

Village of Oak Park SNOW PLAN

2010 - 2011

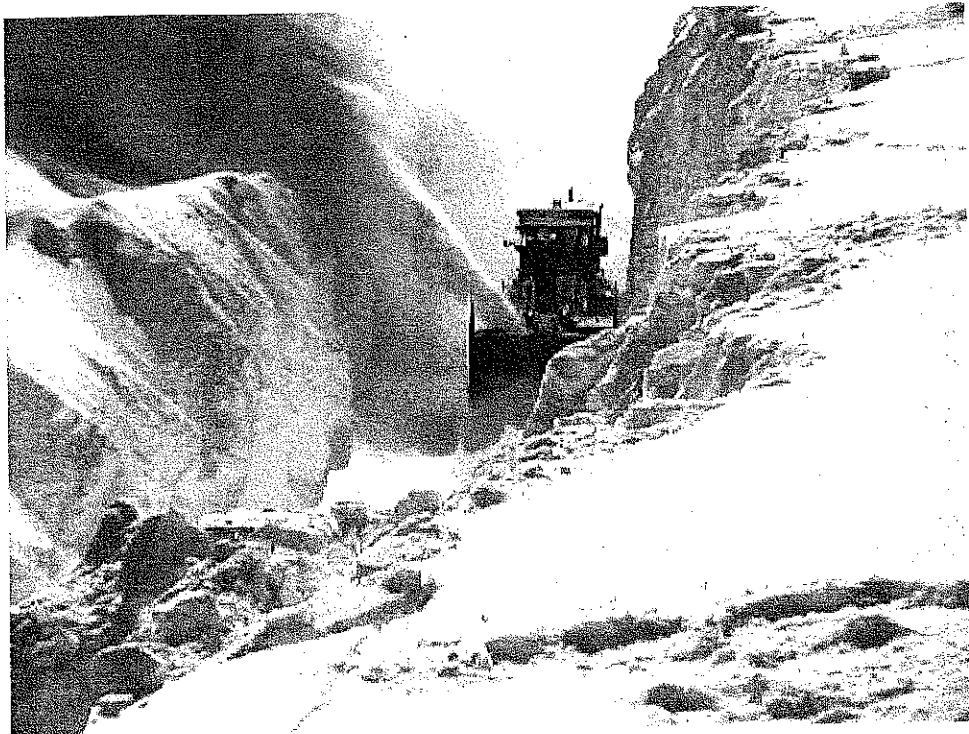


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Introduction

Winter weather can be a challenge in the effort to provide services to the community. In northern climates, snow and ice events pose a serious safety risk and can cause major disruptions to the economy of the community. The function of the Snow and Ice Response Team in Public Works is to ensure preparedness and to maintain or re-establish safe conditions to all streets, alleys and sidewalks that are maintained by the Village. Winter storm incidents can strike at any time of the day or night and each storm is unique in its delivery of precipitation. The uniqueness of each winter storm demands a strategic and flexible response by Public Works. Such things as storm intensity, rate of accumulation, timing, wind speed and temperature must be considered when making decisions on how to respond to a storm. This Incident Action Plan for Snow and Ice Response is designed to be a guideline for storm management and a directory of resources to combat the elements.

Program Purpose and Key Performance Indicators

The primary purpose of the Incident Action Plan for Snow and Ice Response is to maintain and restore safe driving conditions following winter storms.

Two Key Performance Indicators (KPI) for snow and ice response are:

1. Within eight (8) hours following the end of all snow and/or ice events all main streets are cleared to wet pavement conditions.
2. 100% of all snow and/or ice events are plowed curb to curb within twenty-four (24) hours following the end of the event.

I. Snow and Ice Response Task Force and Incident Command

The Village of Oak Park's Incident Command Center and Incident Command Post for snow and ice response are based at the Public Works Center at 201 South Blvd. To contact Incident Command call, 708-358-5721 or radio Base 1. Equipment, salt and other resources are stored at the Public Works Center.

The Public Works Director shall act as the Operations Sections Chief and will develop and manage the Operations Section to accomplish the Incident Objectives established by the Incident Commander. The Operations Sections Chief is normally the person with the greatest technical and tactical expertise in dealing with the problem at hand.

The Superintendent of Streets is the Incident Commander (IC) during snow and ice events and is responsible for organizing and implementing the Incident Action Plan for the Village of Oak Park. If the Superintendent of Streets is not available, the Streets Supervisor shall act as the Incident Commander. If the Streets Supervisor is not available, the Operations Sections Chief (Public Works Director) shall designate an alternate Incident Commander.

During the winter season, the Incident Commander will be responsible for monitoring weather conditions and alerting the Incident Management Team (comprised of Public Works Superintendents and Supervisors) and General Staff (Incident Management Personnel) assigned to the Snow and Ice Response Task Force that the Incident Action Plan is to be implemented.

- A. The Incident Management Team and General Staff from all Public Works divisions will be assigned specific assignments consistent with the Incident Objectives. Incident Objectives shall be established by the Incident Commander to select appropriate strategies and define the tactical direction of available resources and units.
- B. General Staff assigned to a snow route will be provided a map of the assigned locations. When General Staff completes the Initial Action, they are expected to report to the Incident Commander for additional assignments.

II. Weather Warnings

The key to any successful Snow and Ice Response is to be prepared in advance for the predicted conditions that are about to occur and remain flexible to mitigate any unexpected conditions that arise. The Incident Commander will monitor weather forecasts and will provide an update of expected conditions. The Incident Commander will also advise the Incident Management Team and General Staff on what level of response is appropriate for the predicted event.

The Incident Commander will generally have knowledge of an approaching snow and ice event several days in advance. When the event is imminent, weather warnings and parking restriction information will be distributed from the Incident Command Center to the Police and Fire Departments, Village Manager's office, the Village Clerk's office, the Community Services Department and to all Public Works Divisions. This is typically done by fax or e-mail notification. *Appendix E lists FAX numbers to other Village Departments that should receive notifications.*

Parking restriction information, as well as other weather warning reports, can be found at the following location on the Village network:

U: /Public Works/Snow Plan 10-11

** See Appendices D and L for examples of weather reports and parking enforcement/restriction information.*

To stay aware of current and future weather, the Department of Public Works subscribes to private meteorological forecasting services to provide weather warnings via telephone, pager and fax twenty-four hours a day, seven days a week. These services provide daily weather forecasts, advanced storm warnings and frequent storm updates:

The Department of Public Works also monitors public weather outlets such as the Weather Channel and local media forecasts. The public weather outlets provide a comparison to the contracted private services and assist the Incident Commander in interpreting the coming event.

With this information, the Incident Commander will alert the Incident Management Team and General Staff to implement the Incident Action Plan.

Although every effort is made to be alert and respond to winter weather events proactively, there are times that snow and ice events occur with limited or no notice. The Oak Park Police Department also provides monitoring of the road surface conditions and will advise Public Works of hazardous situations.

III. Winter Storm Operations

Snow and Ice Response generally consist of numerous Operational Periods. Each Operational Period has its own level of complexity and requires the Incident Management Team to closely monitor conditions and General Staff performance. Operational Periods are generally divided into the following stages.

1. **Alerting General Staff:** Based on the projected start time of precipitation, every effort will be made to alert General Staff before snow falls. If the storm is anticipated to start during critical travel times, General Staff will be alerted and pre-positioned to create a more rapid response time.
2. **Pre-storm Equipment / Resource Check:** Hours prior to a storm, General Staff will check all equipment and resources to be used during the storm. Last minute repairs and adjustments will be made to ensure all equipment is operational and properly calibrated.
3. **Managing the Storm:** As the storm begins and precipitation accumulates, General Staff is mobilized to begin the Initial Action responding to the storm. The objective in this stage is to maintain safe road conditions for the duration of the storm. Salting begins immediately as snow begins falling and plowing occurs as soon as accumulations reach approximately 2". Plowing and salting operations will continue as the snow falls in an effort to mitigate the overall accumulations on road surfaces. Ultimately, safe travel passage will mean clean pavement through the travel lanes.
4. **Operational Periods:** Winter storms will, by their nature, vary in intensity and duration. General Staff schedules are based on union agreements. Extended storms may necessitate the Incident Commander to schedule General Staff to work a maximum of 16

hours depending on available personnel, storm intensity and duration. By moving to an on-off work shift, the health and safety of the General Staff will be assured. Rotation of shifts will last as long as required to complete all phases of the Snow and Ice Response.

5. **Clean Up:** Once the snow has stopped and the storm has ended, General Staff will shift from Snow and Ice Response to a Clean Up Response. The objective of the Clean Up Response is to ensure that all streets are plowed curb to curb, all cul-de-sacs are cleaned, sidewalks are cleaned and passable, and alleys have been plowed if necessary. The Clean Up Response may take a number of days to complete. Generally, during an average snow fall of 4”, Clean up Response could take 24 hours after the storm has ended because of the on street parking restrictions.

IV. **Snow and Ice Truck Route Descriptions**

All areas (*from the busiest streets in the Village to the crosswalks staffed by a crossing guard*) maintained by the Village of Oak Park have been assigned to a route. Staffing of the routes will vary from storm to storm.

1. **Truck Routes:** There are ten (10) truck routes in the Village. The truck routes cover three (3) main thoroughfare sections, six (6) residential sections and one (1) miscellaneous section. The miscellaneous section includes our brick streets and Marion Street; this area will be plowed using rubber blades and the utmost caution.

All truck routes will be staffed simultaneously to provide maximum coverage for winter weather events.

2. **Trackless Route:** The trackless route is for outlying priority school/pedestrian access areas, including ‘L stops’ over I-290 (bridge decks).
3. **Alley Routes:** There are three (3) alley routes that require plowing. Alley routes are supplemented by additional available units and resources.

4. School Crosswalk Routes: There are several school crosswalk/school crossing routes. These are areas where school children cross major roads and are protected by a crossing guard. *Appendix H lists all school crosswalks and has a map of crosswalk locations.*

V. Incident Action Plan for Snow and Ice Response and Staffing

1. **Salting Operations**: Salting is usually the first stage of response and continues “as needed” throughout the snowfall. Salt Trucks are dispatched as soon as icing conditions materialize. Frequently, salting and minimal plowing is all that is required for Initial Action. Initially, ten (10) spreader trucks are mobilized to all major streets, arterials, overpasses and residential streets. Additional General Staff is mobilized to respond to school crosswalks and trackless routes

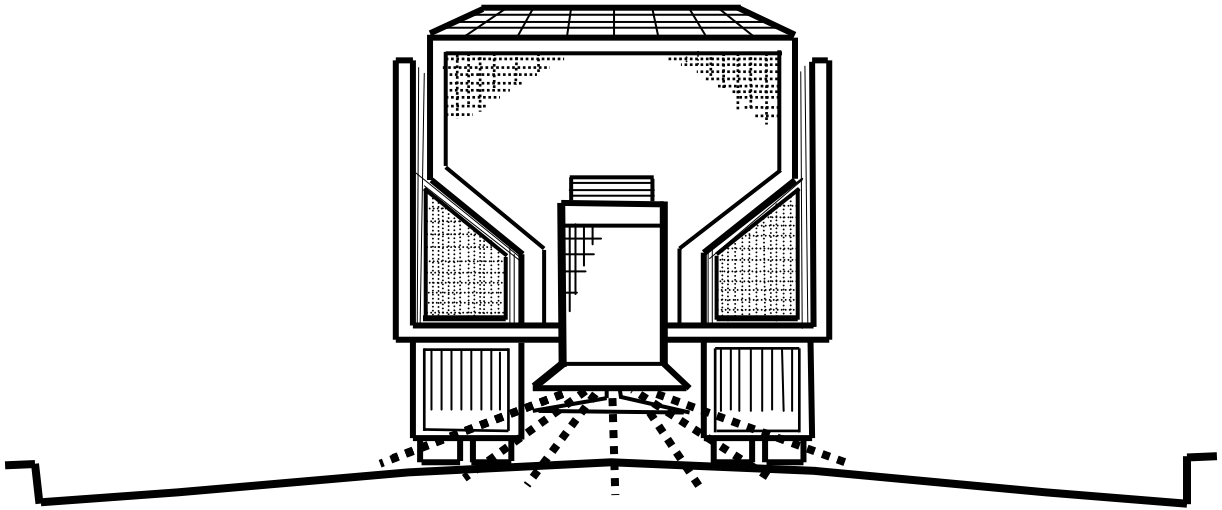
A pre-wetting agent is added to the salt to increase effectiveness at lower temperatures. The Incident Commander and/or the Incident Management Team will advise General Staff if any changes are required in the spreader settings.

In a salting operation, The Incident Commander will dispatch nine (9) trucks into nine (9) routes, one (1) truck into misc. section which includes the brick streets and Marion Street, one (1) trackless unit to clear sidewalks and bridge deck sidewalks, and one (1) holder unit to salt school crosswalks.

The following illustrations detail the salting and school crosswalk operations.

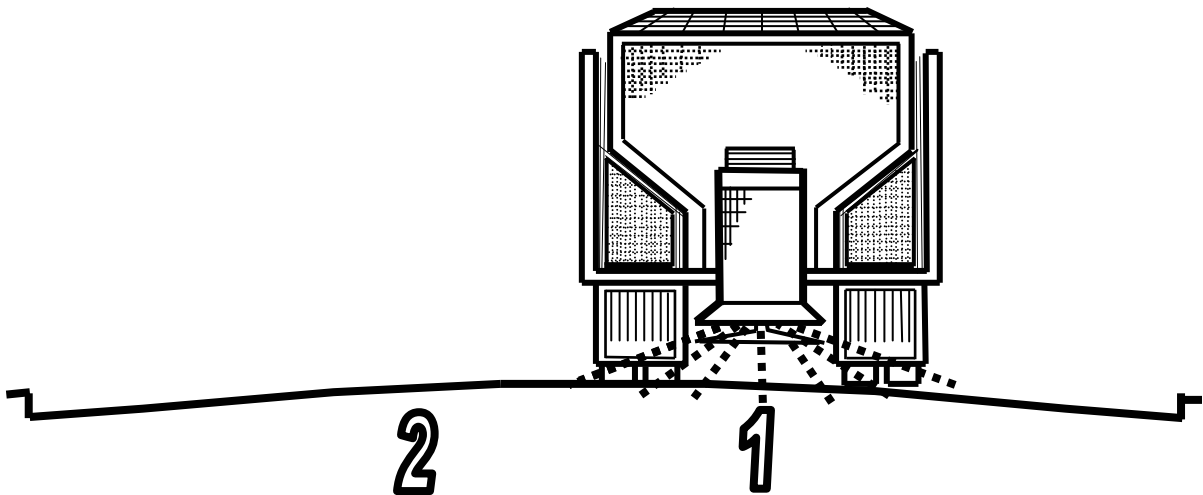
Salting Only Events

Residential Streets:



One pass is to be made on east/west and north/south residential streets. Spread salt in middle of street on top of the crown so salt brine will flow down both sides to curbs. Adjust spreader speed so salt is thrown just wider than the width of the truck.

Main Streets:



One pass shall be made in each direction in traffic lanes as close to the center line as possible to allow full coverage of crown so salt brine will flow down to curbs. Adjust spreader flaps up to allow salt to be thrown wider than one traffic lane when needed such as when right turn or left turn only lanes are present. Four lane streets such as Madison, Harlem, and North Ave may need a second pass in certain conditions.

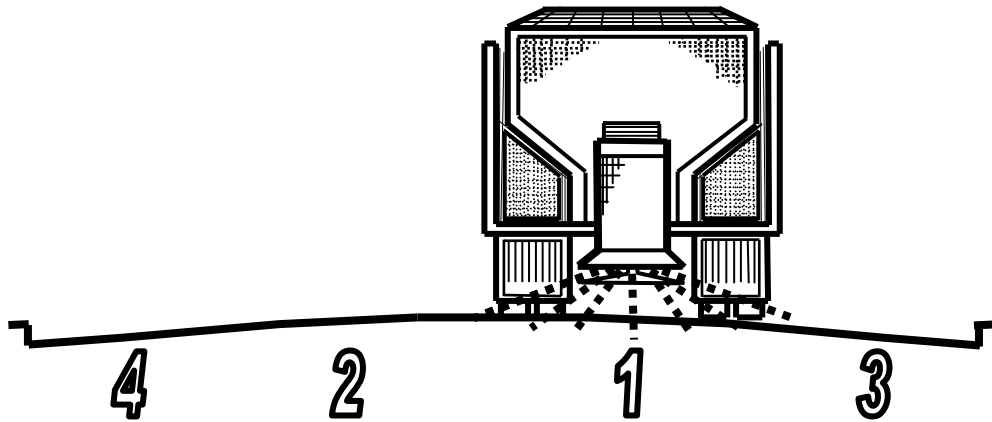
2. **Plowing Operations:** Snow plowing is the second highest level of response to a winter storm. Plowing snow is necessary whenever snowfall accumulations are expected to be more than two (2) inches. Plowing snow is the method used to mechanically remove accumulations of snow and ice from road surfaces. The Village of Oak Park has fifteen (15) large dump trucks, seven (7) small dump trucks, and sixteen (16) pick up trucks to remove snow from streets. The Village also uses three (3) large front end loaders, two (2) skidsteer loaders, three (3) specialized machines one (1) walk behind snow broom and six (6) snow blowers to remove snow from alleys and sidewalks.

Different levels of equipment and staffing are used for different intensities of storms to plow snow.

- A. **Level I Plowing:** A storm that has a snowfall range between 2” – 4”.
In the Chicago area, this is the most common type of snow event.
During Level I plowing operations, the Incident Commander will dispatch trucks to ten (10) routes throughout the Village. The Incident Commander will also dispatch one (1) trackless unit for sidewalks and one (1) holder unit to clear school crosswalks. Depending on the weather forecast alleys may be plowed.
- B. **Level II Plowing:** A storm that has a snowfall range between 5” –12”.
During Level II plowing operations, the Incident Commander will dispatch thirteen (13) trucks to ten (10) routes throughout the Village. The three mains would be plowed in tandem, the six residential routes and misc. route 10 would have one truck each assigned. As the storm concludes and main routes are cleared curb to curb, General Staff assigned to the three main routes will assist in the residential sections and tandem plow. The Incident Commander will also dispatch one (1) trackless unit for sidewalks, three (3) snow plows for the alleys and one (1) holder unit to clear school crosswalks.
- C. **Level III Plowing:** This category storm rarely occurs in the Chicago area and has a snowfall range of 12”+. During a Level III plowing operation, the Incident Commander will dispatch nineteen (19) trucks to ten (10) routes. General Staff will perform tandem plowing in each route except misc. route 10. The Incident Commander will also dispatch two (2) trackless units for sidewalks, three (3) snow plows to plow alleys and three (3) units (holder and 2 men w/snow blower) to clear school crosswalks.

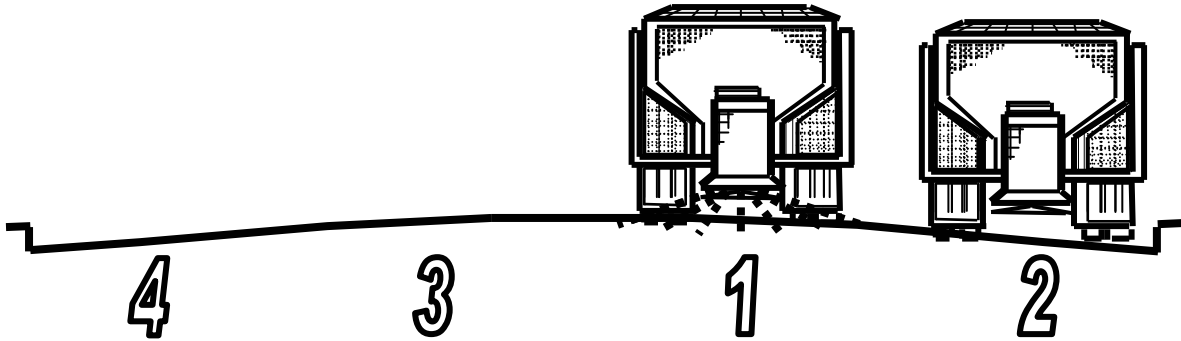
Plowing Events

Residential Streets (single truck):



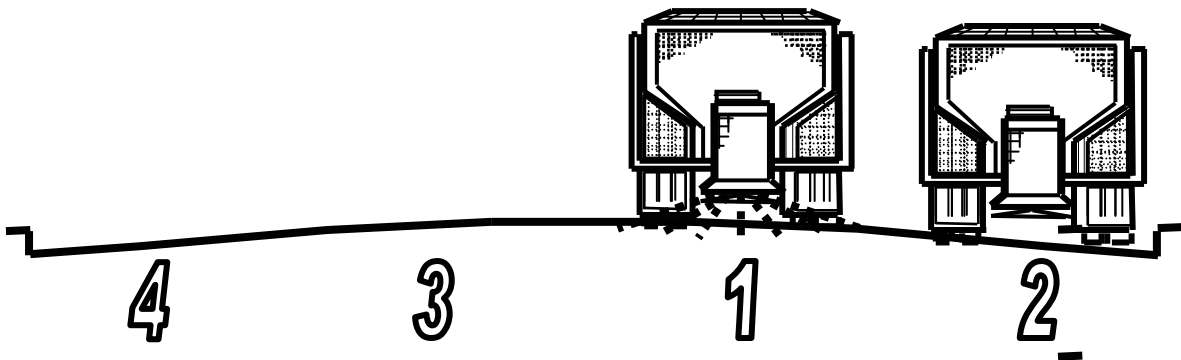
Four passes shall be made. Drive as close to center of street as possible while staying to one side of the top of the crown. Adjust spreader speed so salt is thrown no wider than the plow width while making first two passes. No salt shall be spread while making passes three and four (curb cuts). On some streets a fifth and a sixth pass may be necessary.

Residential Streets (tandem plowing):



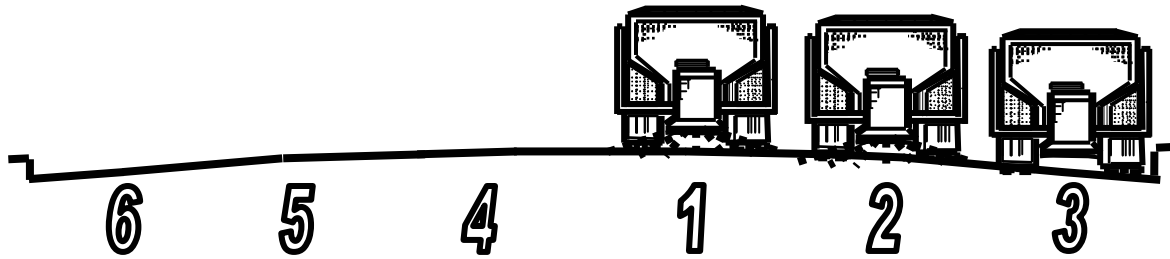
Four passes shall be made using trucks working in tandem. Truck # 1 shall make the first and third passes and spread salt as specified above, while Truck # 2 shall make the second and fourth passes without spreading salt. As mentioned above some streets may need a fifth and sixth pass. In cases such as this, the trucks will split up to do the remaining curb cuts.

Main Streets (tandem plowing):



Four passes shall be made on main streets using trucks working in tandem. Truck # 1 shall make the first and third passes and spread salt, while Truck # 2 shall make the second and fourth passes without spreading salt. Some streets will need a fifth and sixth pass. In cases such as this, the trucks should split up to do the remaining curb cuts.

Four Traffic Lane Main Streets:



The above configuration will be utilized for streets such as Madison, Harlem, and North Ave. When the need arises, trucks from different main routes will band together in groups of three to plow and salt the wider four traffic lane streets in the Village of Oak Park. The lead truck will plow lanes 1 and 4 while spreading salt no wider than its plow. The following truck will plow lane 2 and 5 and, depending on conditions, will also spread salt no wider than its plow. The last truck will plow the curb lane and will not spread salt. If the need arises, this configuration can also be used to clear snow on two traffic lane main streets where there are No Left Turn lanes etc.

Note: There will be times when no salt will be spread. Operators should periodically get in touch with Snow Command as conditions change to get direction.

- 3. Public Sidewalk Snow Removal and Enforcement:** By Village Ordinance any owner, occupant, lessee or person otherwise legally in possession of any lot or parcel in the Village shall remove and clear away, or cause to be removed or cleared away, all snow and ice on the public sidewalk fronting or abutting any such lot or parcel within 24 hours after the cessation of any fall of snow, sleet, or freezing rains. After the 24 hours has passed the Village will send its Enforcement Officer out to follow up on complaint of non compliance with this ordinance. The Village's Housing and Building and Property Standards Departments are drafting a letter to all vacant and foreclosed properties on their list reminding them that they are still responsible for the upkeep of their properties and compliance with this Ordinance. Warnings and tickets could be issued if the Ordinance has not been followed.

The Village has a contractor to help with limited assistance to residents who are physically and financially unable to remove snow from public sidewalks following a winter storm. Participant must register and phone in after each snow event if they need assistance. Staff then sends out a contractor to clear those areas. *See Appendix P for ordinance and Enforcement memo.*

VI. Parking Restrictions

The Incident Commander will coordinate with the Police Department Watch Commanders Office (358-5537) and follow the Snow Parking Ban Policy on when we are going to start to enforce the Snow Parking Restrictions. Village ordinance defines Emergency Snow Parking with the following restrictions (*see Appendix L for Snow Parking Ban Policy and additional information*):

- There shall be no parking on posted snow routes when there is an accumulation of two inches or more of snow.
- There shall be no parking on alternate sides of most streets between 8:00a.m. and 10:00p.m. after two inches of snow.
- In posted commercial areas, there shall be no parking on alternate sides between 12:00a.m. and 8:00a.m.

VII. Snow Hauling

When accumulations warrant it, snow will be hauled away from business districts, parking lots, intersections or any other location in the Village. Annually, a contractor is retained to assist Public Works in hauling snow. Snow is hauled out of the Village to a predetermined location.

VIII. Marion Street Sidewalks

Marion Street Sidewalks have snow sensors that must be cleaned of snow after each snow event. The Street Lighting Division will check these sensors periodically throughout the duration of a storm and ensure that they are cleared at the conclusion of each storm. *See appendix J for location of sensors.*

IX. Snow and Ice Materials

The Village of Oak Park purchases salt through competitive bidding and/or a joint purchasing program through the State of Illinois. Additional vendors are also identified to potentially provide more salt if the primary supplier should run short. *See Appendix K for information on snow and ice response materials and the joint purchasing program.*

The Village of Oak Park actively pursues procurement of environmentally-friendly snow and ice control materials. Appendix K also provides information on where to obtain such materials, along with the costs associated with purchasing the material. The following environmentally-friendly products are currently being used:

Roadways

- Road salt purchased from Cargill in 2010/2011
- Salt Brine/Calcium Chloride – a pre-wetter of salt.
- Route 10 (Brick Streets) uses salt covered with GS-30

Salt is stored at the Public Works Center in our new state of the art salt silo. The salt silo holds 1,000 tons of salt. It is loaded into trucks by a front end loader.

Salt Brine/Calcium Chloride is stored in two (2) 5000 gallon tanks located at our Pump Station at 129 Lake St. Salt Brine/Calcium Chloride is pumped from the tank into individual tanks on each plow truck.

Pre-wetting is a procedure used with salt spreaders whereby salt brine/calcium chloride is sprayed onto the rock salt as the salt hits the spinner. The moistened salt acts as a catalyst to activate the melting characteristics at lower temperatures, and the moisture enables the salt particles to adhere to the pavement increasing placement accuracy.

Appendix O includes a policy for the Salt Storage Silo and Salt Conveyor System Inspection program. This policy outlines the procedure for maintenance and inspection of the Village Salt Storage facility.

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Sidewalks

- Eco Salt – in bags

Eco Salt is purchased in bags of 50 lbs and stored at the Public Works Center and is used on sidewalks adjacent to Village Owned properties and sidewalks as part of the “trackless routes”. *Appendix Q shows a list of Village Owned properties.*

X. Snow Hotline

In an effort to maintain communication with the public, a snow hotline was established. The hotline provides a current message during snow events when snow parking restrictions are in effect. Residents may call 708-358-7669 (SNOW), 24 hours a day or check local VOP6 for scrolling updates. *(See appendix M for directions on changing hotline messages and scrolling updates)*

XI. Training

To prepare General Staff for each snow season, various training sessions are conducted in-house and through outside agencies. The mission of training is to ensure that the Incident Management Team, General Staff, and all resources and units understand their roles and are comfortable and effective in carrying out the Incident Objectives.

XII. Record Keeping

It is the responsibility of the Incident Commander and the Incident Management Team to maintain all records of snow events and the Village’s response to each event. The purposes of record keeping are to ensure quality control, track General Staff and resources used, and maintain fiscal accountability. *Samples of record keeping forms are in Appendix N*

OPERATOR AWARENESS – Plowing/Salting Safety Instructions SAFETY GUIDELINES FOR PLOWING SNOW

Trucks:

1. Check fuel, oil, lights, tires, windshield wipers, fluid levels, defrosters, horn, side mirrors, spreader before leaving the building. A two-way radio check should be done with Snow Command as you leave the building.
2. When filling salt trucks, **DO NOT OVERFILL SALT SPREADERS**. If salt is spilling over the sides of the truck, it is **OVERFULL**. Before leaving the building remove excess salt from the top of the spreader.
3. When you come in for a break or to reload your salt, if it is needed, hose off your headlights and other lights for better visibility. Do a quick walk-around to make sure all lights are operating properly and there are no other problems with your truck.

Snow Plow:

1. Check plow blade – have Fleet correct any plow problems you observe.
2. Check for missing and loose plow bolts.
3. Check to see if plow wheels are adjusted properly.
4. Operate the plow – make sure it is functioning properly – raise it and lower it.

Plowing/Salting Assignments:

1. Pick up and briefly review your assigned section route map – ask Supervisor to answer any questions you may have.
2. Check with snow command for any trip hazards in your section. Be aware of any high manholes, concrete islands, etc. in your assigned plowing area.

Plowing Operation:

1. Use your headlights, warning lights, strobe lights etc. – make yourself visible.
2. Plow at a safe speed, usually 10 – 15 mph. The type of street, the amount of traffic and the depth of the snow will dictate your speed.
3. **KEEP A SAFE DISTANCE FROM OTHER MOTORISTS.**

4. From time to time look back and see if you are plowing the streets properly. If something looks wrong, pull over and check your plow.
5. Always be alert for stalled or parked cars, cars backing out of driveways and people walking in the street.
6. Obey all traffic laws.
7. Be ready to stop or turn at any time in the event of sliding or fishtailing cars.
8. NEVER attempt to push or pull a private vehicle with your truck.
9. DO NOT operate any equipment while under the influence of drugs or alcohol. Public Work's employees holding CDL's are subject to random, reasonable suspicion, and post-accident follow-up drug and alcohol testing.
10. Call in private companies plowing, pushing and stacking snow on Village streets.
11. When you are plowing you are to make 2 passes on all streets then return to plow curb to curb. This will make all streets passable before opening up the entire street.
12. At the end of the plowing operation, truck interiors shall be cleaned of all food wrappers, cups, cans and other trash.

Plowing Etiquette:

1. Notify supervisors of all accidents and disabled motorists.
2. DO NOT intentionally push or pack snow against parked cars.
3. DO NOT intentionally plow snow onto sidewalks.
4. Slow Down – do not hit pedestrians with flying snow.
5. Be COURTEOUS to all motorists and pedestrians – do not get into verbal altercations with anyone!
6. DO NOT use private property to turn around.
7. Be extra alert when backing out of a dead end street.

Please sign below that you have been given and read the above OPERATOR AWARENESS – PLOWING/SALTING SAFETY INSTRUCTIONS.

PRINTED NAME

SIGNATURE

DATE