

WILLINGBORO TOWNSHIP DPW DEPARTMENT MANUAL

Category: Operations	CHAPTER NUMBER: 1
VOLUME TITLE: SNOW OPERATIONS	REFERENCE:
ISSUED BY: Director Richard Brevogel	# OF PAGES: 6
SUBJECT: Snow/Ice Removal Operations Plan	
EFFECTIVE DATE: February 2015	GENERAL ORDER # DPW:
LAST REVISED: February 2015	
APPLICABILITY: ALL DPW EMPLOYEES	ANNUAL REVIEW: As Needed
ACCREDITATION STANDARDS:	
This Written Directive developed for the Willingboro Township Public Works Department, and does not enlarge an officer's civil or criminal liability in any way. They should not be construed as the creation of a higher standard of safety or care in an evidentiary sense, with respect to third party claims.	

I. Mission

The mission of the Department of Public Works is to remove accumulations of snow and ice from the Township's road, municipal parking areas, and some designated sidewalks as rapidly and efficiently as possible. The safety and mobility of the community is of the utmost importance during any type of precipitation that may form ice and/or accumulating snow. The department must respond immediately to each storm and the varying storm condition that may occur throughout the winter season to first maintain public safety on the roads and as soon as possible to leave all other areas in an accessible condition.

II. Responsibilities:

The Department has responsibility for snow and ice removal from:

- 128 miles of Township roads and 22.1 miles of County Roads.
 - 42 of Township miles treated as primary/secondary collector routes.
 - 22.1 miles maintained under the County Inter Local Service Agreement
- 4 Municipal Parking Areas
 - JFK Center
 - Municipal Building
 - Rear of Building
 - Across the street
 - Library/Town Center
 - Maintained under a Service agreement with Delco
- Township Sidewalks
 - School Routes (4 miles)

III. Goals

The Department's goal is to remove a large portion of the accumulated snow and ice from its areas of responsibility. The removal will be of sufficient width and depth to allow the adequately prepared public to travel at reduced speeds throughout the town. Removal is accomplished by applying salt (assisted by a liquid deicer at low temperatures) at various rates to create traction and speed the melting process. When required, plowing is used to remove excess or large accumulations of snow and ice in conjunction with the salt treatment. The department does not attempt to achieve bare pavement during any storm. The practice is far too expensive and the large quantities of salt required would be detrimental to the environment and the township's infrastructure (curbs, sidewalks, road and bridges).

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Under most circumstances, a large storm 6"-8" will require the following time frames to reach the previously described goals **after the end of the precipitation.**

- Primary and Collector streets – 8 hours
- Secondary and Schools Routes – 12 hours
- Sidewalks (school Routes) – 8 hours

IV. Authorization

Snow removal is authorized by the Director of Public Works after consulting with the Duty Public Works Supervisor.

- Hazardous conditions are reported by the Willingboro Police Department and the Duty Supervisor is contacted by the County Dispatch.
- The Duty supervisor will use their judgment to determine the level of resources required to make roads passable and to balance the provided budget for this purpose. The decision is based on the established goals and mission of the department.
- The township ordinance requires residents to remove all vehicles from roadways with the anticipation of two (2) inches or more accumulations.

V. Department Organization

The Department officials, responsible for the administration, supervision, and coordination of snow and ice control:

- The Director of DPW is the official responsible for the oversight of the overall snow and ice control program.
- The DPW Duty Foreman is responsible for the initial plan regarding implementing snow removal operations
- The Department Supervisors under the Direction of the Director are responsible for the detailed planning, organizing , and coordinating operations.

VI. Resources

The Department of Public Works is located at 25 Industrial Drive, Willingboro NJ. Telephone number is 609-877-2200 ext 1051. The hours of Operation are 7am -3 Pm Mon- Friday and Saturday 7am-3pm for Recycling.

- The Department of Public Works resources available to the Department for snow and ice control are comprised of:
 - 28 Authorized DPW personnel (includes supervisory/administrative/truck drivers/mechanics/laborers and equipment operator)
 - 3 Building Maintenance Personnel
 - 5 Recreation and Parks Personnel
 - 30 pieces of DPW equipment
 - Dump Truck with Plows (26000 lb) 7
 - Light Duty trucks with Plows
 - F150 4x4 2
 - Medium Duty trucks with Plows
 - F250 4x4 8
 - Units with Liquid Deicer Tanks 2
 - Heavy Duty trucks with plows
 - F450 4x4 5
 - Small Pick ups with plow
 - Ranger 1
 - Front End Loader w/ push box 1
 - Back hoe w/ push box 1
 - Tractors 2

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- Skid Steer
 - Sidewalks 1
- Toro
 - Sidewalks 1

VII. **Concept of Operations:**

The Department's snow and ice operations are divided into four different phases.

- The **preparation phase** includes the following areas of preparation.
 - Pre- Winter DPW equipment maintenance repairs and overall planning beginning in September.
 - Employee training, route designations (employees) and stockpiles of materials are completed in October and November based on budget availability.
 - Supervisory personnel monitor weather forecasts and conditions from November to mid-April.
- The **Readiness phase** is activated when weather indicators warn of impending precipitation that may form ice and/or snow. Plans are developed based on the forecasted conditions and are adjusted as required.
 - Supervisory personnel review the various forecasts for precipitation start time, duration, and amount. Based on these indicators and local conditions, an opening operational strategy is formed.
 - DPW personnel and other supporting departments are notified of the impending conditions and equipment is checked for readiness.
 - During off duty hours, usually in the late evening and early morning hours, a snow and ice watch maybe required due to the uncertainty of the start of precipitation. In addition, police may notify DPW personnel when snow and ice conditions begin to occur.
- The **Control Phase** is activated as precipitation begins or as conditions warrant. During this phase various levels of response may be required.
 - **Level One:** Salt crews are dispatched to apply salt on the primary and collector streets. These roads will receive constant attention throughout the storm. Secondary or residential streets and municipal parking areas are evaluated and if required, salt and/or deicing materials are applied as the precipitation ends. In some case scenarios this may commence without any precipitation present for the sole purpose of pre-treating roads for a more effective response.
 - **Level Two:** When it becomes evident through local conditions and up-dated weather forecasts that accumulating snow will be occur and potentially require plowing, DPW personnel are dispatched to those areas that essential to be plowed including the sidewalk maintenance at the municipal complex, JFK center and township buildings. As the storm ends and plowing is completed, sand and salt is applied to the affected areas as deemed necessary. The township will plow the roads in a "Curb to Curb" fashion to facilitate opening the road completely and to allow for storm water infrastructure to be accessible for melting snow and avoid flooding. Decisions to plow interior streets are determined based on many variables including and not limited to predicated temperatures, future weather forecasts, budgetary constraints, equipment availability, personal and public safety.
 - **Level Three:** Addresses storms (blizzards) that exceed the available department and outside resources. During this level, the Department's primary goal will be to keep major thoroughfares open for emergency vehicles. If an emergency is declared at the state level the Township OEM office will open and coordinate efforts with County and State OEM offices. Communication and coordination with other township agencies and departments is continually maintained. Every possible resource available to the department is used to stabilize the condition and return the areas of responsibility to the established goals.
- The **Cleanup Phase** is activated as the control phase nears completion.
 - Miscellaneous salting and plowing duties are performed by DPW employees as required.
 - If required, sidewalk plowing begins with an emphasis on (School Routes and Township Buildings).
 - If required, as determined by the township manager, excessive accumulations of snow are removed from those areas.
 - Catch basin and storm systems clearing to prevent flooding during snow and ice thaw.

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VIII. Interaction with Town Agencies / Public

For the Department's plan to be successful, coordination and communication with other agencies and the public is of the utmost importance.

- During any snow and ice operation
 - Police and fire operation requesting assistance timely response by the DPW equipment.
 - Public requests for assistance are reviewed by supervisory personnel for authenticity, type of response required and priority.
 - When weather conditions dictate the closing of the municipal buildings or other facilities, the town manager will be notified, through the Director, of road and parking lot conditions by 5am or as soon as reasonable prior to the scheduled openings for this decision. The Supervisor of Building and Grounds for the Willingboro School District is advised of the present road conditions prior to school opening.
 - Updated road/storm conditions and the department's progress in the operation are reported to the public and news media upon request.
- During Severe Storms
 - When plowing is slowed or curtailed due to low visibility progress will be slowed and goals reached in a longer timeframe.
 - Any agencies having four wheel drive vehicles will assist in the effort to maintain public safety and mobility.
 - When an emergency is declared by the town manager or his/her designee the Emergency Operations Plan will take effect.

IX. Public (resident) Information

- **Driveways**
 - While we try to minimize the amount of snow that gets plowed into the driveways it is unavoidable. Clearing driveways openings is the responsibility of the property owner.
 - Plow blades cannot be lifted as they pass by a driveway
 - Snow will be plowed into driveways as we perform curb to curb plowing.
 - You may wish to clear your driveway several times during the storm or wait until the storm and plowing activities have ended.
 - Shoveling, plowing or snow blowing snow back into the street when clearing driveways and sidewalks is prohibited by township ordinance.
- **Street Parking**
 - Parking on Streets in anticipation of a snow storm of greater than 2" inches is prohibited by **Ordinance 13-2.7**. *This requirement does not establish the minimum amount of snow required to begin plowing operations. These decisions are made on a storm to storm basis.*
 - The Department will make an "All Call" and post information on the township website in anticipation of a storm.

The Department will, as weather conditions dictate, alter its plan of attack for a specific storm when the public interest and safety are better served.

NO TWO STORMS ARE THE SAME.....

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Salt Routes For Truck #74

Primary Routes

M.L. King Dr.
Levitt Pkwy.
Garfield Dr.
Genesee Ln
Gabriel Ln.
Evergreen Dr.
Eastbrook LN.
East River Dr.
Harrison Dr.

Secondary Routes

Nottingham Dr.
Holbrook Ln.
East Gate Ln.
Echo Ln.
Elsin Ln
East Stokes Rd.
Gallant Ln.
Gallaway Ln.
Glenview Ln.
Merribrook Cir.
Somerset Dr.
Summitt Turn
Sedgewick Ln.

Salt Routes For Truck #75

Primary Routes

Industrial Dr.
Iron Side Ct.
Rancocas Rd.
Fire House Ran. and Garfield Dr.
Windover Ln.
Club House Dr.
Crestview Dr.
Tyler Dr.
Twin Hills Dr.
Tiffany Ln.

Secondary Routes

Rose St.
Pine St.
Windsor Ln.
Country Club Rd.
Tallwood Ln.
Twig Ln.
Tweedstone Ln.
Traynor Ln.
Trinity Turn

Salt Routes For Truck #76

Primary Routes

JFK Way
Fire House JFK and Charleston
JFK Jug Handles
Pennypacker Dr.
Millbrook Dr.
Complex
JFK Center
Pinafore Ln.
Pageant Ln.

Secondary Routes

Primrose Ln.
Pinetree Ln.
Plumtree Ln.
Pheasant Ln.
Post Ln.
Mosshill Ln.
Marshall Ln.
Midvale Ln.
Melborne Ln.
Messenger Ln.
Middlebury Ln.
Millstone Ln.

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Salt Routes For Truck #77

Primary Routes

Rockland Dr.
South Sunset Rd.
Sunset Rd.
Fire House on Sunset
Sidney Ln.
Charleston Rd.
Van Sciver Pkwy

Secondary Routes

Rittenhouse Dr.
Northampton Dr.
Newell Pass
New Castle Ln.
Hampshire Ln.
Hawthorne Ln.
Hopewell Ln.
Buckingham Dr.
Brooklawn Dr.
Babbit Ln.
Bradford Ln.
Brewster Ln.
Birchwood Ln.
Barnwell Ln.
Sharon Turn
Sheffield Dr.
Southampton Dr.
Fairmont Dr.