sand. The mixture is applied to the center of the roadway where traffic can work

the mix traveling either way. The mixture, in conjunction with traffic action, creates a watery brine melting snow and/or ice, and resisting snow and ice packing on the roadway. The road crown further assists with the spreading of the mixture brine. The sand/salt mixture is only effective to approximately 20 degrees Fahrenheit. Salt is applied to most of the arterial, collector and some side roads and is applied in the same manor as described previously. Other deicing agents such as calcium chloride are effective at lower temperatures. It is used minimally because of the impact on the environment and the need for specialized equipment.

**COMMUNICATIONS**: The majority of the Public Works equipment is equipped with two way communications. Each plow and equipment operator is assigned a unique call number. A list of all call numbers is displayed in each piece of equipment or truck. Portable and base radios are also maintained at the Highway Department garage, along with the operator's ability to communicate with Exeter Dispatch and the Town police and fire departments.

**SCHOOLS**: The Public Works Department does not have the responsibility for the clearing of snow and winter treatment of the Town schools access road and parking lots.

**PARKING BAN**: The Town has a winter parking ban. It is in effective from December 1st to March 15th of each year. This ban prohibits parking in the Town rights of way (ROW) between the hours of 12:00 midnight and 6:00 am. The Town has the right to tow or ticket violators. The purpose of this winter parking ban is to allow winter maintenance crews unobstructed snow removal and ice control routes in order to maximize their efforts.

**SNOW EMERGENCIES PARKING BANS**: Snow emergency parking bans may be instituted by the Public Works Director with concurrence of the Police Chief in the event of a predicted or on-going severe winter snowstorm as authorized by town ordinance #102.6 <u>SNOW</u> <u>EMERGENCY</u>.

- 1. Contact Police Chief for concurrence with implementing the parking ban.
- 2. Notify the Town Manager.
- 3. Draft "News Release sing sample format on public works stationary.
- 4. Fax copies to:

Town Office	772-4709
Channel 22 & town web site	
Police Department	778-7061
WMUR Channel 9 News	641-9005
Fosters	749-7079
Exeter Newsletter	772-3830
WOKQ	749-1459
Chamber of Commerce	772-9965

PEA

777-4392

Union leader

668-0910

#### SAMPLE

January 3, 2004

#### NEWS RELEASE

The Town of Exeter has instituted a SNOW EMERGENCY PARKING BAN, which will begin 9:00pm on Friday January 3rd and remain in effect until 9:00 am Saturday, January 4<sup>th</sup>. Vehicles parked on or alongside town streets during this period will be towed at the owner's expense.

**PLOW ROUTE PRIORITIES**: With a total of 68 miles of roads from which to remove snow and control ice and 20 pieces of equipment to handle this responsibility, the Highway Department has to assign priorities for winter maintenance route activity in order to maximize the effectiveness of their efforts for the motoring public.

- 1. School bus routes will be given priority during school days. The business district will be maintained as practical during business hours, with the main snow clearance effort to be done during the snow parking curfew hours from 12 midnight to 6 A.M. Public Safety is a very great concern in this area due to many cars and pedestrians in the area. All night parking is permitted on Pleasant Street provided proper application is made to the office of the Town Manager and a permit is issued in compliance with rules established by the Board of Selectman and Town Manager. All night parking is permitted in designated areas in Town Lots (Water Street, Kossuth Street, Front Street and Center Street) with out a permit. During snow removal operations vehicles left for overnight parking must park in the designated areas to allow for clean up operations within these Town Lots.
- 2. Public parking areas at the rear of the Town Offices, each municipal department, and the Municipal Parking Lots will be cleared as soon as possible during the winter storm. The application of slip resistant materials will be applied after the storm as determined to be needed by the Highway Superintendent or acting representative.
- **3.** Transfer Station/Recycle Center: Transfer station personnel may be required to assist with the Town's general winter maintenance operations. If the facility is open during the snow or ice storm, personnel will plow this area prior to opening for public use. Public areas shall be kept as clear as possible to provide as safe access as reasonably possible. Sand and other slip resistant materials shall be used in public areas. It often will not be possible to maintain clear ground, but a reasonable effort will be made during storms.
- 4. Fire Hydrants: Fire hydrants are cleaned of snow following the snow storms.

**ROADS AND SIDEWALKS NOT RECEIVING WINTER MAINTENANCE**: The Town of Exeter does not maintain a number of State roadways and certain sidewalks as part of its ongoing winter maintenance activities.

A. Town roads classified as Class VI roads and beyond the Urban Compact boundary.

**B.** Private roads.

**C.** School District sidewalks and parking areas, which are the responsibility of the school district.

D. Due to limited manpower and equipment a limited number of sidewalks are plowed. It is the goal of the department to plow all sidewalks used by children that walk to school while school is in session.

**LOW SALT USE**: The Town has established roadways or portion of roadways as low salt use areas to protect drinking water resources or other natural resources. A low salt area is one in which the municipality has determined it will use a low concentrate of salt as part of its ice control efforts for winter maintenance. The Town will post the area to warn traveling motorists that they are in a low salt area.

**DAMAGE TO PRIVATE PROPERTY**: The municipality is not responsible for damage to private property that is located within the public right of way. (RSA 231:92-a). The right of way (ROW) is often 50'wide, and is often confused by property owners as their property. In most cases, the ROW often extends 10 to 20 feet of either side of the road. Cultivated extensions of lawns, mailboxes, fence and stonewalls within the right of way improves the appearance of the street greatly, but is obstructive to good winter maintenance.

The snow windrow must be pushed back as far as possible for many reasons such as:

- 1: Traffic safety
- 2: Space for future snow storage.
- 3: Prevention of melting snow water from running onto the pavement
- 4: To permit maximum possible view of traffic and roads.

It is not possible for the town to replace or repair any type of structure erected by an abutting land owner within the right-of-way that has been damaged as a result of highway maintenance and construction work.

The Town is responsible for repair or replacement of property damaged by snow removal equipment having been in actual contact ( not by the weight of snow being pushed back) and only if the damaged is property is on private property. Damage within the public right-of-way, Lawns, Fences, Granite post ) is not the responsibility of the Town.

Mail Boxes Town Rights -of-way

Selectmen's Policy 03-33

1, Mailboxes in stalled on town property or within the public rights of way must be positioned in accordance with town standards. The Towns liability for damages to any mailbox and post will

not exceed \$35.00 .Claims must be initiated by the resident, with work being completed by the department as scheduling allows. In the case of residents requesting more than basic mailbox installations, the Town will provide payment (not to exceed \$35.00 for materials and \$15.00 for labor) to the resident, with proper invoicing provided.

2, With the exception of mailboxes, the Town accepts no responsibility for damages to structures, (i.e. granite post, lamppost, fences, ect) located on town property or within the public right – of –way.

3, Installation of any other structures or plants require permission of the Town by way of an excavation permit, approval of the Highway Superintendent and / pr Selectmens approval, and would require a hold harmless agreement absolving the Town of Exeter of Liability.

**OBSTRUCTING ROADS AND SIDEWALKS: This is prohibited by law and can cause a serious hazard Revised State Statutes 41:11 47:17 VII and 236:20. Town Ordinance (502)** No person, firm or corporation engaged in the operation of snow plowing, blowing or removing shall allow or cause any accumulation of snow to obstruct or impair any town-maintained street, roadway, sidewalk, parking lot or right-of way, unless such operations are approved by the Highway Superintendent or the Director of Public Works.

**POST STORM OPERATIONS**: As determined by the Highway Superintendent, the snow banks resulting from the previous accumulations shall be pushed back, or shelved, using the plow and wing of the grader or other suitable equipment to make space for future snow storms.

**DOWNTOWN SNOW REMOVAL OPERATIONS**: During the initial stages of the storm, only the roadways through the town center maybe plowed. (As parking areas along the businesses are free of parked vehicles, snow removal equipment may swing wider through the street to push back large amounts of accumulated snow.)

The Town Center is defined as being bounded on the north by Water Street, on the west by Main Street on the south by Front Street and to the East by High Street. Between November 15th and April 15th snow removal in the Town Center shall not begin until 10 PM and shall cease operations at 7 AM. Cars left in this area after the stated times will be called into the Police Department to be towed away. No snow removal operations will be conducted in the area of such vehicles until they have been removed.

## SIDEWALK SNOW REMOVAL:

**A.** Sidewalk snow clearance will not begin until all other snow removal operations are manned and in progress. If there are insufficient personnel available to conduct sidewalk snow removal operations, as well as street and road clearance, the streets and roads shall take priority.

**B.** Sidewalks outside the Town Center shall be cleared as soon as possible during and after the storm.

C. Sidewalks leading to the schools and town center are a priority, similar to the roads being

school priority routes.

**D.** The sidewalks will be treated with sand as quickly as possible after the storm.

F. The Arterial sidewalks listed below are to be cleared of snow and sanded as described above.

Water Street	Drinkwater Road	Chestnut St
Main Street	String Bridge	Brentwood Rd
Pleasant Street	Swasey Parkway	Tan Lane
Front Street	Linden Street	Spring St
Portsmouth Avenue	Gill Street	
Center Street	Court Street	
High Street	Pine Street	
Winter Street	Lincoln St	

G. The secondary sidewalks will be plowed and sanded only after roads and arterial sidewalks are cleared.

Franklin St	South St	Elm S	St Elliot S	t Gary Ln	Union St
School St	Washington	n St	Holland Wa	y Park St	Clifford St
Bow St	Grove St	Jady	Hill Ave	Chestnut St	Summer St

If pedestrians or vehicles cause obstructions to the sidewalk snow removal operations, the Town's winter maintenance operators are encouraged to request their cooperation. Otherwise, the operator is expected to call the Police for assistance. The operator is cautioned to avoid confrontation at all possible costs.

## APPENDIX A TERMINOLOGY

In an effort to avoid confusion, the following standardized terminology is established. When directed to do so, operators will perform winter maintenance tasks in accordance with these definitions.

**Treat Roads:** Roads spread with salt and or a mixture of sand and salt. The proportion of the sand/salt mixture will be determined by the Road Agent or his or her designee. Mixture will be spread along the centerline of the roadway in a width of two to four feet.

**Treat Route:** The spreading of salt and or a sand/salt mix on all roads, in such a manner that one backtracks as little as possible.

**Treat Mains**: The treating of just the high traffic volume roads. Depending on conditions, drivers

**Open**: Keeping the center of roads open; not spending a lot of time clearing route intersections or turn arounds. This normally will be requested while snow is falling and there is a need to finish the drivers' routes in as short a time as possible. (One-inch per hour would result in three to four inches of snow at the beginning of routes before a truck gets back to it.)

**Open Full**: Making extra passes at Routes/intersections to allow vehicle traffic to flow better. This is also aimed at getting the whole route done in as short a time as possible.

**Cleanup**: Clean-up and push back all roads. Clean-up intersections; turn arounds, Route and cul de sacs. Some areas may require more than one pass.

**Slush Off:** Scrape off any snow/ice that has loosened up from treating with salt. Normally it will require one pass each way unless advised to slush off and clean up.

**Push/Back**: After several large storms it may be necessary to send a truck or the grader out to shelf or back snow win rows. A loader will normally go along to clean up driveways and intersections.

Drafted by the Exeter, NH Public Department Adopted: