



**Town of Falmouth  
Department of Public Works  
Snow & Ice Control  
Procedural Manual - 2025**

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**Peter M. McConarty, P.E. P.L.S.  
Director of Public Works**

**James F. Grady, Jr  
Superintendent of Highways**

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## **GENERAL STATEMENT**

During Extreme Weather Events, the primary mission of the Department of Public Works is to respond with all available resources in order to restore the serviceability of roads and facilities as expeditiously as possible. This Procedural Manual establishes the protocols to be utilized for snow and ice control throughout the Towns road system during the winter weather events. Winter storms can create hazardous situations for motorists and pedestrians alike. This policy sets standards for snow and ice removal to be performed as efficiently as possible in order to keep roads passable and safe. “Black asphalt” and dry roadways are not reasonably possible during winter storms, and it is not the Department’s mission to create bare roads throughout Town. Many variables affect winter maintenance operations on Cape Cod and each storm or weather event may require different efforts or emphasis. The goal of this snow-fighting procedure manual is to return road surfaces to normal winter conditions as soon as feasible.

## **IMPLEMENTATION**

The following procedures will be in effect when adverse weather conditions cause accumulations of frost, sleet, ice, or snow on Town roadways, school properties, or municipal property, and will stay in effect during the winter months. The Highway Division is the lead agency for implementation and is supported with staff and equipment from other Public Works Divisions as well as private contractors.

## **MONITORING & NOTIFICATION OF SNOW/ICE EVENTS**

The Town of Falmouth, Department of Public Works subscribes to the DTN/Meteorlogix Weather Sentry weather alert system. This provides us with accurate real-time information concerning the weather at our exact location. We have access to live radar images, projected accumulation amounts, wind and visibility conditions, 24 hr. contact with a live meteorologist, as well as precipitation warnings up to three hours prior to an event.

During normal working hours, (7:00 a.m. to 3:30 p.m., Monday-Friday) our weather sentry as well as the observations of the Public Works employees will alert the first response for storm operations.

During after hours, the weather alert system will notify key Public Works personnel responsible for monitoring weather conditions. Additionally, the Police Dept. will call when snow or ice begins to fall.

The Superintendent or Assistant Superintendent of Highways will check road conditions and commence to call in personnel as necessary. This will usually start with salt & sanding units and change accordingly as conditions deteriorate.

## **RESPONSIBILITIES**

The Department is responsible for approximately 230 miles of Town roads as well as approximately 185 miles of vetted and approved private roads open to public use. Only Town roads receive salt treatment, while all roads, including vetted and approved private are plowed as a public safety issue. Additionally, the following municipal properties and parking lots are included:

- Town Hall
- Police Station
- Administration Building
- Senior Center
- High School
- Lawrence School
- Morse Pond School
- Mullen-Hall School
- Teaticket School
- East Falmouth School
- North Falmouth School
- Main Library
- East Falmouth Library
- North Falmouth Library
- West Falmouth Library
- Gus Canty Recreation Center
- Falmouth Marina
- Peg Noonan Public Parking
- Eastman's Public Parking
- Wastewater plants / Lift Stations
- Water Division sites
- Waste Management Facility
- Falmouth Country Club
- Falmouth Dog Park
- Dog Pound
- Trotting Park Fields
- Whites Landing Parking Lot
- Falmouth Community Veterans Ctr.
- Goodwill Park
- Tides Motel Lot
- Robbins Road Parking Lot
- Falmouth Heights Ball Field Parking Lot
- High School Sports Field Parking Lots
- King Street Municipal Parking Lot
- Locust Street Parking Lot
- Emerald House Parking Lot
- Shining Sea Bike Path – Woods Hole to North Falmouth

## **STORM LEVEL CLASSIFICATIONS**

Response efforts are tailored to anticipated storm conditions. Factors such as wind, air temperatures, pavement temperatures, rain, time of day, day of week and storm intensity or duration will impact response actions and effectiveness. Storm events are classified into three response levels as follows:

- **Level 1:      Less than 3” predicted**
  - Pre-treatment for roads / sidewalks
  - Possible plowing – Main roads & Connector Roadways.
  - Mobilize:      Town crews
  
- **Level 2:      3”-12” predicted**
  - Pre-treatment for roads / approved sidewalks
  - Plowing –      All roads – Town & private
  - Mobilize:      Town crews & private contractors
  
- **Level 3:      12” or more predicted or blizzard conditions**
  - All level 2 actions underway
  - Subsequent road treatments
  - Plowing:      Continuous plowing on all roads
  - Mobilize:      All resources – Town & private
  - Parking Bans: Enacted

## **PRE-TREATMENT & SALTING**

Town crews are generally mobilized two (2) hours prior to any initial precipitation, (except rain). This allows us to pre-treat primary roads to prevent ice / snow from bonding to the road surface. Application of pre-treated salt with calcium chloride.

This solution forms brine on the pavement, essentially separating the road surface from the snow. This allows traffic to work the solution; melting the snow until the slush accumulation is so great it needs to be plowed off. All main routes and bus routes, schools, and municipal buildings will be included in this operation identified as a **Level 1** event. This will also include sidewalks along the Main St. & Water St. business districts.

## EQUIPMENT

The Department of Public Works utilizes all assets of each Division as needed to address snow and ice emergencies. The following is a list of available equipment broken into individual categories.

- Four, Ten-Wheel w/plow & sander
- Five, Six-Wheel 35,000 GVW trucks w/plows & sanders
- Twenty-Two Dual Wheel One-Ton Trucks.
- Fifteen Single Rear Wheel One-Ton Trucks w/ three Salt Spreaders.
- Eleven, Pick-up trucks 4x4 w/plows
- Two Front-end Loaders
- Two Backhoes
- Six Skid Steer Loaders (Bobcats)

In addition, the Town has available, up to 30 private snowplow contractors for use as conditions warrant, as allowed under Chapter 84, Section 5A of the Massachusetts General Laws (MGL). The retaining of private contractors for the purpose of snow removal by municipalities is exempt from contract and procurement law under Chapter 30B, Section 1B(17) of the MGL. All contractors are required to furnish a certificate of insurance prior to being hired as well as workman's compensation coverage if not operated by the vehicle owner.

All contractor plow vehicles are equipped with either an 8, 9 or 10 foot plow blade and each unit is inspected by Department personnel in our vehicle maintenance garage to insure compliance with vehicle condition and safety equipment. Vehicles that fail inspections will not be allowed to plow.

## PLOW ROUTE PRIORITIES

When plowing becomes necessary, (usually at 3 inches, this will vary at times depending on the forecast and temperatures), all available Department of Public Works resources (both staff and equipment) will be utilized. This will be identified as a **Level 2** event. The primary responsibility of the Department will be to initially focus on the main (primary) roads in Town. This will be done with two vehicles plowing in tandem whenever possible to increase the efficiency of the removal process. Each driver has a specific route map assigned to him / her and is responsible for those roads. All nine main routes will be filled with Town personnel concentrating on main roads, with additional town vehicles and private contractors working on secondary roads. There are additional routes that are assigned to specific drivers that fall within the overall boundaries of the original nine routes.

- **Priority One:** Roads, which are the main arteries of the Town, are given first priority to maintain since they provide the interconnecting link from all sections of Town for emergency vehicle access. Priority may be extended to bus routes during early dismissals, then returning to regular priorities once completed.
- **Priority Two:** Roads, which are secondary roadways that connect to main roads and major residential areas and hilled roadways, are given the next level of priority to move motorists from these areas to the main roads.
- **Priority Three:** Roads, which are all other local roads within residential areas, are the last areas to be completed. These are usually completed using private contractors, but may be done with Town recourses in the event of a smaller accumulation.

Route drivers will initially progress through a route by making two passes in order to make each road passable. The drivers will then proceed to “open-up” each road by making subsequent passes to “curb” the snow.

Depending on the severity of the storm, the “opening-up” of roads may be delayed for several hours because the drivers will be limited to maintaining the original passes to keep the center of the road open. Final “curbing” of the snow will commence once the snowfall has ceased to accumulate.

## **STORM FACTORS**

There are many factors which influence how storms must be managed:

- **Total snowfall** – The greater the total snowfall, the harder it is to keep roads clear and the longer it takes to complete all tasks.
- **Snow intensity** – When snow falls rapidly, it accumulates on roadways faster than plows can remove it.
- **Snow duration** – The longer the snow continues, the more difficult it is to maintain passability and it takes longer to complete all tasks.
- **Air temperatures** – When air temperatures are below freezing, it can result in sleet, icing, and black ice. In addition, the lower the temperature, the less effective the salt treatments are.
- **Road Temperature** – The colder the road temperature, the greater the likelihood of ice formation due to reduced salt effectiveness.
- **Winds** – Windblown snow, drifting and reduced visibility slows plowing speeds.
- **Time of day** – Snow fighting is most effective during evening hours when there are fewer vehicles on the roads.
- **Time of year** – Snow events that occur around holidays may result in reduced manpower as a result of vacations.
- **Blizzards** – Sustained, strong winds reduce visibility which, in turn, reduce plow vehicle speeds and dramatically reduce plowing effectiveness. Drifting snow quickly re-deposits on plowed roadways and sidewalks which hampers clearing efforts.

## STORM PROGRESSION

The timing of a storm is critical. The worst time for a storm is during the high commuting periods. If it begins snowing at 8:00 in the evening and it is over by early morning, snow crews usually have ample time to prepare the roads for the morning commute. But when a storm starts at 6:30 in the morning, or 3:30 in the afternoon, motorists will need to take extra precaution until crews are able to clear the streets.

Christmas week is also a particularly bad time for a major snow event – there are many more vehicles on the road due to shoppers and people on vacation. Further, there are fewer personnel or contractors available due to vacations. Both business and shopper expectations with regard to road / sidewalk conditions are high during this time.

All storm conditions are dictated by temperature, the amount of moisture present in the storm, wind speed, and duration. The combination of these factors is directly related to the conditions that dictate how a storm will be managed. Freezing rain, sleet, snow, dry snow, amount of snow, wind conditions and the time of day all contribute to storm conditions.

Blizzards (or Nor'easters) are always problematic. Visibility is dramatically reduced which, in turn, reduces the speed at which roads can be plowed. The wind re-deposits snow onto roadways and causes significant drifts to accumulate. A blizzard, by definition, is:

- Sustained winds of over 35 MPH for three hours or more.

When we are engaged in a **Level 2** event, and precipitation continues to accumulate at a rapid speed, we will upgrade to a **Level 3** event as conditions warrant-generally blizzard conditions or snow accumulations greater than 12 inches. This will involve all Public Works personnel and private contractors, along with additional private heavy equipment (Loaders, Large plows, etc.) as necessary.

Depending on the expected severity of the storm, the Emergency Operations Center located at the Falmouth Fire & Rescue Headquarters, may be activated. This decision will be made by the Town Manager in conjunction with the Director of Public Works, Fire Chief and Police Chief. All operations will be closely monitored from this location and calls can be directed there.

As a storm winds down and plowing is coming to an end, the eight salting/sanding units will begin to treat their main roads again in an attempt to melt any existing snow and to provide better traction. Following this, secondary roads, hills and bus routes will be treated to improve conditions.

The primary goal of the Department is to open all streets as quickly as possible, and keep them open for the duration of the storm. After heavy snowfalls, it may be necessary at times to send larger vehicles into certain areas to help push back the snow to insure that the entire width of the street is open. In doing so, it is unavoidable to redeposit snow into already cleared driveway entrances. This is not a deliberate act, but necessary in the event of another storm back to back. The Town, or its private contractors, will not be responsible for plowing or shoveling out these driveways.

## **PRIVATE ROAD POLICY**

The Department plows approximately 185 miles of vetted and approved private roads. The Town of Falmouth approved Question #1 during Town meeting in 1962 that states: *“The town accepts the provisions of section six C of Chapter forty of the General Laws, which authorize cities and towns to appropriate money for the removal of snow and ice from private ways therein open to public use.”*

This does not include common driveways or condominium developments.

The town will pre-treat or salt hills and bus routes.

Owners of private roads are always free to engage their own plow service contractors should they desire more expeditious service than the Town can provide.

Owners of private roads are collectively responsible for ensuring proper maintenance of their road and the Town will refuse to provide plow services on any private road when the condition of the road becomes impassable or if the roadway becomes encroached with overgrown branches or shrubbery.

## **SIDEWALKS**

Sidewalk clearing is focused on main connectivity routes including Main Street, Downtown area, Schools, and primary roadways. Public Works does not have the staffing resources or equipment to clear all sidewalk in Town. Sidewalks fall under priority 2 and commence once main roadways and secondary roadways are open, and staff become available. Sidewalks included under this policy are listed under Appendix D.

## **DAMAGE TO PRIVATE PROPERTY**

It is important for homeowners to understand that the average width of Town owned road Right-Of-Ways (R.O.W.) are forty (40) feet wide. Often times, residents place obstructions in the R.O.W. of Town property. This could include anything from plantings, fencing, railroad tie walls, sprinkler heads, and mailboxes to mention a few. Other than mailboxes damaged by a direct result of plowing operations, other damage to obstructions in the ROW will not be repaired or replaced by the Town. We recommend that mailboxes be at least a minimum of 18-24 inches off the edge of the pavement. Due to the usual wet nature of snow that is common on the Cape, it is also recommended that a sturdy wolmanized post be utilized. If a post or mailbox is damaged as a result of plowing operations, please notify the Department and a Field Supervisor will investigate to determine if indeed it was a direct result of our operation. If a repair or replacement is necessary, it will be scheduled in a timely matter, and a standard mailbox and post will be installed to meet U.S. Postal Service requirements. If a homeowner had a larger than normal or custom mailbox, it will be up to the homeowner to upgrade. Therefore, it is imperative that homeowners take a close look at items or improvements made in the ROW that may be subject to damage during storm operations.

Another reason for removing these obstructions from the ROW is to allow the Town adequate room to place the snow in the event we have multiple storms back to back. The snow windrow must be pushed all the way to the edge of pavement for the following reasons:

- Traffic Safety
- Space for additional snow storage
- To allow storm drains to be exposed
- To permit maximum possible visibility for pedestrians and vehicles

## **COMMUNICATION**

All Public Works vehicles are equipped with two-way radio capability. The Department has the capability to include all Divisions being on one channel. All drivers have cell phones, so we have several modes of continuity.

During a **Level 2** event, the Department of Public Works Administration office personnel monitor the phone lines until 10:00 p.m. to log complaints which are then distributed to a supervisor who assigns them accordingly.

All Town vehicles and heavy equipment have been outfitted with GPS transponders. This allows us to monitor plow routes and individual vehicle locations as well as speed travelled, directional heading of the vehicle, among other characteristics. We are also capable of direct connect with the plow operator in the event the truck must be re-routed for an emergency situation.

The direct phone line to the Department of Public Works is 508-457-2543 which will connect you to the main office where your concerns or complaints can be logged.

## WINTER SALT / SAND

A winter salt/sand mix is available to the general public at the Public Works Facility located at 416 Gifford Falmouth, MA.

As you enter the parking lot from Gifford St. there is a stock pile to your right. Home owners are allowed to fill barrels for their own personal use at home. **It is not intended for contractors who are doing private work utilizing this public resource.**

## HOW YOU CAN HELP

### **Before The Storm**

- Fuel your vehicle: This ensures transportation should you need it.
- Park your vehicle: Park in driveway or off-road. This keeps roads clear for plows and avoids damage to your vehicle.
- Shopping: Do shopping in advance of a storm.
- Top-off heating oil tank.
- Ensure that you have flashlights, batteries and a battery operated radio.
- Carry warm blankets in car.
- Ensure that you have several days supply of necessary medications.

### **During The Storm**

- **STAY HOME**, if possible. Driving during storms is dangerous. Contrary to popular belief, 4WD vehicles do not stop on a dime.
- Stay informed – Tune in to FCTV-13 or local radio channels for weather updates or check the Town of Falmouth website.
- Do not shovel or plow snow onto roadways or sidewalks.
- Clear your sidewalk area as soon as possible after snow has stopped.

If you live on a curve or at a bend in the road, it is helpful for plow operators if you have reflectors placed near the edge of pavement to show where the road turns, particularly with heavy snowfall.

It is essential that cars be parked well off the edge of the roadway so that plows can open up the full width of the road.

If you must drive during a storm, please drive slowly. Excessive speed is often the number one cause of accidents in bad weather.

Please yield the right of way to the snow emergency vehicle. Try to maintain a distance of at least 100 feet. This will provide for a clearer surface as you follow, and keep you out of reach of the spinner so your vehicle is not saltblasted. Many times, we have seen motorists become impatient and try to pass a plow or sander which is extremely dangerous. Remember, we are out there trying to make the roads safe for everyone, including ourselves.

Motorists should also remember that having a four wheel drive vehicle does not help you stop any easier on snow or ice covered roadways. There is a false sense of security with those vehicles.

Driving during a storm should be a last resort. We understand that at certain times of the day, people are going to, or coming from work. We would like to just remind everyone to slow down and drive cautiously and only when absolutely necessary.

### **After the Storm**

Remember that if your road does not look like it is at its full width, we will probably be back to widen it. This will create a windrow in front of your driveway that is unavoidable and unintentional. Please be patient with us.

If there is a catch basin or fire hydrant in front of your property, please help us by digging it out so it is both visible and accessible in the event of an emergency.

Finally, snowplowing is a dangerous, arduous, and time-consuming task. Your Public Works employees, and private contractors make every effort to perform these tasks with great pride and efficiency. We strive for the safest roads at the most reasonable expense, and in the shortest period of time. The cooperation and support of Falmouth's Town officials and residents is greatly appreciated.

### **Disclaimer**

This manual is intended to be a living-document that is amended as necessary, and the manual is used as a guide as to how the Public Works Department responds during snow and ice operations.

There are many variables that may alter the operations including equipment breakdowns, employee shortages, severe weather requiring personnel to get off of the roads for a period of time, etc.

The Department also reserves the right to add, change, or amend as needed.