

LOWER SAUCON TOWNSHIP

SNOW REMOVAL POLICY

PURPOSE

To provide winter highway safety to the traveling public through the removal of ice and snow from Township roads in the most efficient and effective manner.

DISCLAIMER

The Township reserves the right to deviate from this policy at any time due to weather conditions, manpower shortages, material shortages, equipment failure, CDL restrictions, or any other unforeseen problem.

SCOPE

There are approximately 87 miles of Township maintained roads, and approximately 30.23 miles of State maintained roads in Lower Saucon Township. The Township Public Works Department does not remove snow on State maintained roads for liability reasons. Roads that are state maintained are:

- Route 378
- Route 412
- Lower Saucon Road between Easton Road and Williams Township Line
- Seidersville Road from Hickory Hill Road west to the Salisbury Twp Line
- Easton Road from Cherry Lane to Williams Township Line
- Riverside Drive between Shimersville and Redington Roads
- Friedensville Road between Bingen Road and Hellertown Line
- Hickory Hill Road between Seidersville and Friedensville Roads
- Applebutter Road between Lower Saucon and Shimersville Roads
- Bingen Road between Black River and Friedensville Roads
- Black River Road between 378 and Bingen Road
- Redington Road between Lower Saucon Road and Riverside Drive
- Flint Hill Road between 412 and Springfield Township Line

PERSONNEL

The Township Department of Public Works is staffed by nine (9) full-time employees under the supervision of a Roadmaster and Director of Public Works. Eight of the nine employees are Class A Commercial Driver Licensed (CDL) operators and are subject to random drug and alcohol testing and by law are only permitted to drive 12 hours at a time with a mandatory 8-hour break. Multiple snowstorms can cause problems with these CDL restrictions on driving hours in which case the

Township Manager can declare a Snow Emergency in order to allow the employees additional driving hours.

TRAINING:

Public Works employees have completed a snow removal operations training session held by PennDOT's Local Technical Assistance Program (LTAP). At the beginning of the snow season every employee is instructed in the proper operation of their assigned vehicle along with the attachments such as the snow plow and cinder spreader.

EQUIPMENT

The Department of Public Works utilizes the following equipment for snow removal operations:

- (4) 64,000 gross vehicle weight (GVW) ten wheel dump trucks that are equipped with a cinder spreaders and 11' snow plows.
- (3) single axle 39,000 GVW dump trucks equipped with a cinder spreaders and 11' snow plows.
- (2) 17,500 GVW and 2-11,000 GVW dump trucks equipped with a cinder spreader and 8'6" to 9' snow plows.

PLANNING

Planning for winter snow operations includes the following:

- **Defining cinder/plow routes within each area:** At the beginning of the snow season the Director of Public Works and the Roadmaster review the available equipment and manpower to insure the plow routes are comparable to one another to insure the most efficient use of the Township workforce.
- **Preseason scouting of potential problem spots:** After the plow/cinder route reviews have been completed the Public Works employees are assigned a plow and cinder route and given the time to make a dry run to inspect their areas for obstacles as well as problem areas such as high manholes/water caps/inlet boxes etc. All obstacles in each area are either marked with delineators or, if possible, eliminated or removed. At the completion of the dry run a meeting is held to determine in-house mutual aid between both the employees of the Public Works Department as well as the Lower Saucon Authority and surrounding community's Public Works Departments.
- **Equipment:** Every piece of snow operations equipment is inspected and serviced at the onset of the inclement weather season. This service includes an oil change, lube, filter change, attachment fitting, adjustment and calibration. Due to the corrosive nature of sodium chloride the trucks are kept unloaded and washed until either a snow event is predicted or we receive a call from the Township Police Department that they are needed.

MATERIALS USED

- **Types and amounts:** There are three basic materials that are used to deice and provide traction:

1. **PennDOT type anti-skid stone material.** Anti-skid is used to help provide traction during a snow event. Anti-skid cost is from \$8.00 to \$12.00 per ton.
 2. **Sodium Chloride (salt).** Sodium chloride is mixed with the anti-skid material at a 50/50 rate and is the primary melting agent utilized by the Public Works Department. Salt will melt snow and ice down to a temperature of about 15 degrees Fahrenheit. Sodium chloride cost is \$41.49 per ton.
 3. **Calcium Chloride.** Calcium chloride is added to the anti-skid/sodium chloride mixture when the temperature drops below 15 degrees Fahrenheit as it will melt snow and ice down to 50 degrees below zero. Calcium chloride cost is \$380.00 per ton.
- **Storage:** The Township winter mix storage shed is capable of storing approximately 1000 tons of material. Typically we store about 250 tons of straight sodium chloride and 750 tons of the 50/50 mix of anti-skid and sodium chloride. The calcium chloride is stored in 100 pound moisture proof bags and added if needed. Calcium chloride is a water attractant and if left in the open will quickly get hard and unusable. The storage shed is turned (mixed) at the beginning of the season to break up any lumps and is restocked by a loader/backhoe throughout the season as needed.

CALL OUT

During normal working hours if a snow event is anticipated, Public Works will have trucks loaded and will keep an eye on the current road conditions. After hours, Public Works relies on the Township Police Department for notification in the event of poor road conditions due to adverse weather. Public Works employees are on call 24/7 year round for all events and are provided with a cell phone so they can be contacted at any time. After a call out there is about a 1 ½ hour response time for Public Works employees to get to the Township garage, get the trucks out and loaded, and get to their assigned areas.

PLOWING PROCEDURES

The appropriate snow removal method employed is dependent on several factors:

- **Types of snow events:** Ice, sleet, dry snow, wet snow, snow followed by ice, ice followed by snow, snow with high winds, snow followed by high winds etc. are some of the different types of events that dictate the method the Public Works Department will use to best fight a event to clear the roads as safely and quickly as possible. For example, if it is predicted that a event will start out as snow but end as freezing rain they would chemically treat the roads but hold off on plowing because by leaving the snow with the deicing and anti-skid agents the roads will be slushy but passable when the freezing rain comes, as opposed to removing the snow and the roads turning to solid ice.
- **Anticipated accumulation:** With amounts up to 2” to 3” the Public Works Department will chemically treat the roads without plowing. Over 3” they will first chemically treat the roads to keep the traffic from hard packing the snow turning it to ice, then plow all of the roads, and finally chemically treat the roads to completely remove the residual.

- **Temperature:** If the temperature is above and expected to remain above 15 degrees Fahrenheit, the Public Works Department will use the 50/50 combination of anti-skid and sodium chloride and if it is colder they will add the calcium chloride with increasing concentrations as the temperature drops.
- **Duration:** The easiest event to clear is one that occurs very fast, drops its total load quickly then clears up. In this type of event, the Public Works Department will plow every road once. When they have a long term event they will concentrate on keeping the main roads open and when the snow ends will perform a final plow/cinder operation on every road.

Township roads are plowed using the following procedure:

- The main goal throughout a snow event is to keep every road in the Township open. With this goal in mind, during a snow event every road will be kept plowed one pass in each direction. After a snow event has completed dumping its total snow load, the goal is to open every road curb-to-curb or shoulder-to-shoulder. One of the challenging factors is that every road in each area is not the same width. We have roads in the Township as narrow as 14' all the way up to 35'. Roads up to 19' in width are plowed in two passes (one in each direction going with traffic). Roads over 19' require multiple passes in each direction.
- The speed at which the plows travel will depend greatly on the type and amount of snow, traffic conditions and type of area, but the typical plow speed is from 3 to 7 mph.
- During cindering operations, the trucks will travel up to 15 mph
- Cul-de-sacs are difficult to clear to everyone's satisfaction. No snow will be left or piled in the centers of the bulbs unless there is an island. Snowplows do not have the ability to lift and carry snow from one area to another. The driver will push the snow up and over curbs wherever open areas exist between driveways, fire hydrants and mailboxes.

DAMAGE TO PROPERTY

Township Property

- ♦ Curbs/Berms/Pavement: During snow removal, curbs, berms and pavement can be inadvertently damaged. If this damage is observed by the Snow Plow operator, the Roadmaster is notified of the location and the damage is repaired in the early spring. In addition, the Public Works Department annually inspects each Township road to locate and document any deficiencies such as these for future repair.

Private Property

- **Torn Sod:** If the property is properly marked and the Public Works Department tears the sod the Public Works Department will repair it. If there are no markers, the Township will not repair any minor damage.

Markers should be at least 3' in height, made from a flexible type material and be reflective. Markers should be installed 12" from the edge of pavement or, in areas with concrete curbing, at the edge of the curb. Markers should be spaced at 50' intervals.

- **Mailboxes:** By State law the only time the Township is held accountable for damage to a mailbox is if some part of the plow or vehicle actually hits it. The Township is **not** responsible for damage to mailboxes caused by snowplows since mailboxes are erected on the right-of-way at the property owner's risk. Mailboxes should be placed as far from the right-of-way as possible and still permit access by mail carriers. Mailboxes should be placed on a "firm support." PennDOT offers the following suggestions to help reduce the possibility of a mailbox being damaged by routine winter maintenance operations:

PennDOT Suggestions to Reduce the Possibility of Mailbox Damage

- Homeowners should make sure their mailbox is firmly supported and placed as far beyond the shoulder of the highway as the postal carrier can reach.
- Place a 6 to 8 inch piece of reflective tape on the mailbox to help snowplow operators see the mailbox at night.
- Remove snow from around the mailbox, but avoid throwing snow back on the roadway.
- If the mailbox is located within the legal right of way and damage was experienced in the past, you may want to consider relocating your mailbox.
- Homeowners can also consider installing a cantilevered mailbox support that will swing out of harms way.

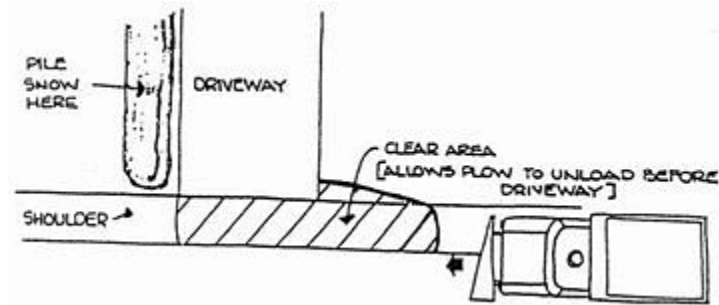
Plans for building the cantilevered mailbox support can be obtained from a PennDOT county maintenance office. 1-800-FIX-Road.

Procedure for Mailbox Damage Claims

1. If it is believed that a mailbox was struck by a Township plow vehicle the Director of Public Works should be contacted.
2. The Director of Public Works will visit the site and try to determine (by both visual as well as talking with the operator involved) if the mailbox was actually hit.
3. If the Director of Public Works determines the mailbox was hit he will contact the Township insurance carrier and notify the home owner to repair/replace the mailbox and send all costs along with a copy of his home owner's insurance policy to the Township's insurance carrier.
4. If after viewing the site and talking with the operator, the Director of Public Works does not believe the mailbox was hit by the plow or vehicle he will notify the resident that it is their responsibility to repair/replace the mailbox.
5. If the resident does not agree with this determination, the Director of Public Works will complete an action form and send it to the Township insurance carrier for their review. (see attached action form)

RESIDENT PARTICIPATION

Proper driveway plowing techniques: If you cannot wait until the roads have been plowed and want to minimize the amount of snow that the road crew truck puts in your driveway, then clear an area to the left of your driveway as you face the street. By doing this the snow plow will unload into this area instead of your driveway. The accompanying diagram shows how to clear snow from your property.



Never throw, blow or plow snow from your driveway onto the roadway.

Remember--do not shovel snow from driveways into the roadway. This practice is illegal under the state motor vehicle code and is also hazardous. The Pennsylvania Motor Vehicle Code provides for a maximum fine of \$300.00 for this violation.

Clearing snow from fire hydrants.

If there is a fire hydrant near your property, please take a few minutes to clear the snow away from the hydrant. Having the hydrant visible and accessible will save valuable seconds in the event that our volunteer firefighters must respond to an emergency incident in your neighborhood.