

# VILLAGE OF DOWNERS GROVE

## SNOW REMOVAL AND ICE CONTROL POLICY

### 2012/2013

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#### I. GOALS OF THE PROGRAM

The primary goal of the Village's snow removal and ice control program is to maintain safe travel routes during and following snowstorms, as well as to restore mobility for the traveling public within a reasonable time frame following cessation of storm conditions. To accomplish this goal, the Public Works fleet is equipped with plows and computerized salt spreaders. Personnel are trained in the use of snow removal and salting equipment to ensure efficiency.

#### II. PROGRAM OBJECTIVES

The main objective of the program is to provide for an organized response and uniform standard of maintenance that enables reasonably safe travel during winter storms while minimizing environmental impacts to the extent practicable on Village streets, Village parking lots and downtown business district sidewalks. Snow removal is one of the most visible activities provided by the Village of Downers Grove, affects virtually every household, resident and visitor, and is essential for safe and continued vehicular and pedestrian movement throughout the community.

**A. TARGET LEVEL OF SERVICE:** The target level of service is bare pavement. It is defined as "all driving lanes clear of snow and ice between the outer edges of the wheel paths and less than 1 inch of accumulation on the center of the roadway." The effectiveness of rock salt on Priority 3 roadways is very limited by the low traffic volume on those streets. Priority 3 roadways will be kept passable, and if possible, bare pavement. The ultimate goal is still completely clear roadways.

**B. ROADWAYS:** Different targets for attaining bare pavement are established according to Average Daily Traffic volumes (ADT).

Priority 1 Primary roadways are roadways with the highest traffic volume, roadways adjacent to schools, and roadways leading to Good Samaritan Hospital. Priority 1 streets have an average daily traffic of 2,000 to 10,000 cars, with a few as high as 20,000 cars. These are roadways generally considered arterial and collector roadways.

Priority 2 All other secondary roadways with average daily traffic of 200 to 1,999 cars.

Priority 3 Cul-de-sacs and dead-ends with average daily traffic of less than 200 cars. Staff will begin work to complete all Priority 3 areas as

operations continue on Priority 2 areas with a goal of completing all priority areas as early as possible.

1. The bare lane target for the most heavily traveled roads (Priority 1 and Priority 2 roadways) is within twelve (12) hours after the storm's completion.
2. The bare lane target for the least heavily traveled roads (Priority 3 cul-de-sacs and dead-ends) is within eighteen (18) hours after the storm's completion.

During and after the storm's completion, some streets may become snow packed as a result of wind and drifting conditions, and vehicular traffic over unplowed roads. All attempts will be made to reduce snow pack situations. Snow accumulations that impair a motorist's sight distance will be monitored and addressed as needed.

- C. DOWNTOWN SIDEWALKS AND STATION PLATFORMS:** The bare surface target for all downtown business district sidewalks and train station platforms (Main St. and Fairview Ave.) is within eight (8) hours after the storm's completion. When storm events occur during business hours, clearing operations may be slower due to a high number of pedestrians and vehicular traffic. Metra is responsible for clearing the train station platform at the Belmont Road station.
- D. CIVIC CENTER:** Plowing of the Police Department parking area shall be coordinated between the Police Sergeant and Public Works Snow Supervisors on duty as several Police vehicles need to be relocated prior to the Police parking being plowed. This area may be plowed with the assistance of Building Services personnel weekdays between 7:00 a.m. and Midnight. Of historical note, the area of most concern is the driving lanes in the lower Police Department parking area. Plow drivers assigned to this plow route shall make a pass through the driving lanes while clearing Priority 1 roadways to salt and plow until a complete plowing can be scheduled.
- E. FIRE STATIONS:** Parking lots for Fire Stations 1, 2, 3 and 5 shall be completely plowed in conjunction with Priority 3 roadways. Plow drivers whose routes include these station sites shall plow a travel lane while clearing Priority 1 roadways.
- F. PARKING LOTS/DECK:** All Village parking lots and the downtown parking deck will be plowed during the first available night shift following a storm event. Operations may be adjusted if the storm cleanup occurs on a weekend or holiday.
- G. WINDROWS AND LARGE SNOW PILES:** All windrows and large piles of snow in parking lots and the downtown parking deck will be removed beginning with

the first available night shift following a storm. This process may require several nights.

- H. SCHOOL CROSSWALKS WITH CROSSING GUARDS:** In recognition of difficulties experienced following heavy snowfalls, the Village will assist with clearing school crossings when snowfalls are greater than four (4) inches in depth. This assistance becomes available as Public Works personnel and equipment finish clearing public streets, Village parking lots and downtown business district sidewalk areas.

The following is a list of the school crosswalks with crossing guards:

Prairie and Belmont	Parrish and Venard	39 <sup>th</sup> and Highland
Oakwood and Grant	Oakwood and Prairie	Main and Franklin
Prairie and Highland	Prairie and Douglas	Lincoln and Fairview
Hill and Fairview	Hill and Blodgett	Dunham & Jefferson
59 <sup>th</sup> and Blodgett	Norfolk and Powell	Dunham and Palmer
6800 Fairmount	Florence & Indianapolis	Jefferson & Hillcrest
Seeley and Grant		

- I. ALLEYS:** The Village does not plow or salt any alley rights-of-way outside of the Central Business District.
- J. ROADWAYS MAINTAINED BY OTHERS:** State and County roadways, and unincorporated areas serviced by the Townships are the sole responsibility of State, County, or Township agencies. Assistance due to emergency conditions may occur on a case-by-case basis.

### **III. SNOW REMOVAL AND ICE CONTROL RESPONSIBILITY**

The responsibility for providing snow removal and ice control for the Village's 167 centerline miles of streets, 333 cul-de-sacs and dead-ends, sidewalks and parking lots in 2 business districts, sidewalks and parking lots at 3 commuter rail areas, and several Village-owned building complexes and the associated parking lots rests entirely with the Department of Public Works. Snow and ice control is considered emergency work in that streets must be cleared any time of the day or night. Because of the potential hazard to the motoring public and high incidence of overtime involved in this program, careful planning and preparation must be done prior to the snow and ice season. This planning process is made considerably more difficult due to the variable conditions encountered during each storm. Such things as the rate of accumulation of snowfall, moisture content, temperature, time of day or night, wind direction, velocity and duration are all factors that interact to create a unique aspect for each storm with the result that no two storms are ever identical.

#### IV. PERSONNEL

##### A. POSTED SNOW TEAMS AND SCHEDULES:

1. **TEAM LIST:** The team list includes assigned supervisors, route drivers, the downtown crew and backup employees.
2. **TEAM SCHEDULE:** The team schedule covers the period from October 29, 2012 to the week of April 8, 2013.

**B. ADDITIONAL EMPLOYEES:** The Supervisors shall maintain a current list of additional employees who are available for snow removal and ice control duties. Public Works employees not assigned to a snow team shall be asked first, and the list shall be posted on the Public Works Bulletin board.

**C. FIRST RESPONSE EQUIPMENT ASSIGNMENTS:** Once called in, employees will be assigned work areas and equipment. If a full team is present and available, route drivers will be assigned their normal route and truck, and downtown personnel will be assigned equipment for the downtown. If personnel shortages occur due to scheduled vacations, illnesses or other leaves of absence, some personnel from the downtown crew may be assigned to routes. Backup employees from Engineering will be used as necessary.

#### V. EQUIPMENT AND RESOURCES

**A. ROUTE TRUCKS:** Front-line vehicles for snow and ice removal are kept ready for any storm event and include 5-ton and 10-ton trucks. Several backup trucks are kept in case of truck breakdowns and for other emergencies. All front line trucks have plows that are 11' wide.

**B. CUL-DE-SACS, DEAD ENDS, AND PARKING LOTS:** Vehicles for plowing cul-de-sacs, dead ends, and parking lots include 1-ton trucks with 8' wide plows, three rubber tired loaders with plows and a backhoe with a plow.

**C. DOWNTOWN SIDEWALKS AND TRAIN STATION PLATFORMS:** Machines for downtown sidewalks and platforms are narrower for the tighter spaces in the downtown and station platforms.

**D. EQUIPMENT RENTALS:** Additional equipment may be needed to handle the removal of large snow piles and windrows. Equipment rental quotations are obtained annually from companies that can supply skid steer loaders with buckets, rubber-tire end loaders, and tractor-trailer dump trucks. Of historical note, tractor-trailer dump trucks along with operators have facilitated the removal of large snow piles and windrows from the downtown.

**E. CONTRACT PLOWING:** If it is advantageous for the Village to contract for snow removal in a subdivision, the Village will consider contracting with the

subdivision's service for snow removal in the right-of-way of that subdivision. In these subdivisions, contractual plowing occurs when snowfalls exceed 2 inches. Currently, there are seven subdivisions: Mistwood (Mistwood and Braemoor), Villas of Bending Oaks (Durand, Tamarack, Aspen, Chase), Chesapeake (Ashbury, Baybury, Canterbury), Kensington & Springside (either side Prentiss from Springside to Woodward), Hidden Pines, Townhomes of Belmont Woods, and Villas of Maple Woods.

- F. ROAD SALT:** The Village has a storage dome facility at the Public Works Building (5101 Walnut Avenue) that can hold approximately 2,500 tons of road salt. Road salt is purchased through a State of Illinois Joint Purchasing contract with an annual Village commitment. An additional 800-1,000 tons can be stored under a roof with tarps next to the Fleet Services Facility.
- G. LIQUID DEICING MATERIAL:** The Village has the capability to store about 20,000 gallons of liquid for pre-wetting of salt. For 2012-13 this liquid will be Geomelt which when added to salt, improves the melting of snow and ice at temperatures below 20 degrees Fahrenheit.
- H. ICE MELT:** The Village has the capability of storing sufficient quantities of de-icing product for the downtown sidewalks.
- I. ANTI-ICING LIQUID:** The Village has the capability of storing sufficient quantities of anti-icing liquid for pre-treating downtown sidewalks.

## VI. SNOW ROUTES, SALTING, PLOWING SNOW AND ICE THRESHOLDS

- A. ROUTES, MAPS AND CHECKLISTS:** Village roadways are divided into 10 routes. Color maps are printed, laminated, and stored in binders at the Public Works facility for staff use. All cul-de-sacs and dead-ends are numbered and checklists are printed for staff use. The following table lists the mileage and number of cul-de-sacs and dead-ends in each route.

Route	Total (Centerline) Miles	Priority 1 (Centerline) Miles	Cul-de-sacs Dead-ends	Truck
1	13.482	6.718	20	10-ton
2	15.157	6.262	56	5-ton
3	19.463	4.030	21	10-ton
4	20.367	8.466	23	10-ton
5	16.193	5.779	12	5-ton
6	18.044	5.396	47	5-ton
7	20.640	8.236	37	10-ton
8	15.646	4.998	66	10-ton
9	15.292	5.891	38	10-ton
10	12.649	6.397	13	5-ton
Total	166.933	62.173	333	

- B. SALTING:** Under normal conditions, salting alone may be sufficient to melt 1" to 1.5" of snow on all Priority 1, Priority 2, and Priority 3 roadways. Salt spreaders are calibrated for specific pounds per lane mile and will be set such that minimal salt will bounce from the roadway onto the parkway vegetation and trees.
- C. PLOWING THRESHOLD:** Plowing will occur when the accumulation of snow on streets exceeds one and a half inches (1.5") to two inches (2.0"), or as determined by Supervisors on duty. Salting of these areas will follow as needed. Snow will be pushed to curbs and drainage inlets uncovered. Bare pavement will be maintained on all Priority 1 roadways. Priority 2 roadways will be plowed after Priority 1 roadways are clear, then Priority 3. During the plowing and clearing of cul-de-sacs, no snow will be left or piled in the centers of the bulbs unless there is an island. Snow will push up and over curbs wherever open areas exist between driveways, fire hydrants and mailboxes. Plowing requires all front line 5-ton and 10-ton trucks, and then all 1-ton trucks and front end loaders to complete cul-de-sacs and dead-ends. Plowing may require 4 to 5 passes on a two-way roadway. Heavy snowfalls may require more than 5 passes.
- D. ICE CONTROL THRESHOLD:** Salting shall occur whenever there are icy conditions. All Priority 1, Priority 2 and Priority 3 roadways shall be salted to eliminate the icy condition. The on-duty Supervisors will determine timing and duration of ice control procedures.

## VII. DOWNTOWN SIDEWALKS, STATION PLATFORMS, PARKING LOTS

- A. DOWNTOWN SIDEWALK AND PLATFORM CONSIDERATIONS:** Operations within the downtown and on the train station platforms will strive to achieve safe pedestrian and vehicular passage, while balancing the application of de-icing products and physical removal of snow. For clarification, the train station platforms that the Village is responsible for clearing are at the Main Street station and Fairview Avenue station (hereinafter referred to as the “train station platforms”); whereas the Belmont station platform is kept clear by Metra. Due to more pedestrians, tighter spaces, and planted vegetation, practices are designed to limit the negative impact of winter snow removal operations while providing the best service possible.
- B. PRE-STORM TREATMENTS:** All designated downtown sidewalks within the Special Service Area, train station platforms and the parking deck will receive anti-icing liquid applications throughout the winter season whenever practical. The material being applied will help prevent snow and ice from sticking to the surface.
- C. SNOW AND ICE REMOVAL:** Snow accumulations on downtown sidewalks and train station platforms shall be physically removed with a broom, plow or blower on the compact articulated tractors. This may result in some snow being left along a building front or around a light pole due to the size of the machine. Snow will be pushed to the curb whenever possible. Any remaining piles of snow along curb edges or tight locations may be pushed out later with walk-behind snow blowers and shovels. Following brooming or plowing of the walk areas, a light application of de-icing material may be applied. All downtown sidewalks and train station platforms will be treated with a de-icing material should icy conditions exist.
- D. PARKING LOTS/DECK:** Village parking lots will be cleared during the overnight hours. During other times of the day, driving lanes will be maintained open by either plowing or salting, with clearing of the parking stalls occurring during the overnight hours. Where accessible parking facilities exist throughout the Village, special attention will be given to not create any obstacles such as snow piles that would hinder the proper use of these spaces.
- E. WINDROWS AND LARGE SNOW PILES:** As snow accumulations exceed 2- 4 inches, a windrow in the street area of the downtown may become necessary to avoid placing additional snow back on the downtown sidewalks. During the formation of these windrows, all efforts will be made to keep access open to all drives off of the roadway. Large piles of snow may also be formed in parking lots as snow amounts exceed 2-4 inches. Removal of windrows and large snow piles will primarily occur at night (9 p.m. to 5 a.m.) when reduced vehicular and

pedestrian traffic allows this operation to occur more safely. Operations may be adjusted if the storm cleanup occurs on a weekend or holiday.

## VIII. WEATHER FORECASTING

- A. **PROFESSIONAL WEATHER FORECASTING SERVICE:** A key element in implementing an efficient snow and ice control program is receiving and acting on timely weather information. Accurate weather forecasting is imperative in deciding which of the various operational procedures will be initiated. An annual contract with a meteorological weather service shall be maintained to provide staff with forecasts and advance storm warnings. The service shall call the on-duty supervisor with a meteorological report and a printed copy shall be sent to the Public Works fax machine.
- B. **DTN WEATHER SERVICE:** In order to monitor the progress of storms, the Public Works facility has a DTN Weather Center. This system enables the Department to view various satellite maps including Doppler radar and check on future weather conditions in various time intervals.
- C. **OTHER:** It is recognized that forecasts will occasionally be in error and operational plans may change. Public Works personnel shall use a combination of reports from contracted weather services; media weather reports, online satellite data and personal experience to adapt snow removal operations to the current conditions.

## IX. STORM RESPONSE

- A. **PRE-STORM ACTIVITIES:** When indications are high that a winter storm event is going to occur, preparations will begin to address the approaching event. This will include, but is not limited to, checking weather service reports, and viewing on-site radar images and local news reports. Depending on the timing and anticipated strength of the pending storm, the team on the night shift may be sent home to rest, equipment may be loaded with salt, plows may be attached to trucks, all fuel tanks will be filled to capacity, and some roadways may be pre-salted. Trucks may be sent out on the roads to monitor changing conditions and to contact the Supervisors as instructed.
- B. **STORM RESPONSE:** The on-duty Supervisor assigns personnel, equipment, and salting rates based on the type of storm. Employees called in for snow duty shall complete a minimum of one salting of their entire route. Route drivers and downtown personnel shall contact an on-duty Snow Supervisor at regular three-hour intervals, and at any time prior to leaving their assigned route or the downtown to ensure safety and monitor progress. For example, the night shift beginning at 7:00 p.m. shall contact an on-duty supervisor at 10:00 p.m., 1:00 a.m. and 4:00 a.m. Salting, plowing, and ice control activities progress as stated previously, and teams rotate as needed until the storm event has finished and all

salting, plowing and ice control activities have been completed and the goals of the Snow Program have been met.

- C. POST-STORM ACTIVITIES:** Employees involved in snow removal shall be responsible for fully fueling vehicles and equipment at the end of their respective shift.

All 5 and 10 ton plow trucks shall receive a post storm mechanical inspection from the Fleet Services Division following plowing operations. This inspection shall be scheduled by the Fleet Services Manager.

The day shift staff on-duty following a storm event shall be responsible for thoroughly cleaning snow removal vehicles and equipment. Trucks and equipment shall be steam cleaned with the pressure washer in the wash bay at the Public Works Facility. Dump bodies shall be raised and the sub-frame of the body and chassis frame rails, spinners and spreaders shall be free of salt and other deicing material. Vehicle interiors shall be cleaned of all wrappers, cups and other garbage. Seats and dash boards shall be wiped down and interior cab floors shall be vacuumed. Windows shall be cleaned inside and out. Employees shall be released to their normal work detail following an inspection completed and approved by the on-duty Supervisor overseeing post-storm activities.

- D. “NO PARKING” ENFORCEMENT:** In order for the Public Works Department to plow streets efficiently, it is critical that parking be prohibited on streets when snowfalls exceed three inches. It is also critical that such parking prohibitions be rigidly enforced. At the present time, Chapter 19 of the Municipal Code reads as follows:

**19-9. Emergency during snow storm—When to exist.**

An emergency is declared to exist within the Village whenever snow falls to a depth of three inches or more during any period of twenty-four hours or less. Such emergency shall continue to exist for a period of forty-eight hours or until such earlier time as snowplowing and removal operations have been declared completed by the Director of Public Works. (Ord. No. 843, § 13.)

**19-10. Same—Illegal parking of vehicles.**

During a snow emergency it shall be unlawful for any person to park or cause to be parked any vehicle of any kind or description on any public parking lot or any street between the hours of 9:00 P.M. and 6:00 A.M., except as specified under Section 19-11; provided, that vehicles may be stopped not longer than five minutes for loading or unloading of passengers or thirty minutes for loading or unloading of materials at all places where such parking is otherwise permitted. (Ord. No. 843, § 13; Ord. No. 1137, § 1.)

The Police Department shall be requested to make every effort to strictly enforce

the above Sections.

- E. PRIVATE SNOW PLOWERS:** The depositing of snow from private property onto streets is strictly prohibited. At the present time, Chapter 19 of the Municipal Code reads as follows:

**19-21.1. Depositing of snow on the paved portion of streets prohibited.**

It shall be unlawful for any person, other than authorized Village personnel, to:

- a. Plow or otherwise remove snow or ice from private property and deposit the same on any Village street, sidewalk or right-of-way in such a manner as to decrease the drivable width on any such street, impede the normal routing of pedestrian traffic, or significantly hamper Village snow removal efforts.

- b. Plow or otherwise remove snow or ice from private property in such a way as to block the vision of motorists at any intersection, prevent parking at the curb or cover fire hydrants. (Ord. No. 2361, § 1.)

The Police Department shall be requested to make every effort to strictly enforce the above Section.

- F. RECORD KEEPING:** To document performance, ensure quality control, and monitor equipment and material usage, record keeping is essential. The on-duty supervisor will be responsible for beginning their shift by complying with the Public Works Department's Low Level Emergency Response Procedure. After every work shift, the on-duty supervisor will submit a post-event report.

**X. PROPERTY DAMAGE AND REPAIR**

- A. PARKWAYS:** Although all efforts are made to avoid any damage during snow and ice removal operations, it does, and will occur, with even the most cautious drivers. In cases where turf damage has resulted from the plow jumping the curb, all resulting restoration will be either seeded or hydro-seeded as soon as weather conditions allow in the spring. Under only extreme circumstances will parkway damage resulting from excessive salt be restored.

- B. MAILBOXES:** Mailboxes are occasionally damaged during snow removal operations. When possible, the box will be repaired in place. In cases of boxes knocked down by plow contact, Village staff will install a replacement box at the earliest possible time. Replacements will be the standard metal rural route box placed on a one & half (1 ½) inch tubular steel post, properly installed per US Postal and Village standards (8 inches from the back of curb and 40 inches high). This standard design will be used for all mailbox replacements. The Village cannot replace decorative mailboxes. A property owner who installs decorative materials on the parkway does so at their own risk. Boxes damaged as the result of snow rolling off of the plow will not be repaired. When noted staff will attempt

to notify residents if their mailboxes do not meet standards so that they may make corrections prior to the snow removal season.

## **XI. OTHER CONSIDERATIONS**

- A. EMERGENCIES:** In the event that a police, fire, or medical emergency requires snow removal assistance, such operations shall be given the highest priority. Such operations shall be directed through the on duty Supervisors.
- B. COORDINATION WITH OTHER PUBLIC WORKS ACTIVITIES:** It is recognized that snow removal is not the only function performed by the Public Works Department during the winter months. It has become commonplace to address snow removal operations simultaneously with repair of water main breaks. On duty Supervisors shall have the responsibility to prioritize work activities given weather conditions and availability of staff.
- C. ASSISTANCE TO PRIVATE PROPERTY OWNERS:** At no time during or after snow removal operations will Village vehicles be used to clear snow or ice from areas on private property, except where it can be shown that snow was disproportionately placed on private property, in exceptional circumstances of a life threatening nature, a medical necessity, or as may be directed by the Village Manager or Director of Public Works. Under no circumstances will a Village employee be allowed to use a Village owned vehicle to push, pull, or tow a stranded vehicle from a roadway or parking lot. The employee shall, if a hazardous condition exists, notify the Village Operations Center of the hazardous condition and provide all the needed information.
- D. RIDE ALONG PROGRAM:** Residents, officials, spouses and children are allowed to ride along in a snow plowing truck to observe operations. Forms are available at the Public Works office and must be completely filled out before anyone is allowed to ride along.
- E. MUTUAL AID:** Contacts with other municipalities are maintained in case of emergency.

## **XII. DEPARTURE FROM POLICY**

It is recognized that conditions may be so unusual or unexpected that a departure from these general guidelines may be authorized. When conditions warrant, the Supervisors, in consultation with the Director of Public Works, Assistant Directors of Public Works, Village Manager, Police Chief, or Fire Chief may order a departure from these general guidelines when, in their opinion, conditions require such action.