
**Town of North Yarmouth
PUBLIC WORKS DEPARTMENT
WINTER OPERATIONS
Standard Operating Policies**

ROUTES AND ASSIGNMENTS

Route A - Truck 6-13 (26.5 lane miles): New Gloucester Rd (Route 231), Town Farm Road, North Road, Deer Run Road, Milliken Road, Lufkin Road, Steeplechase Road.

Route B - Truck 7-10 (28.0 lane miles): Memorial Highway, Hallowell Rd (Route 9: Route 115 to Pownal line), Sligo Road, Mountfort Road, Royal Road, West Pownal Road, and Sligo Ext.

Route C - Truck 2-17 (25.0 lane miles): Walnut Hill Rd, Gray Rd (Route 115: Yarmouth town line to Gray town line), Cumberland Rd (Route 9: Route 115 to Cumberland town line) Mill Road, Haskell Road, and Long Hill Road.

Route D - Truck 3-19 (17.8 lane miles): Parsonage Road, Pea lane, Smithwood Drive, Doughty Road, Princewell Road, Meadow Creek Road - Bayberry Drive, Baston Road, The Lane, Sweetser Road, Henry Road, Edna Lane, Fayview Lane, Delwin Drive. Assist Truck 2-17 in salt/sand Route 115/Route 9.

Route E - Truck 1-19: Help route trucks as needed, Public Safety Facility, Public Works yard, Community Center, Town Office, Village Square Road, Cluff Road, Wescustogo Road, Thunder Road, ALL intersections: Routes 9 & 115 (2), Routes 115 & 231, Route 231 & Mill/North Roads, North Road & Route 9, Route 9 & West Pownal Road.

Note: Routes may not be plowed in the order as listed.

Additional Standards:

- 1) The Community Center and Town Office are kept open as best as possible during the storm and are cleaned up after roadways are completed.
- 2) Sidewalks are plowed and salted after the storm is over, possibly the next day. Due to equipment limitations, sidewalks may get plowed twice or more during large storm events.
- 3) Old Town House Park and Chandler Brook Preserve will be plowed as soon as possible after the storm.
- 4) Fire Rescue Department will clear hydrants as needed.
- 5) Plow sand and salt shed to keep snow and ice from building up on the roof system.

SEAT BELTS MUST BE WORN

OFF-SEASON MAINTENANCE

Fall:

- Calibrate sanders
- Task training of crew
- Mark sidewalks, driveway ends, guardrail locations with grade stacks, curbs - any area a plow or the trackless may hit when removing snow

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- Fill sand and salt shed and liquid tanks with required products
 - Advertise “No Parking” on streets policy
 - Advertise mailbox information
 - Find spare drivers
 - Fluid Film corrosion control

Spring:

- Paint snowplows, frames, and sanding equipment
- Make any needed repairs
- Thoroughly wash and provide corrosion protection before summer storage

NOTIFICATION

The Town is engaged in an agreement with Cumberland County Regional Dispatch Center to be notified of any adverse road conditions 24 hours a day 7 days a week and automatically dispatched in storm events when aware of declining road conditions.

Backup call outs (dispatch) are received either from Cumberland County Sheriff’s Department or the Maine State Police.

Notifications are made directly to the Public Works Director either by landline or cell phone.

Call notification is defined at the onset of inclement weather, i.e., snow, sleet, freezing, rain. The Public Works Director or his/her designee will be notified and immediately dispatch his/her crew to assemble at the Public Works facility to take appropriate action.

SALT/SAND STORAGE:

The sand and salt shed will be filled in the fall with a sand/salt mix of 100 lbs of salt per one (1) yard of sand. This mix keeps the sand from freezing and helps to melt snow/ice on the roadways.

Use of Sand: The department shall strive to manage winter roads as cost-effectively as possible and are often asked about using “good, old-fashioned sand.” Sand is an essential tool in snow and ice control, but it has many hidden costs. Though inexpensive in the pit, sand must be screened, hauled, and mixed with salt to prevent freezing. It is stored, used in significant quantities, and then must be cleaned up in the spring. Other disadvantages of only sand use include:

- Has no ice-melting ability
- Requires constant re-application
- Can cause skidding on dry pavement
- Causes paint chipping and broken windshields
- Creates drainage problems
- Smothers roadside vegetation
- Causes siltation of waterways
- Creates silica dust

Advantages of Using Alternatives Products:

- NYPWD’s use of anti-icing techniques means a significant reduction in our use of sand.
- It is a positive benefit to the environment.
- Roadside ditches are free of sand, making stormwater runoff more efficient.

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- Waterways don't receive the annual surge of salt and sand that smother aquatic habitat.

PLOWING AND ANTI-ICING

Before an approaching winter storm, NYPWD prepares all routes and equipment. Trucks will be loaded with anti-icing products. Depending on storm predictions, a mixture of sand and salt or treated salt will be spread as needed throughout the storm; salt may be "pre-wetted" with salt brine or ProMelt Magic-0 liquid. Pre-wetting helps the solids stick to the pavement and speeds up melting at lower temperatures and with less salt.

When storms are cold (below 15°F), nothing is more effective than a plow. Cold temperatures and dry snow mean the plow alone can push the snow off the road without anti-icing materials, which would cause the snow to get wet and stick to the roads.

Initially, at the onset of a storm, before roadways have been completely covered with snow and ice and the traffic has not packed the snow to ice, they are treated with salt or an enhanced salt/sand mix approximately 200 lbs. of salt per one (1) yard of sand. This procedure aims to form a brine between the snow-ice/pavement to keep the snow and ice from adhering to the road. Sand/salt or treated salt will be spread as needed thru out the storm. Then the snow is kept plowed after accumulation is to a depth of 1.5 to 2 inches. Plowing during the storm is only to keep the travel lanes clear. It can be widened during regular work hours. At the end of the storm, the "clean up run" where intersections are cleaned and banks are pushed back on a limited basis, another enhanced sand/salt load or treated salt will be applied to clean any remaining snow and ice from the roadway. Temperatures below 20°F may require the use of salt-treated with ProMelt Magic-0 liquid, a blend of agricultural by-products and magnesium chloride, or a similar product.

Treated salt with ProMelt Magic-0 is used for several reasons:

- Works at a lower temperature than traditional dry salt
- Reduces "bounce and scatter" when applied to the road, thereby decreasing salt use rates
- Keeps the salt in the lanes and not on the shoulders of the road
- Less corrosive on equipment
- Less toxic to the environment

PRIORITY ROADS

To make the most efficient use of available resources, the town has established priorities using the assumption that the storm is not beyond the standard capabilities of the town's snow and ice removal resources. Depending on the nature of the storm, variations in the level of service may occur. The established priorities are as follows:

Priority 1 Roads: Three (3) inches or less of snow on the road during a storm, plowed approximately every three (3) hours. Road surfaces clear of ice and snow about 24 hours after the storm ends. The posted speed limit generally above 35 MPH.

P1 Roads: **Walnut Hill Road, Gray Road (Rt. 115), Cumberland Road, Memorial Highway, Hallowell Road, (Rt. 9), New Gloucester Road (Rt. 231), Mill Road, North Road, Haskell Road, Sligo Road, Doughty Road, and West Pownal Road.**

Priority 2 Roads: Roads plowed to allow travel during the storm, plowed approximately every three (3) hours. Some snow and ice may remain on the travel surface. Bare pavement should be attained in hazardous areas such as turns, hills, stop signs, etc. approximately 24 hours after the storm ended. The posted speed limit generally below 35 MPH.

P2 Roads: Mountfort Road, Royal Road, Milliken Road, Town Farm Road, Baston Road, Long Hill Road, and Parsonage Road.

Priority 3 Roads: Gravel roads, dead-end roads, residential subdivisions, col-du-sacs, etc. plowed to keep open for travel during the storm. Some snow and ice may remain on the traveled surface. Hazardous areas should be treated with a combination of sand and salt and gravel roads treated with sand only.

P3 Roads: All other town travel ways.

Priority 4 Sidewalks: Generally plowed and treated within 24 hrs after the storm is over. Parking lots plowed as soon as possible after the storm, fire hydrants plowed with Fire Rescue Department assistance as soon as equipment and workforce are available.

Priority 5 Parks: Parking lots plowed after all other work is complete.

Priority Routes: Route #231, Route #115, Route #9 & North Road, and the Mill Road.

PRIVATE ROADS

Emergency plowing of private roads and driveways can be requested by incident command on scenes by NYFRD, Cumberland County Sheriff's Department or the State Police, and MSAD 51. The town's contracted trash hauler may request help on private roads in which PWD will respond to help the situation one time. Still, it is up to the private road association to keep the street passible for emergency vehicles, buses, and trash haulers.

LOW SALT ZONE

Limited salt use areas are Memorial Highway (Rt. 9) from the Parsonage Road to Sligo Road. It is a Low Salt Zone as requested by the Yarmouth Water District to minimize Salt contamination of the Hayes Well, which supplies the public water system.

SAFETY PROCEDURES

As with any operation, safety is of the utmost concern, not only for the motoring public but also for our plow operators. Long hours of steady operation lead to dangerous situations and an increased potential for accidents.

Daylight and primetime commuter hours, particularly during school bus runs, are of the highest priority. Constant plow runs are necessary except for breaks to refuel and other normal, essential stops. If a storm is prolonged thru the evening hours and through the night, rest breaks and off-road time is **mandatory**. Radio and telephone communication are monitored during these rest periods to respond to any emergency vehicle traffic that may be dispatched, i.e., Fire Rescue or Sheriff's Department.

Storms with snowfall rates of one (1) inch per hour or more are challenging to manage, whiteout conditions are considered hazardous, and at times trucks must be taken off the road until visibility improves. These decisions will be made at the discretion of the Public Works Director or his/her designee. These decisions can none the less be a judgment call. The only conclusion that will be reprimanded is no decision at all.

NORMAL STORM OPERATIONS

- 1) Attempt to be at the garage within 30 minutes of call in.

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- 2) Be prepared to hook up or unhook equipment to weather conditions if necessary.
 - 3) Arrive fit and ready for work; keep abreast of weather conditions to dictate your rest, meals, sleep, staying at home, etc.
 - 4) Notify the Public Works Director or dispatch 893-2810 of anything that may delay or prevent your immediate arrival from working - **ASAP**.
 - 5) Early morning call outs are critical, mainly between 3-6 AM on **SCHOOL DAYS**. **Special efforts must be made to have equipment on the road as soon as possible.**
 - 6) While in the field, be prepared to make route changes directed by the Public Works Director or his/her designee.
 - 7) Keep the Public Works Director informed of your situation, i.e., answer your radio. Be prepared to check in with frequently.
 - 8) Call in plate number of parked vehicles to dispatch, or inform the Public Works Director, go around the vehicle and continue with route.
 - 9) When normal snow plowing operations commence during business hours 4:00 AM to 8:00 PM, Priority 1 roads will be plowed and treated first. Priority 2 roads may only be broken open and made passable as the storm dictates.
 - 10) Plow operators are not to vary from their assigned route unless it is an emergency or directed to do so by the Public Works Director.
 - 11) The type of storm time of day traffic and other contributing factors will determine the events' sequence and how the operators plow. These decisions will generally be made prior to operators leaving the garage.
 - 12) **Primary concerns during daylight plowing:** Keep traffic flowing as safely as possible; main lines are the primary concern. If school is in session, bus routes need to have extra attention given to them. You cannot be everywhere at once, and we do not have a truck for every road in town, be calm, patient, and above all, courteous.
 - 13) **Primary concerns during late-night operation:** Fire Rescue and Police - keep alert and be prepared to assist with plowing and sanding as directed.

POST STORM ACTIVITIES

- 1) Employees
 - Get adequate rest that is needed.
- 2) Vehicle Maintenance
 - Fuel vehicles (every day)
 - Grease
 - Check hydraulic system
 - Check fluid levels
 - General operation check
 - Check lights and tires
 - Pre-wetting tanks
 - Check and replace cutting edges
 - Wash down vehicle

3) Other Duties Include:

- Prep sand pile for next storm
- Remove snow where needed, i.e., Fire Rescue Station, intersections, sidewalks, parking lots
- Clear fire hydrants
- Any other task(s) deemed vital to prepare for the next storm

NOTE: Expect storms to occur back to back sometimes; this leaves little time to prepare to plow again, so all prep time is important and should be done in a timely manner.

OPERATOR STORM REPORTS

Operators will fill out and complete a report after each storm event. Please keep an accurate account of your time also track all loads of sand, salt, and liquids on your report.

GENERAL INFORMATION

- Clean truck cab and keep it free of all trash.
- Check first aid kit and flashlight before each storm.
- Report road defects on your route as soon as possible (note on driver's report).
- Report any injuries immediately to the supervisor.
- If you are overtired - **stop and take a break.**
- **MEALS** will be scheduled around priority traffic. At times high traffic volume will need to be dealt with as the storm dictates; it may be necessary to break in shifts to keep traffic flowing safely as possible.

CALL OUT

It is often necessary to dispatch a single truck to respond to a single trouble area (nights, weekends, etc.); when doing so, the driver should also check any other known trouble areas within the town automatically. It will help avoid duplicate call outs. Report by phone or radio to dispatch 893-2810 and inform them that you are 10-8 in service and 10-7 when finished and out of service. If contacting by radio, make sure they respond.

PRIMARY TROUBLE SPOTS

- Route 115/Mill Road
- Chases Hill
- Route 115/Route 231
- Flats on 115 near Yarmouth Line
- All of Route 231
- Route 9 Town Forest Area
- Old Town Hall Area
- Pine Grove Cemetery to Pownal Line
- North Road at Packard's Road turn
- Mill Road

The average turnaround time for all routes is three (3) hours, depending on the time of day and traffic volume.

PUBLIC EXPECTATIONS

Snow plowing and deicing operations have changed drastically over the past few years. Commuter traffic volume has increased in some areas as much as three times compared to past usage. Speeds have also increased regardless of posted speed limits. Today's modern lifestyle and faster pace create increased public demand for roadways to be kept in a constant state of readiness. Therefore, the need to

assess conditions, take decisive and quick appropriate action, and access the necessary materials, equipment, and the workforce are paramount.

LEVEL OF SERVICE

The service level is based on the current Best Management Practices manual on anti-icing/salt priority programs for the State of Maine.

The level of service and prioritization of roads is determined by the Select Board, Town Manager, Public Works Director, Road Commissioner, and the public and shall set traffic counts. Commuter times, road hazards, school bus routes, and emergency vehicles are all taken into account.

SAFETY IS TOP PRIORITY

September 29, 2008

November 29, 2016 - Amended

October 15, 2018 - Amended

March 19, 202 - Amended

October 25, 2020 - Amended