

CITY OF MONTPELIER
DEPARTMENT OF PUBLIC WORKS
WINTER OPERATIONS PLAN



2015-2016

Thomas J. McArdle, Director

General Information:

The City of Montpelier has approximately 52.5 miles of roads, about 26 miles of sidewalks and 1.6 miles of alternative transportation paths that must be maintained for all users during the winter season.

City parking lots are maintained by the Green Mount Cemetery staff and private contractors with services procured through a seasonal bid process. DPW staff is responsible for the application of de-icing materials and removal of accumulated snow in the storage areas.

The Street Division has 12 full time personnel and 1 seasonal employee who provide most of the winter operations for the City. The water/ sewer and equipment divisions provide support and assistance as well as replacement or supplemental staff as necessary to compliment the snow & ice fighting force to achieve the desired level of service.

The City receives weather condition updates on a contractual basis from Weathering Heights, Roger Hill, who provides up to date weather and forecasts to assist the Department with winter operations decisions. Other information is gathered via the internet at www.weather.gov, www.accuweather.com, www.intellicast.com and other web based weather forecasting agencies.

The Police Department provides assistance by inspecting the streets during off duty hours and calling out the Public Works Department when road conditions warrant. During the months where adverse weather conditions maybe present, there is a Public Works employee designated “on-call” 24 hours a day, 7 days a week.

Call out guidance is provided to the Police Department to minimize the response time and assist the call out person in making a decision prior to coming in. The officer or shift supervisor should provide all pertinent information as follows:

- Is the problem City wide or confined to a specific area or areas?
- What is the specific nature of the problem? Snow covered (# of inches of snowfall), icing – City wide or runoff related
- Debris- What is the condition? Is the road passable? What equipment is necessary to clean up the debris (loader, chain saw, etc?) Is there an officer on site?

Any information that the officer/ supervisor can give is extremely valuable in assisting the on-call personnel in making a decision on who, what, etc.

Operations:

The Department has established an overall plan to provide for clearing of roads and the plow is generally followed. There are 6 plow routes that are cleared by a

combination of large dump trucks and smaller dump trucks to improve efficiency. There are also 3 sidewalk plow routes that cover the entire area of the City.

Equipment

- 6 large dump trucks
- 5 small dump trucks
- Motor grader
- 1- 1 ton pick up trucks
- 2 loader mounted snowblowers
- 3 bucket loaders
- 3 sidewalk plows with a snowblowers and/ or reversible or v plows
- 1 skidsteer loader with plow and snowblower

Materials:

- Capabilities- Salt storage- 500 cubic yards
- Sand storage- 1,200 cubic yards

The City typically uses an average of 3,000 cubic yards of salt during the winter operations. Current prices are \$72.18/ ton compared to 58.73/ ton last season. The City contracts with 2 primary suppliers of salt, American Rock Salt (Trucked by Dubois Construction) and Cargill Salt (Trucked by Barretts) to provide salt when supplies are depleted. Sand costs approximately \$14/ cubic yard and is used to provide traction during icing conditions and for gravel road maintenance.

Snowplowing and Salting/ Sanding:

Plow and salt routes have been established to provide general areas of coverage for routine operations. Typically, 1 large dump truck and 1 small dump truck are assigned to each area so that the route can be completed as efficiently and affectively as possible. Each plow route takes approximately 3 ½ -4 hours to complete during a normal storm. There are 6 plow routes with 10 trucks available for the routes varying from large to small dump trucks.

Plow route priorities are hills, major routes (Class 1 and 2 highways) and intersections. These areas are the greatest concern because of the probability of accidents and the volume of traffic. Some of the flat residential streets are deemed lower priority as they are lower volume streets and have a lower probability of accidents.

Additionally, there are 3 sidewalk plow routes to maintain the sidewalk by plowing, blowing and salting/ sanding. Sidewalk plows are very slow moving and prone to breakdown due to their specialized design and makeup and are costly to purchase and maintain. This season, we will have a replacement sidewalk plow if there is an issue with a breakdown of one of the other pieces of equipment. It can also be used to assist during significant events where we receive freezing rain that makes sidewalks more difficult to

maintain and keep safe. We have not added additional employees to increase the number of sidewalk plows in operation on a consistent basis due to our necessary routes and current staffing.

Sidewalk priorities are the areas around the schools and the downtown, then branching out into the neighborhoods. Sidewalk routes for plowing take approximately 4 ½- 5 hours to complete, which increase significantly to approximately 8 or more hours when the sidewalks need to be blown in heavier storms and when snow has accumulated. Typically, the downtown is the only sidewalks that are maintained during the weekend and the remaining sidewalks are completed on Monday mornings to open the sidewalks around the school.

We will begin to reduce salt usage in low volume, flat areas to conserve supplies while attempting to maintain safe roadways. We will also continue to emphasize to our operators the importance of plowing the streets to remove the snow and utilizing the right amount of salt to keep the roads safe and not add to waste.

During evening hours between 10 pm and 3 am, staffing will be reduced to a minimum or no staffing will be available unless continuous heavy snowfall or ice storms hit and road conditions become hazardous.

Use of salt/ sand from Public Works Garage:

The primary material use for winter operations is rock salt. Rock salt is very expensive and therefore, the City prohibits the taking of road salt by residents and businesses.

Residences and businesses are expected to keep their own driveways, parking lots and walkways clear. The City does not have the equipment, labor or time to remove snow that is plowed onto driveways and walkways.

The City purchases sand for the use on City sidewalks and streets to improve traction in ice storms, etc. Sand is provided to residents at the Public Works Garage at a rate of 2- 5 gallon buckets per 24 hour period. Residents are required to check in with the Stock Records Clerk to verify residency prior to obtaining sand. Salt and melting agents are not available for the public use. Area merchants (hardware, grocery and general merchandise stores) should have supplies available for purchase.

Downtown Snow Removal:

There is little to no snow storage capabilities in the downtown, resulting in the need for snow removal operations after large storms. Snow removal operations occur primarily during nighttime hours due to parking issues, hauling issues and for the safety of the employees and the traveling public, although the Public Works Department has attempted to perform some areas during the day to keep costs for snow removal down. It is necessary to ensure roads, sidewalks and parking areas are open for travel/ use.

The City utilizes a snow removal plan which denotes 4 nights of operations following substantial snowstorms where accumulation causes issues for the downtown. It is critical that all vehicles are removed from the streets prior to 12:30 am so that the snow removal operations can be continued without significant hold ups. Vehicles on the streets after 1 am will be towed and the owner responsible for all costs incurred as a result of.

The snow removal operation consists of the City grader, loader mounted snowblower and City trucks to move the snow. Annually the City obtains hourly trucking costs from local contractors to haul snow to the snow dumps throughout the City. Contracting the hauling keeps repairs costs on our equipment down and allows our personnel to rest in case we receive additional storms requiring attention.

Continued Operations:

At times, it is essential to “wing back” snow banks from roadways, intersections, driveways to improve safety and visibility in those areas. This also allows for additional snow storage area for future storms and is a necessary part of winter operations.

Fire Hydrants are checked frequently for water and filled with antifreeze to avoid freezing and damaging the hydrants. Flags are placed on hydrants to show their location when snow banks become too high to protect them and make them visible. Following snow events, staff will remove the snow from the hydrant making them accessible if needed for firefighting capabilities.

A small number of water/ sewer employees are necessary to provide the staffing levels to perform winter operations on a normal basis. At times, additional water/ sewer employees will be called upon to conduct winter operations. This overlap of employees allows the Department to maintain safe roads without additional backup personnel.

Damages:

Title 19, Section 1111 prohibits encroachment of the right of way without consent of the municipality. Because of the number of damage complaints resulting from items placed within the right of way, the following have been established:

Objects in the right of way are placed there at the owners risk and the City assumes no responsibility for damage incurred as a result of winter operations including winging back snow banks. Common items are flower pots, recycling and trash containers, basketball hoops and fences, as well as some vehicles.

The City allows mailboxes to be placed within the highway right of way to enable rural delivery. The City maintains the right to control the height and location of mailboxes within the right of way and may require homeowners to move the box to a more suitable location. The post office has a typical detail of the height of a mailbox to ensure that mail can be delivered; it should also be adequately adjusted so that the wing of the plow truck can go under the mailbox without damaging it. Mailboxes that tip towards the road are prime candidates for being struck by a plow truck. Please ensure

that mailboxes are properly installed to ensure that City trucks can do their jobs and residents can receive their mail.

The City will pay a maximum of \$25 for the repair or replacement of a mailbox physically hit by the snow plow. Determination shall be made by cut marks on the box or from paint found from the plow blade. Snow coming off the plow blade can also damage or knock over mailboxes as well as private contractors and homeowners. The City is not responsible for repairing or replacing mailboxes damaged because of these situations.

Safety and protection:

To assist the City in its endeavors in winter operations and for the protection and safety of all, the following is essential:

- Snow shall not be plowed, blown or shoveled onto the City sidewalk or street.
- The parking ban must be respected and obeyed to allow City staff to perform their jobs effectively, efficiently and safely as possible. 1 vehicle left in the roadway during winter operations causes substantial issues in providing adequate and timely service.
- Placement of trash and recycling containers present a common and troublesome issue for sidewalk plows and snow plows as well as vehicles and pedestrians who utilize these areas. Please work with your trash hauler to ensure that the trash can be removed as well as the snow. Also remember, just because it isn't snowing, there maybe a need to maintain sidewalks due to icing in some locations and that containers on the sidewalk make it impossible for certain sidewalk users to pass with a stroller, walker or wheelchair.
- Children should be prevented from being allowed to build snow forts, castles, tunnels, etc in roadside snow banks. If a child is caught in a collapse or "winging back" of the banks occurs, the consequences could be dire.
- Snow plows and equipment must be respected. Given the height, width and visibility limitations of the vehicles and the unpredictability of winter operations, it is best to allow additional room to enable the operator to perform their duties safely and effectively.

Contact information:

Public Works Garage, normal hours of operation 7 am to 3:30 pm, Monday – Friday.
223-9510

Police Department – for problems noticed after normal work hours-
223-3445

Public Works Director- normal hours, 8 am until 4:30 pm, Monday – Friday
223-9508