



Snow and Ice Control Plan

City of Rochelle Snow and Ice Control Plan

Table of Contents

1. Snow and Ice Control Introduction and Purpose
2. Ordinance Requirements and Service Priorities
3. Storm Warning Notification and Personnel Mobilization
4. Snow and Ice Control Materials
5. Equipment Preparation and Calibration
6. Route Assignment and Driver Preparation
7. Loading Procedures
8. Spreading and Plowing Operations
9. Snow Hauling and Storage
10. Damages Due To Snow Operations
11. Contractual Services
12. Public Relations

Exhibits

- A. City Code Section 94-291 through 94-296
- B. City Code Section 94-297
- C. City Code Section 94-298 through 94-299
- D. City Code Section 94-411 through 94-413
- E. Organization Chart
- F. Equipment Inventory
- G. Snow and Ice Control Timeline
- H. Spreader Calibration Chart
- I. Winter Operation Report
- J. Anti-Icing Flow Chart
- K. Material Loading map
- L. Anti-Icing Route Map
- M. Salt Route Map
- N. Snow Route Map
- O. Downtown Operations
- P. Mailbox Damage from Snowplowing Policy

1. Snow and Ice Control Introduction and Purpose

The City of Rochelle Street Department Snow and Ice Control Plan establishes control methods and procedures that are designed to reduce threats to public safety in accordance with desired levels of service established by City administration. The purpose of this plan is to enable the Street Department to prepare for and accomplish the snow and ice control mission. The procedures established herein provide details pertaining to the personnel, equipment and materials to be used on city streets.

Winter snow and ice storms impact all city residents, businesses and institutions. The community health, safety and welfare is reliant upon the capabilities, skill and dedication of its staff to promptly and effectively keep local roadways reasonably safe for travel during and after storm events. The scope of the snow and ice control mission is briefly summarized below:

- The City of Rochelle has responsibility for approximately 160 lane miles of road, 13 miles of alleys, 54 cul-de-sacs and dead ends combined and 14 parking lots.
- The Rochelle Street Department has 8 full-time Class B Commercial Driver Licensed employees available; one employee comes over to assist from Lawnridge Cemetery. 12 plow-equipped trucks, 2 loaders, 1 backhoe and 2 skid steers.

The community is divided into 9 designated plow routes and 8 of the routes are assigned one large truck (2 large trucks have both front plows and side-mounted wing plows) 1 of the designated routes will use a small truck (Pick up or 1-ton).

The overall goals to be achieved through the use of this established plan are as follows:

- Provide standards and methods to be used to prepare city personnel for snow and ice control operations and to accomplish the mission during and after events.
- Establish personnel and equipment assignments, notification procedures and priority snow and ice control routes.
- Allow city officials to better understand the snow and ice control operations process.
- Provide services to ensure the safest roadway system possible given the resources at hand.
- Provide a level of service that is cost effective, fiscally and environmentally responsible.

Every winter storm seems to be different than the previous event. The variables of precipitation type (sleet, wet or fluffy flakes), temperature (air and surface; dropping or rising), time/type of day (day, night, weekend, rush hour), wind speed and direction, event duration and post-storm weather prediction all effect the manner and effectiveness of snow fighting. A plan may not be fully able to specifically address every contingency. Therefore, flexibility within the plan must account for variations with individual events.

2. Ordinance Requirements and Service Priorities

City Ordinances

Ordinances have been adopted as part of the Rochelle Municipal Code that regulate on-street parking and snow and ice control operations on City right-of-ways. The enforcement of these ordinances rests with the City of Rochelle Police Department. The pertinent City Code sections are as follows:

- City Code Section 94-291. through Section 94-296. TOWING OF ILLEGALLY PARKED VEHICLES (Exhibit A)
- City Code Section 94-297. DEPOSITING SNOW ON STREET OR SIDEWALK (Exhibit B)
- City Code Section 94-298. through 94-299. PENALTY. (Exhibit C)
- City Code Division 3. - SNOWMOBILES AND ALL TERRAIN VEHICLES Section 94-411. through 94-413. (Exhibit D)

The City of Rochelle Street Department is responsible for:

- Posting and maintaining signs advising the public of the snow event parking restrictions imposed by Code Section 94-291 through 94-295. Such signs shall be posted within the City right-of-way at key locations determined by the Superintendent of Streets and the Chief of Police in order to provide adequate notice to the traveling public.
- Notifying the Police Department of observed municipal code violations pertaining to and effecting efficient snow removal operations. This includes on street parking violations and unlawful deposits of snow onto any street, highway or sidewalk, whether by City residents, commercial owners or private contractors.

Service Priorities

Arterial Highways: The City of Rochelle is bisected by a number of State of Illinois and Ogle County arterial highways. These routes identified below, are **NOT** the responsibility of the City of Rochelle. The Street Department may assist these agencies in the course of on-going operations on a limited case-by-case basis; however, the Department is not staffed or equipped to provide continuous service on these highways.

State of Illinois (IDOT Oregon Maintenance Facility, 815-284-5478)

- IL Route 38 (east of North pointe St.)
- IL Route 38 (west of N.15th St.)
- IL Route 251 (South of Steward Rd.)
- IL Route 251(north of Flagg Rd.)

Ogle County (Highway Department, 815-732-2851)

- Flagg Rd. (Starting at IL Route 251 going west out of town)

Arterial/Collector Streets: Collector streets are those City roadways that provide connecting access between arterial routes and local side streets. These collectors may also serve schools or other significant public facilities. During snow and ice events, arterial/collector streets will be given **first priority** by the Street Department. This means that plow drivers will first focus their attention on arterial/collector streets within their assigned route. The snow plow route map (Exhibit N) identifies those streets identified as first-priority arterial/collectors.

Under most conditions, snow will be plowed curb-to-curb (where curbs exist) and de-icers will be applied before snow removal on local streets begins. If heavy snow is falling, it may be necessary to leave some second priority local streets unfinished so that the priority one collector streets are kept clear. This should not be done until at least one pass has been made on the priority two streets or upon the direction of the Street Superintendent or Foreman.

Local Streets: Local streets are all public streets within the City not identified as arterial or collector. These streets will be given **second priority** during snow and ice events. Snow will be plowed curb-to-curb and de-icers applied in accordance with the application policy established by the Superintendent.

Cul-de-sac and Dead End Streets: Cul-de-sac and dead end streets will be given a **third priority** during snow and ice events. After completion of a snow event and the cul-de-sacs and dead ends are plowed, staff will determine whether the amount of accumulated snow is great enough to require removal.

Municipal Parking Lots and Alleys: These parking lots and alleys are the responsibility of the Street Department for snow and ice control operations. Street Department employees, assisted by the Cemetery employee, are assigned to keep these lots open during a storm though he/she may assist other drivers on adjacent local street routes. The municipal parking lots may be deferred in favor of public streets as these parking lots and alleys are given a **third priority**.

Sidewalks: The Street Department and City administration have determined that public sidewalks around all municipal parking lots should be cleared of snow in order to provide safe passage of pedestrians.(Refer to Exhibit O). The Street Department normally assigns personnel to this task following a snow event as a **fourth priority**. The response time to clear the sidewalks depends upon the intensity and duration of the snow and ice event and how long it takes to clear the public street system. The Street Department's goal is to clear the sidewalks within 48 hours after the storm is over, during regular business days.

Downtown Sidewalks: Downtown area property and business owners are required to remove snow after two or more inches of accumulation.(Section 82-4 – REMOVAL OF SNOW FROM SIDEWALKS) (Refer to Exhibit O). Once snow has been removed from the sidewalk to the curb line of the street, the Street Department will haul out piled snow to a designated location. The equipment to be used will be 2 front end loaders, 2 skid steer loaders, 1 salt truck, 4 dump trucks and snow blower and shovels.

Citizen Sidewalk Clearing: The City encourages citizens to clear the public sidewalks adjacent to their properties in the interest of general public safety. State of Illinois Law does not hold citizens liable for claims arising from injuries that may occur on sidewalks that they have cleared as part of a good faith effort to make travel safer.

3. Storm Warning Notification and Personnel Mobilization

Storm Warnings

The Street Department utilizes Schneider Electric (Public Transportation Edition) MxVision Weather Sentry System located at the Street Department facility and the National Weather Service (www.crh.noaa.gov/lot) to supplement radio and Antenna TV weather bulletins in order to track storm events.

General Policy for Personnel Scheduling

Personnel will be scheduled in a manner that is in the best interest of the City and in the interest of safety and well-being of City employees. Scheduling work hours during and after snow events must provide for a balance between employees available for work and the need to attend to other non-snow related tasks, such as critical infrastructure system maintenance. Reasonable efforts will be made to equalize work hours among employees in accordance with the City-employee collective bargaining agreement.

Mobilization Duties and Responsibilities

Superintendent:

Has overall responsibility for snow and ice control operations. Ensures that plans are in place, personnel are trained, equipment is ready and materials are on hand. The superintendent is the first responder to storm notifications, monitors weather and pavement conditions before and after the storm, coordinates staffing and operations with the Street Foreman, makes the decision to notify personnel for after-hours call-ins and supervises the operations. Performs positive public relations.

Operator/Mechanic:

Monitors weather conditions and be able to report to the Street Department facility within 25 minutes of being called and on the road within 35 minutes of the call in. Keep cell phones close by and charged, properly operate equipment and follow snow and ice control procedures. Responsible for the maintenance and repair of snow and ice control equipment and assists with snow and ice control operations. Performs positive public relations.

Operators:

Monitor weather conditions and be able to report to the Street Department facility within 25 minutes of being called and on the road within 35 minutes of the call in. Keep cell phones close by and charged, properly operate equipment and follow snow and ice control procedures. Perform positive public relations.

Crew Notification for Events that Begin During Normal Work Hours

(Monday thru Friday 7:00 a.m. to 3:30 p.m.)

- The Superintendent or Foreman will determine when crew call-outs are made for pre-storm anti-icing applications and for snow and ice control operations.
- Specific personnel, equipment and materials to be utilized are established further in this plan.

Crew Notification for Events Occurring Outside of Normal Work Days and Times

- For snow and ice events that occur after work hours, 3:30 p.m. to 7:00 a.m. and on Saturdays, Sundays or holidays, the Police Department Shift Sargent will notify the Street Department Superintendent that snow accumulations or icing conditions are beginning. The Street Department Superintendent may at this time drive to the Street Department facility to personally monitor road conditions.
- The Street Department Superintendent will review street conditions, monitor weather radar and initiate a staff call-in if appropriate. Actual conditions will dictate the type of call out required. This initial call-in may be limited to 2-3 drivers who will be assigned the task of applying de-icers on the collector streets identified on the Salt Route Map. (Exhibit M)
- The Street Department Superintendent will monitor road conditions. For most events, the secondary call-in of the remaining crew will be made at this time should snow or ice accumulations justify this need. This would normally be the case for a snow accumulation exceeding 2 inches.
- For larger snow events that are predicted in advance, the Street Department Superintendent may call in all drivers at the initial notification. Experience and judgment comes into play as weather predictions are not absolute and there are many other factors to consider when committing to a full crew call out.

Scheduled Winter Storm Duty Outside of Normal Work Days and Times

- The Superintendent has established a winter-call duty schedule comprised of two Street Department personnel for work periods that are outside of the normal working hours. The intent is to have staff available to respond quickly to isolated snow and ice problems. Various other duties will be assigned for these personnel as appropriate.
- The Street Department Superintendent or Foreman will communicate via cell phone with the winter-call duty personnel to discuss actual street and weather conditions at the onset of snow events to help determine the most effective time and extent of further personnel call-outs.

Supplemental Snow Plow Drivers

- It is the intent of the Street Department that all full-time department staff, will be utilized to the fullest extent to respond to snow and ice events. The Street Department staff is most familiar with snow routes, equipment and procedures. Extremely severe events may tax the ability of assigned personnel to keep up with the storm or its aftermath. The Superintendent will therefore develop a list of supplemental drivers who may be called upon to assist in the effort.
- These drivers will be City Employees under RMU and will be provided training and guidance in accordance with city personnel policies. Such drivers are required to have Class B CDL certification.

Motor Carrier Regulations

The U.S. Department of Transportation Federal Motor Carrier Regulations for vehicles requiring a Commercial Driver's License (CDL) present guidelines for continuous hours of work. Section 390.3(f) (2) exempts municipal operations, such as snow removal, from the maximum work hours stipulated in Section 395 of the regulations. Nevertheless, the City of Rochelle closely scrutinizes and supervises its work schedules to ensure safe operations. This can be accomplished by proper training and preparation, rotating personnel to plow only priority one streets during overnight snowfalls and before rush hours and by using substitute drivers or contract services if necessary.

Continuous Work Hours and Rest Periods

- Employees are expected to be available for regular duty and snow and ice control operation activities for a minimum of 12 continuous hours.
- The Street Superintendent or Foreman may request additional continual work hours if conditions require it and if the employee is willing and able to do so.
- The Superintendent reserves the right to end the work period of any employee, if necessary, in the interest of general safety and employee well-being.
- Employees are encouraged to stop and rest for a short time every four to five hours, such as when refueling at the Street Department facility. Rest stops on the street or in public parking lots should be avoided as the general public may view this negatively.
- Drivers **shall** notify their supervisor by cell phone or radio of their need for a rest break.

Meals

The following policy will apply when work is required beyond normal duty hours and extends for five (5) continuous hours.

- The Foreman or lead person in charge during these events will coordinate times with employees for their paid meal break for **a maximum twenty (20) minute period.** Drivers **shall** complete at least one pass through their entire route prior to their meal break.
- In order to reduce down time due to travel from distant routes to the Street Department facility, employees are allowed to use their City vehicle to eat at private establishments within this 20-minute time allotment. Truck engines and lights will be turned off when parked in parking lots.
- Drivers **shall** notify their Foreman or lead person at the start and end of meal breaks via radio or cell phone.

4. Snow and Ice Control Materials

The Superintendent is responsible to budget for and order road salt and de-icing materials at the earliest opportunity and to ensure adequate supplies are maintained. Road salt is ordered through the State of Illinois Central Management Services.

The Superintendent or Accounting Clerk will have a list of all primary suppliers or those who may be contacted in the event material supplies from contract sources become low or unavailable.

5. Equipment Preparation and Calibration

The U.S. Department of Transportation Federal Motor Carrier Regulations, Section 396, presents guidelines for vehicle inspection requirements. The following policies have been developed based upon these guidelines:

Pre-Winter Readiness Inspections

- Pre-winter equipment preparation is extremely important. Proper maintenance and correction of defects before the winter storm season will reduce down time that would negatively effect snow and ice control operations and will save money in the long term.
- An inventory of snow removal vehicles and equipment to be inspected is attached as (Exhibit F).
- The Street Superintendent or Foreman will schedule a time or times when drivers and a mechanic will jointly review key aspects of the truck's O&M manual as an annual "refresher course".
- The Street Mechanic/Operator will schedule each vehicle for bi-annual (6- month) State Safety certifications as required for commercial motor vehicles.

Spreader Calibrations

- Proper spreader calibration will help reduce waste, control costs and protect the environment. As part of the pre-winter preparations, the Street Mechanic/Operator and the operator of each vehicle equipped with a spreader will properly inspect and calibrate the salt spreading and liquid application equipment. Refer to (Exhibit H) for the calibration chart to be used for each spreader-equipped vehicle.
- The rate of salt application is dependent upon the type of equipment mounted on a truck. Each spreader must be calibrated separately and they need to be regularly cleaned by the driver to operate effectively.

Spreading Rates

- Specifying a single spreader setting may be unrealistic because storm conditions are variable. Guidance on settings will be determined by the Superintendent or Foreman. Generally drivers should only apply enough chemical de-icer to permit plows to remove the snow or melt glare ice.
- Experience shows that it is most effective to spread between 250 and 350 pounds of salt per single lane mile depending on conditions.
- Normally 15° to 20° Fahrenheit is considered the lower limit for salt. If de-icing is necessary at lower temperatures, more salt is needed and melting will take much longer.
- Applications of liquid de-icers (“salt brine and sugar beets”) using truck-mounted equipment will be used to increase snow melting effectiveness and reduce salt scatter as directed by the Superintendent or Foreman
- Because melting action spreads across the pavement to lower areas, concentrate de-icers are applied on the center (crown) of two-lane roads and on the high side of curves.

Driver’s Pre-Trip and Post-Trip Inspections

- Pre-trip inspections ensure reliability of equipment and compliance with highway safety regulations.
- Drivers **shall** perform a pre-trip inspection before using their vehicle by completing a Vehicle/Equipment Inspection Form (Exhibit I). The inspection form will be maintained in the vehicle and in the vehicle maintenance office as per department policy.
- The driver and/or mechanic will immediately rectify defects found during the inspection, if possible. Defects that constitute a hazardous condition and that require time consuming repairs will be noted on the form by the driver and immediately reported to the Operator/Mechanic and Street Superintendent.
- If vehicle defects are found that makes use of the vehicle hazardous, the Mechanic or Superintendent will place vehicle “Out of Service” until repairs can be completed.
- Drivers are responsible to inspect their vehicle, plow(s) and de-icing equipment after the storm event to identify any defects that may have developed during the event. The “Vehicle/Equipment Inspection Form” will be used and completed for this purpose and the inspection will be made as soon as possible after the storm; if not the same day, then as soon as possible after. The intent is to keep vehicles ready for the next event. Defects that are found will be addressed in the same manner as described for the pre- trip inspection.
- Vehicles will be refueled, dump bodies emptied and washed and the cabs cleaned of any litter as soon as possible after the storm, or as directed by the Superintendent or Foreman.

6. Route Assignments and Driver Preparation

Snow Plow Routes

- The City is divided into Nine (9) routes, each with assigned driver and truck with each route numbered 1 through 9. The Superintendent and Foreman will re-evaluate the route assignments at least once per year, preferably during late summer planning and will adjust the routes as necessary to achieve maximum overall effectiveness.
- (Exhibit F) names each route and notes the assigned vehicles.
- (Exhibit N) is a map showing route boundaries and assignments. Each map identifies the Priority 1 (Collector streets), Priority 2 (Local streets) and Priority 3 (Cul-de-sacs and dead ends) streets.

Anti-Icing Routes

- Anti-Icing is the application of liquid salt brine and sugar beets on selected pavements before a snow or ice storm event. Anti-icing is intended to disrupt the bond that forms between ice particles and the pavement surface, thus allowing more response time to snow events and reducing the amount of salt otherwise required.
- The Superintendent or Foreman will decide if and when the anti-icing agent will be applied based on weather conditions and predictions.
- The City has one Anti-Icing route identified on (Exhibit L). Assigned drivers will apply the anti-icing agents only on those streets that are pre-identified as shown on the exhibit. It is not economical to apply anti-icing agents on all City streets.

Driver Preparation and Training

The Superintendent will ensure that all drivers are properly trained to effectively perform during snow and ice control events. This training and preparation should be completed **by November 30** and includes:

- One “dry run” in his/her assigned route using the driver’s assigned vehicle with plow(s) attached.
- Drivers assigned smaller trucks (1-ton or pickup) must also perform a dry-run using the largest truck assigned to that route. This is to familiarize every driver with the larger trucks in case an assigned large truck driver is unavailable for a snow event.
- Drivers will be instructed to familiarize themselves with their route details, to note obstacles and changes since the previous winter and to advise the Superintendent or Foreman of any hazards that should be corrected.
- A pre-winter meeting will be held with all drivers. The Snow and Ice Control Plan will be reviewed in detail and questions or uncertainties will be clarified at this time.

- If possible, a snow plow “Rodeo” will be set up at the Public Works facility or at another designated area with drivers operating a vehicle, equipped with plow, through an obstacle course. In addition, all drivers shall take a written test similar to the one given for CDL licensing. The intent of these exercises is to instill a snow plowing mindset in the staff after months of focus on other duties.
- The Superintendent may also choose to schedule individuals for driver training at the Northern Illinois Public Service Training Academy (NIPSTA).
- All drivers will be trained on the proper use of the front-end loaders for salt loading and snow removal.
- Supplemental drivers will be given a Snow and Ice Control Plan orientation, be instructed on proper operation of the vehicle they will be assigned and will be accompanied by the Street Superintendent or Foreman on a check ride while using the truck and plow likely to be assigned to them.

7. Loading Procedures

Proper truck loading procedures must be understood and followed by all personnel in order to achieve maximum efficiency and safety and to reduce the possibility of equipment damage due to overloading.

Responsibilities and Training

- All drivers must be trained in the proper operation of the front-end loader and be familiar with the loader’s O&M manual.
- A pre-trip inspection on the loader **shall** be done prior to its use for salt loading and a post-trip inspection performed after each storm event.
- The Superintendent, Foreman or Mechanic/Operator is responsible for the operation of the liquid de-icing facility and will coordinate material ordering, mixing and equipment maintenance. The Superintendent, Foreman or Mechanic/Operator will coordinate and conduct training on the proper use of the facility.
- All drivers must be trained in the proper methods for dispensing the liquid de-icer material into vehicle-mounted tanks.

Salt Loading Procedures

- In most cases, trucks will be loaded prior to forecasted storm events; however, larger events will require re-loading at various times. The driver is responsible to load his/her truck following proper procedures at all times.
- Generally trucks will pull up to the salt shed or storage bins one at a time and be loaded with a front-end loader. Trucks waiting to be loaded will be lined up in the staging area (refer to Exhibit K).
- If being loaded by someone else, truck drivers should remain in their vehicle with the windows closed and communicate via radio or cell phone with the loader operator.

- **Plow trucks must not be overloaded.** The following standards will generally apply:
 - The New loader (930K)
 - One full loader bucket contains approximately 4.25 tons of salt or 5 tons of mix
 - No more than 13 tons will be placed in a tandem axle truck
 - Salt (~3 loader buckets)
 - Mix (~2.5 loader buckets)
 - No more than 7.5 tons will be placed in a single axle truck
 - Salt (~1.75 loader buckets)
 - Mix (~1.5 loader buckets)
 - The Old loader (928G)
 - One full loader bucket contains approximately 2.75 tons of salt or 3.5 tons of mix
 - No more than 13 tons will be placed in a tandem axle truck
 - Salt (~ 4.5 loader buckets)
 - Mix (~ 3.75 loader buckets)
 - No more than 7.5 tons will be placed in a single axle truck
 - Salt (~2.75 loader buckets)
 - Mix (~2 loader buckets)

Liquid De-Icer Loading Procedures

The following is a guideline for loading on-board liquid tanks at the mixing facility:

1. Maneuver the plow truck to south side of mixing facility.
2. Place front plow on ground, shift transmission to Neutral and set parking brake.
3. Move hose for de-icing liquids toward back of truck.
4. Attach hose to fill valve on liquid tank and secure.
5. Open valve on tank and open valve on hose.
6. Turn pump switch on for liquid material.
7. Stay with vehicle while loading.
8. When tank is full, turn off pump switch.
9. Close valve on tank and valve on hose.
10. Disconnect hose from on-board tank.
11. Secure hose by moving back against mixing facility wall.
12. Secure cap on tank valve.
13. Document amount of liquid taken for snow and ice report.
14. Check surroundings before driving away from mixing facility.

8. Spreading and Plowing Operations

As previously stated, storm conditions vary greatly and supervisors often face difficult judgment decisions. Experience has proven that the following general procedures should be followed in order to best accomplish effective snow and ice control given the service priorities that have been established.

Priorities

1. Arterial/Collector streets identified in each route will be given **first** priority.
2. Local streets will be given **second** priority.
3. Cul-de-sac and dead end streets are given **third** priority as they are among the last to be plowed and salted since they usually serve the fewest people.
4. Sidewalks that have been identified for snow clearing will be attended to as a **fourth** priority, usually the next business day after street clearing has been finished and/or after the storm.

Actions Before the Storm

- Make sure equipment is ready and trucks are loaded if time allows.
- The Superintendent or Foreman will contact the Police Department to make sure after-hours notification procedures and contact persons are fully informed and that on-street parking violations will be enforced.
- The Superintendent or Foreman will brief personnel on expected conditions, procedures and anticipated staffing plans.

Anti-Icing Procedures

- The Superintendent or Foreman will refer to and utilize the anti-icing flow chart, (Exhibit J), to determine if anti-icing operations will occur prior to any snow or ice event.
- The Superintendent or Foreman will authorize pre-storm anti-icing on those streets pre- identified on (Exhibit L).

Plowing Procedures

- Drivers **shall** notify the Superintendent or Foreman via radio first and if no answer, by cell phone, when they leave the Public Works facility and when they return to the Public Works facility. Example: *“Truck 2 on the road” and “Truck 2 at the shop”*.
- When drivers leave their vehicle anytime during a snow and ice control operation, they **shall** notify the Superintendent or Foreman via radio first and if no answer, by cell phone, when they step out of their vehicle for any reason (i.e., meal break, to check an issue with the truck or route, assisting another driver). This process is to ensure the exact location and safety of all drivers during snow and ice control operations. Example: *“Driver 2 will be out checking on a hydraulic leak at the intersection of Caron Road and 1st. Avenue” and “Driver 2 is back in the truck”*.
- Drivers should complete at least one pass through their entire route prior to stopping for a break.
- Drivers will radio other route drivers to offer assistance if their route is complete and assist where needed.
- Vehicle speeds while plowing shall not exceed the local speed limit and drivers shall obey traffic signs and all applicable traffic laws.
- Drivers **shall** follow Street Department procedures and maintain specified de-icer and liquid application rates.
- Drivers should make every effort not to bury fire hydrants.

- Advise the office if residents are seen blowing, pushing or shoveling snow back into the street, providing the address and time. The Police Department will be contacted regarding these issues if necessary. If private contractors are seen plowing snow onto streets, advise the Street Department Superintendent with locations, time and truck placard information/phone number if possible. The Police Department will be contacted regarding these issues to handle if necessary.

De-Icing Procedures

- Salt application rates will be established by the Street Department designee based on the storm event conditions, but generally range from 250 to 350 pounds per lane mile. This may vary during the event due to changes in air and pavement temperature and other factors.
- Salt will be applied at higher rates on arterial/collector streets and in accordance with the Superintendent's guidance on local second-priority streets, cul-de-sacs and dead-ends.
- Drivers should keep the Street Superintendent informed as to changing pavement conditions.
- Liquid de-icers will be applied to the salt spreader with equipped trucks whenever salt is being applied. Application rates will be pre-established before the storm.

Post-Storm Procedures

- Street Department employees will be assigned the duty of clearing snow from the main entrance of the Street Department complex, sidewalks along the front visitor parking area, around all man doors and overhead doors, the mixing facility and around the fuel island.
- Drivers will perform post-storm washing and inspections of snow and ice control vehicles and equipment as outlined in (Exhibit I).
- Drivers will report their salt usage using (Exhibit I), which the Superintendent or Accounting Clerk will then summarize the total usage by each truck for each storm event.
- The Street Department Superintendent or accounting clerk will summarize each storm event and will summarize personnel overtime for each individual and for each storm event.
- Drivers will perform post-trip inspections per the "Equipment Preparation" section.
- The Superintendent or Foreman may conduct a post-storm critique meeting with drivers and mechanics to review performance and resolve problems encountered.
- Snow clearing at corners, major intersections and storm water inlets will be initiated after significant storms as conditions warrant. This may require the use of loaders, back hoes and skid steers with appropriate traffic control.
- The Superintendent or designee will order replenishment materials as needed.

9. Snow Hauling and Storage

- Accumulation of snow after a series of heavy storms may require snow removal at locations such as key intersections, parking lots, downtown area, cul-de-sacs and dead ends.
- The Superintendent or Foreman will schedule this work for normal duty time if possible, given personnel availability and weather forecasts. Front-end loaders, skid loaders and dump trucks will be used for this purpose.
- Proper traffic control will be performed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) part 6 and IDOT Standards.

10. Damages Due To Snow Operations

The following policies and procedures are established regarding personal or public property damages which may occur due to snow removal operations:

- Drivers are responsible to exercise reasonable care when operating their snow plows and must report any damage they knowingly cause. This is necessary to confirm owner complaints.
- Mailbox damage is often due to snow coming off the plow, not by plows hitting them. Pre-winter “dry runs” serve to identify mailboxes placed too close to the pavement edge so that notices can be sent to property owners before the plowing season begins (Exhibit P).
- If a mailbox is damaged, the Street Department will repair it or place a temporary mailbox within a reasonable time after the storm is over. Calls received about mailbox damage will be logged and tracked for follow-up repair.
- Mailbox repairs will be scheduled and replacements will be made with a USPS standard box/post as a result of snow plowing damages (Exhibit P).
- Mailboxes that are re-installed must follow City of Rochelle regulations regarding proper height and setback from the pavement edge.

11. Contractual Services

- The Superintendent may solicit contractor plowing, salting and hauling assistance if heavy snowfalls occur that over-tax City resources. Every attempt will be made to utilize City personnel first; however, events may arise where citizen safety and employee well-being require on-call help.
- Pre-winter arrangements for plowing assistance bid solicitations may be initiated by the Superintendent.

12. Public Relations

- Informative public education and positive public relations are key elements of the City Snow and Ice Control Plan and it must occur before, during and after winter storm events.
- The City website will be used to educate the public about snow plowing responsibilities of the various agencies involved. Various City policies and ordinances regarding on-street parking, placing snow on public streets, sidewalk clearing, mailbox placement and condition, plowing and salting priorities and phone numbers to use for City contact will also be made available.
- Letters to the public that require citizen action or future avoidance of inappropriate activity will be firm yet positive, polite and informative.
- Phone calls received from citizens regarding snow plowing complaints can be challenging. Every effort will be made to listen patiently, write down and log the request, explain the situation, stay calm and polite and follow-up with the request to the extent possible. The Accounting Clerk may be called in during significant events to answer the phone and coordinate service requests.

Exhibit A

City Code Sec. 94-291. Through section 94-296.

Sec. 94-291. - TIMES WHEN IN EFFECT.

A snow emergency is in effect immediately after three inches of snow has accumulated and will remain in effect until the snow on the city streets has been plowed or removed to the street curb line.

(Code 1996, § 10.75.010)

Sec. 94-292. - PARKING PROHIBITED ON CERTAIN STREETS.

It is unlawful for any person to park a motor vehicle on the following streets after three inches of snow has fallen until such time as the snow has been plowed to the side of the street:

Seventh Avenue from Caron Road to North Main Street.

Tenth Avenue from 20th Street to Second Street.

Carrie Avenue from North Eighth Street to its west boundary.

North Main Street from Sixth Avenue to Tenth Avenue.

North Ninth Street from Lincoln Avenue to Jones Road.

South Main Street from County Highway 17 (Steward Road) to First Avenue.

(Code 1996, § 10.75.020)

Sec. 94-293. - PARKING IN BUSINESS DISTRICT.

(a) It is unlawful for any person to park a motor vehicle on any business district street after three inches of snow has fallen, from 1:00 a.m. to 6:00 a.m. or until the streets are cleared of snow.

(b) The following business district streets are designated streets for snow removal:

Second Avenue from IL Route 251 east to Main Street.

Fourth Avenue from Seventh Street east to Third Street.

Fifth Avenue from Seventh Street east to Main Street.

Sixth Avenue from Seventh Street east to Main Street.

Sixth Street from Lincoln Avenue north to Sixth Avenue.

Cherry Avenue from Lincoln Highway east to Third Street.

Lincoln Avenue from Seventh Street east to Lincoln Highway.

Lincoln Highway, and part of Washington Street, from First Avenue north to Sixth Avenue.

Main Street from the Kyte Creek Bridge, south of First Avenue, north to Sixth Avenue.

(Code 1996, § 10.75.030)

Sec. 94-294. - PARKING IN MUNICIPAL PARKING LOTS.

It is unlawful for any person to park a motor vehicle in any municipal parking lot after three inches of snow has fallen from 1:00 a.m. to 6:00 a.m., or until such time as the municipal parking lots are cleared of snow.

(Code 1996, § 10.75.040; Ord. No. 08-3639, § 1, 1-28-2008)

Sec. 94-295. - PARKING ON STREETS GENERALLY.

- (a) It is unlawful for any person to park a motor vehicle on any public street in the city at any time after a snowfall of three inches or more has accumulated, except as follows:
- (1) Vehicles may be parked on that side of the street where even-numbered buildings are or would be located, between the hours of 7:00 a.m. on that day to 7:00 a.m. on the following day on even-numbered calendar days.
 - (2) Vehicles may be parked on that side of the street where odd-numbered buildings are or would be located, between the hours of 7:00 a.m. that day to 7:00 a.m. of the following day on odd-numbered calendar days.
 - (3) The restrictions in subsections (a) (1) and (2) of this section shall remain in effect for not less than 48 hours after the snowfall ceases, to permit both sides of the street to be plowed to the curblineline. It shall automatically terminate on the end of the third day at 7:00 a.m., or when all snow has been cleared from the street, whichever shall occur later.
- (b) This section shall not affect other parking restrictions and shall not be deemed to permit parking where otherwise prohibited by this section or other ordinances.
(Code 1996, § 10.75.050)

Sec. 94-296. - TOWING OF ILLEGALLY PARKED VEHICLES.

- (a) The superintendent of streets, the chief of police and all members of the police department are authorized to remove and tow away or have removed or towed away by a commercial towing service or by city-operated vehicles any car or other vehicle illegally parked which prevents and obstructs snow removal from public streets or municipal parking lots.
- (b) Cars or vehicles so towed away for illegal parking shall be stored in a safe place and shall be restored to the owner or operator of such vehicle upon the payment of the towage and storage fees.
(Code 1996, § 10.75.060; Ord. No. 08-3639, § 1, 1-28-2008)

Exhibit B

Sec. 94-297. - DEPOSITING SNOW ON STREET OR SIDEWALK.

- (a) It is unlawful for any person to deposit or cause to be deposited any snow upon any street or alley of the city on that portion of the traveled way cleared or scheduled for snow clearance.
- (b) It is also unlawful for any person to deposit or cause to be deposited any snow in such a manner as to obstruct a public sidewalk, that portion of a private driveway located on the parkway portion of a public street, or in such a manner as to hamper vision at an intersection of traveled roadways.
(Code 1996, § 10.75.070)

Exhibit C

Sec. 94-298. - EXTREME SNOW EMERGENCY.

(a) When the following conditions exist within the corporate limits of the city, the city manager is authorized, under the procedures set forth in this section, to declare an extreme state of snow emergency and to completely ban parking on part or all of the streets of the city:

- (1) When an accumulation of five inches or more of snow has fallen in a short period of time, making normal snow removal procedures ineffective;
- (2) When three or more inches of snow have fallen in combination with heavy winds, creating drifts, which make normal snow removal operations ineffective;
- (3) When any other circumstance arises necessitating the imposition of emergency procedures for the protection of life and property.

(b) The extreme state of snow emergency shall be implemented as follows:

- (1) At any time it becomes necessary to implement this section; the city manager shall execute a sworn statement in writing, listing the reasons for the implementation of this section and the specific restrictions on parking to be implemented. This statement shall be filed with the city clerk as soon as is practicable.
- (2) A copy of this statement shall be delivered to the local radio station and newspapers and shall be posted upon the bulletin board at the city police station and fire department and shall take effect immediately upon the conclusion of the first broadcast by the local radio station, notifying the public of the state of extreme snow emergency and of the new restrictions which have been imposed.
- (3) The extreme snow emergency shall continue in effect until the first to occur of the following conditions:
 - a. A declaration by the city manager or the city council that the extreme snow emergency has ended, which shall be published in the same manner as set forth in subsection (b)(2) of this section; or
 - b. The conclusion of the next regularly scheduled meeting of the city council.

(c) Penalties for violation of any restrictions imposed hereunder shall be the same as are stated in section 94-299

(Code 1996, § 10.75.080)

Sec. 94-299. - Penalty.

Any person, firm or corporation violating any of the provisions of this division is guilty of a misdemeanor and, upon conviction, shall be fined in an amount of \$25.00. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such under this section assessed a penalty of \$25.00, if paid within ten days after the date of the violation, after which date the violation shall be punishable as provided in section 1-15.

(Code 1996, § 10.75.090; Ord. No. 08-3639, § 1, 1-28-2008)

Exhibit D

SNOWMOBILES AND ALL-TERRAIN VEHICLES

Sec. 94-411. - STATE LAW ADOPTED.

All of the provisions of the Illinois Snowmobile Registration and Safety Act, 625 ILCS 40/1-1 et seq., and any other state laws regulating snowmobiles and all-terrain vehicles are incorporated into and declared to be a part of this division the same as if they were expressly set forth herein. (Code 1996, § 10.70.010) Sec. 94-412.

- ADDITIONAL REGULATIONS.

- (a) Speed. No person shall operate a snowmobile or all-terrain vehicle on any street or public ways within the city and designated routes at a speed in excess of 15 miles per hour.
- (b) Hours of operation. Snowmobiles and all-terrain vehicles shall be operated only between the hours of 8:00 a.m. to 1:30 a.m.
- (c) Designated routes. The operation of snowmobiles and all-terrain vehicles is restricted to travel on certain designated routes as shown on a map which is on file in the office of the city clerk. Persons, however, will be permitted to travel the shortest distance from their residence to the designated snowmobile route.
- (d) Manner of riding. Snowmobiles and all-terrain vehicles shall travel in single file and to the far right on routes, trails and streets.
- (e) Unattended vehicles. No person shall leave or allow a snowmobile or all-terrain vehicle owned or operated by him to be unattended on any public highway or public property while the motor is running or with the starting key left in the ignition.
- (f) Operation on sidewalk or pedestrian way prohibited. No person shall operate a snowmobile or all-terrain vehicle on any sidewalk or pedestrian way within the city.
- (g) Operation on private premises restricted. No person shall operate a snowmobile or all-terrain vehicle on any private property, not owned or controlled by him, within the city without the express consent or permission of the owner. (Code 1996, § 10.70.020) Sec. 94-413.

- PENALTY.

Any person who shall violate any provision of this division shall be deemed guilty of a misdemeanor and, upon conviction, shall be subject to punishment as provided in section 1-15. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such hereunder. (Code 1996, § 10.70.030)

Exhibit E

Rochelle Street Department Organizational Chart

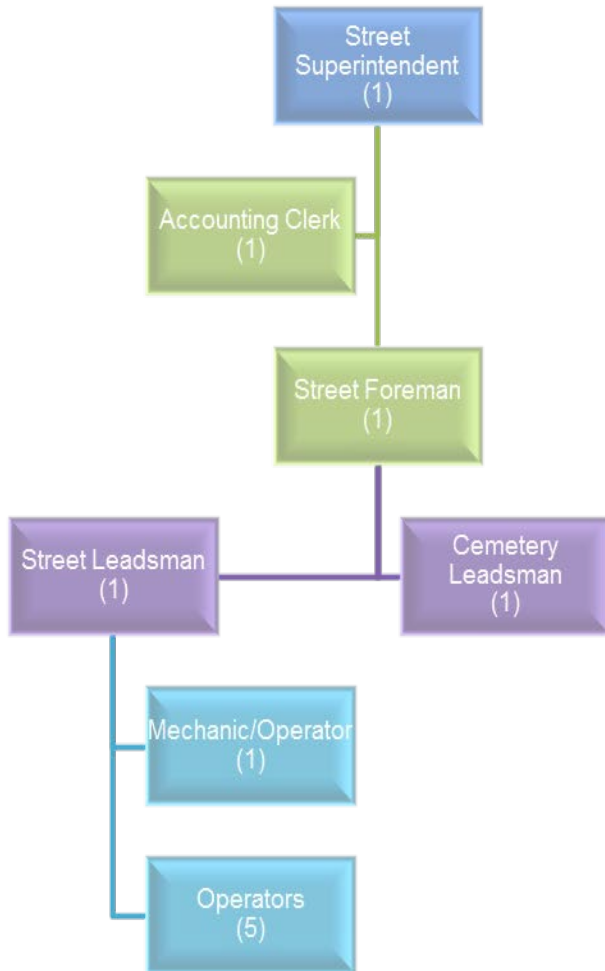


Exhibit F

Unit #	Type	Year	Route
23	International Tandem Axle Dump	2015	1
19	International Single Axle Dump	2007	2
22	International Single Axle Dump	2011	3
8	International Single Axle Dump	2005	4
20	International Single Axle Dump	2007	5
1	International Tandem Axle Dump	2013	6
17	International Single Axle Dump	2009	7
2	International Single Axle Dump	2003	8
16	Ford F350 1-Ton Dump		9

Standby

11	International Single Axle Dump	2002
7	Ford F550 1-Ton Dump	2012
5	Ford F250 Pick-up Truck	2012

Heavy Equipment

25	Cat 928G Front End Loader	1998
26	Cat 930K Front End Loader	2013
30	Bobcat T 770	2016
31	Bobcat S 770	2016

Exhibit G

SNOW AND ICE CONTROL PLANNING TIMELINE

- April** Bi-annual State of Illinois safety certification of each Vehicle.
- September** Review the snow plan, recommend changes and revisions, improve and amend snow plow routes, equipment and develop policies for snow and ice control operations and methods.
Establish list of supplemental drivers for emergencies.
- October** Bi-annual State of Illinois safety certification of each vehicle.
Complete truck and equipment inspections and repairs.
Perform tool check for each truck.
- November** Order ice melting materials from established vendors.
Ensure all snow fighting equipment ready by November 15.
Perform spreader and on-board liquid tank calibrations.
Conduct snow and ice control plan orientation.
Conduct snow plow rodeo, CDL refresher exam and front end loader operation training.
Perform dry run of plow routes to identify mailboxes and other obstructions which will need corrections prior to winter operations.
Meet with Police and Fire Department command staff to review Snow and Ice Control Plan and operations.

Exhibit H



SPREADER CALIBRATION

Different materials will spread at different rates at the same setting, so spreaders must be calibrated with the material that will be used.

Spreader Calibration Procedure: Calibration of spreaders is simply calculating the pounds per mile actually discharged at various spreader control settings and truck speeds. It is carried out first by counting the number of auger shaft rotations per minute, measuring the salt discharged in one revolution, then multiplying the two and finally multiplying the discharge rate by the minutes it takes to travel one mile.

- Equipment Needed:**
1. Scale for weighing
 2. Canvas or bucket/ collection device
 3. Chalk, crayon or other marker
 4. Watch with second hand

- Calibration Steps:**
1. Warm trucks hydraulic oil to normal temperature with spreader system running.
 2. Put partial load of salt on truck.
 3. Mark shaft end of auger.
 4. Dump Salt on auger.
 5. Rev truck engine to operating RPM. (at least 2000 RPM)
 6. Count number of shaft revolutions per minute at each spreader control setting, and record.
 7. Collect salt for one revolution & weigh, deducting weight of container (for greater accuracy, collect salt for several revolutions and divide by this number of turns to get the weight for one revolution.) This can be accomplished at idle or very low engine RPM multiply shaft Rpm (Column A) by discharged per revolution (column B) to get discharge rate in pounds per minute (column C), then multiply discharge rate by minutes to travel one mile at various truck speeds to get pounds discharged per mile. *For Example, at 20 MPH with 30 shaft RPM and 7lb discharge – $30 \times 7 = 210 \times 3.00 = 630\text{lb}$ per mile.

RSD Calibration Chart			Pounds Discharged Per Mile									
Truck Number: _____			Date: _____		By: _____							
Control Setting	A Shaft RPM (Loaded)	B Discharge Per Revolution (pounds)	C Discharge Rate (lb./min)	Minutes to Travel One mile								
				5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
1				x 12.00	x 6.00	x 4.00	x 3.00	x 2.40	x 2.00	x 1.71	x 1.50	x 1.33
2		This weight remains constant										
3												
4												
5												
6												
7												
8												
9												
10												

Exhibit I



Winter operations

Employee _____ Unit # _____ Route # _____

Plowing _____ Salting _____ Anti-Icing _____ Downtown Clean Up _____ Plow Backs _____

Date: _____ Left Shop: _____ Returned to Shop: _____ **12:00 A.M Cut Off**

Conditions

Temperature- _____ Freezing Rain _____ Sleet _____ Drifting _____ Snow _____

Starting Mileage _____

Ending Mileage _____

Material Used	Buckets	Material Used	Buckets
Salt 930K - 1 Bucket = 8,460 Lbs.		Salt 928G -1 Bucket = 5,740 Lbs.	
Mix 930K - 1 Bucket = 10,200 Lbs.		Mix 928G -1 Bucket = 6,900 Lbs.	
Salt Brine		Gallons Used -	
Salt Brine & Biomelt AG 64		Gallons Used -	

Vehicle / Equipment Inspection Form

System	Pre-Trip		Post-Trip		Mechanic Required
	Pass	Fail	Pass	Fail	
Engine / Fluid levels					
Transmission / Fluid level					
Drive Line					
Differential					
Exhaust					
Hydraulic System / Hoses					
Electrical System / Lights					
Brakes					
Tires / Pressure					
Exterior Body/Box					
Cab Interior					
Front End/Suspension/Springs					
Air-conditioning / Heater					
Other / Grease					

Comments: _____

ANTI-ICING APPLICATION DECISION FLOWCHART



Exhibit K

RSD Winter Operations – Material Loading Map

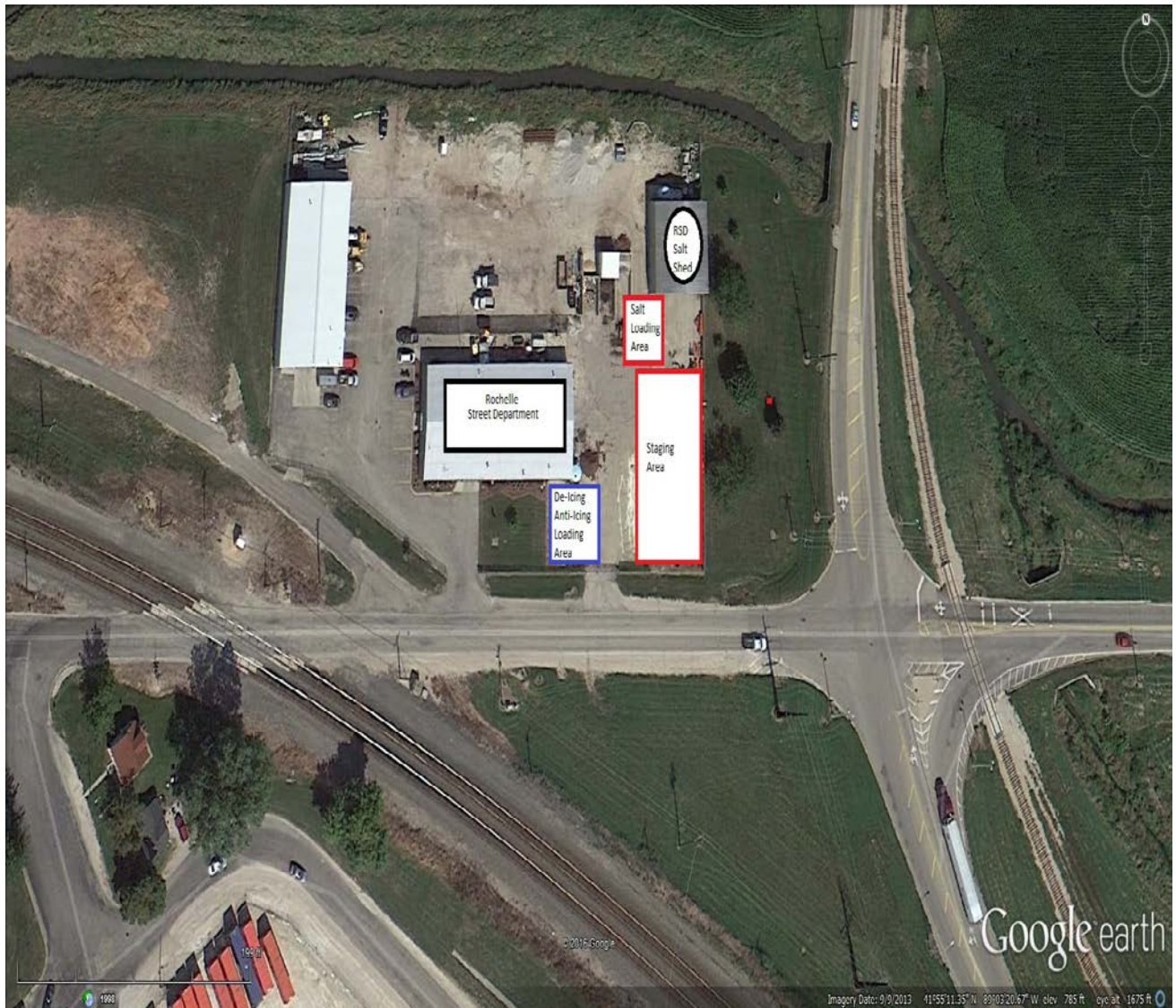
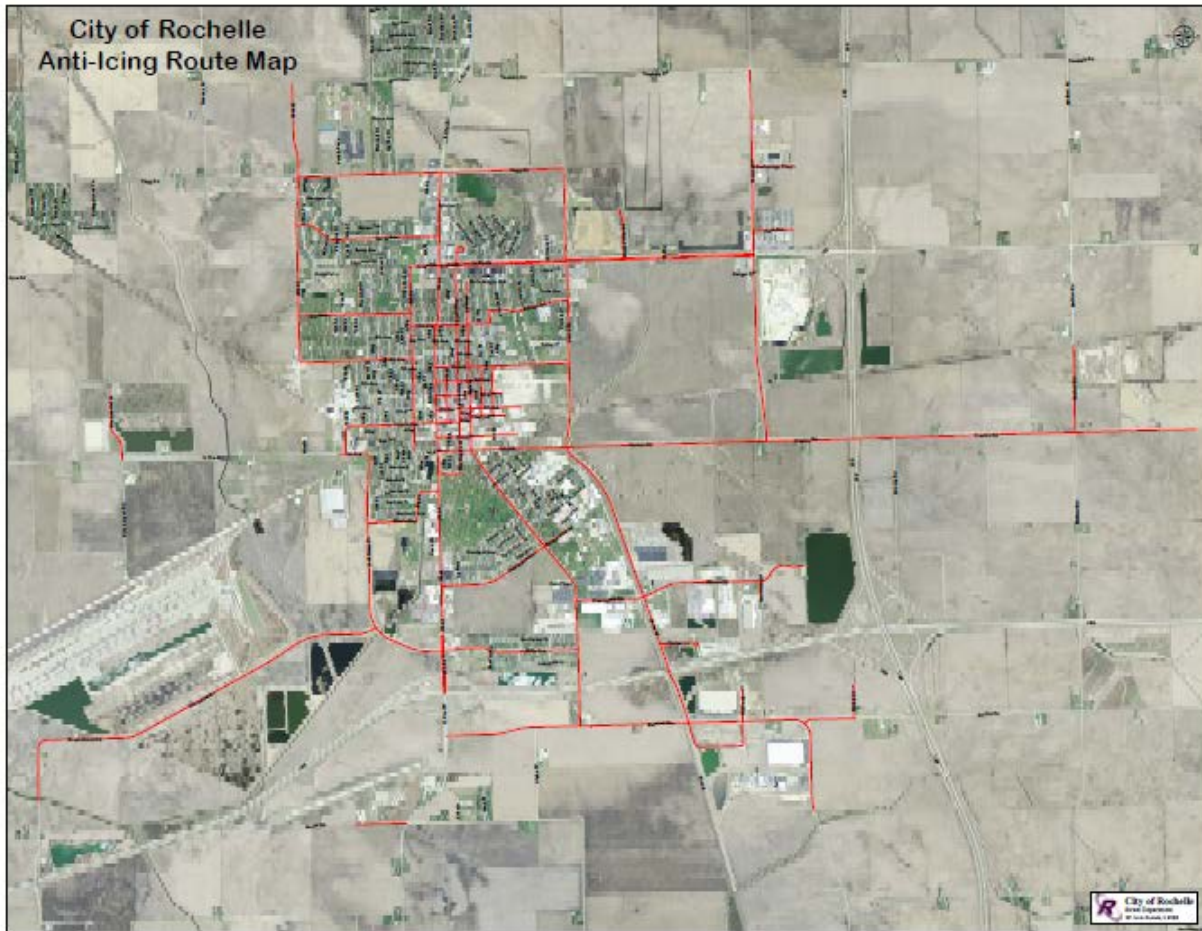
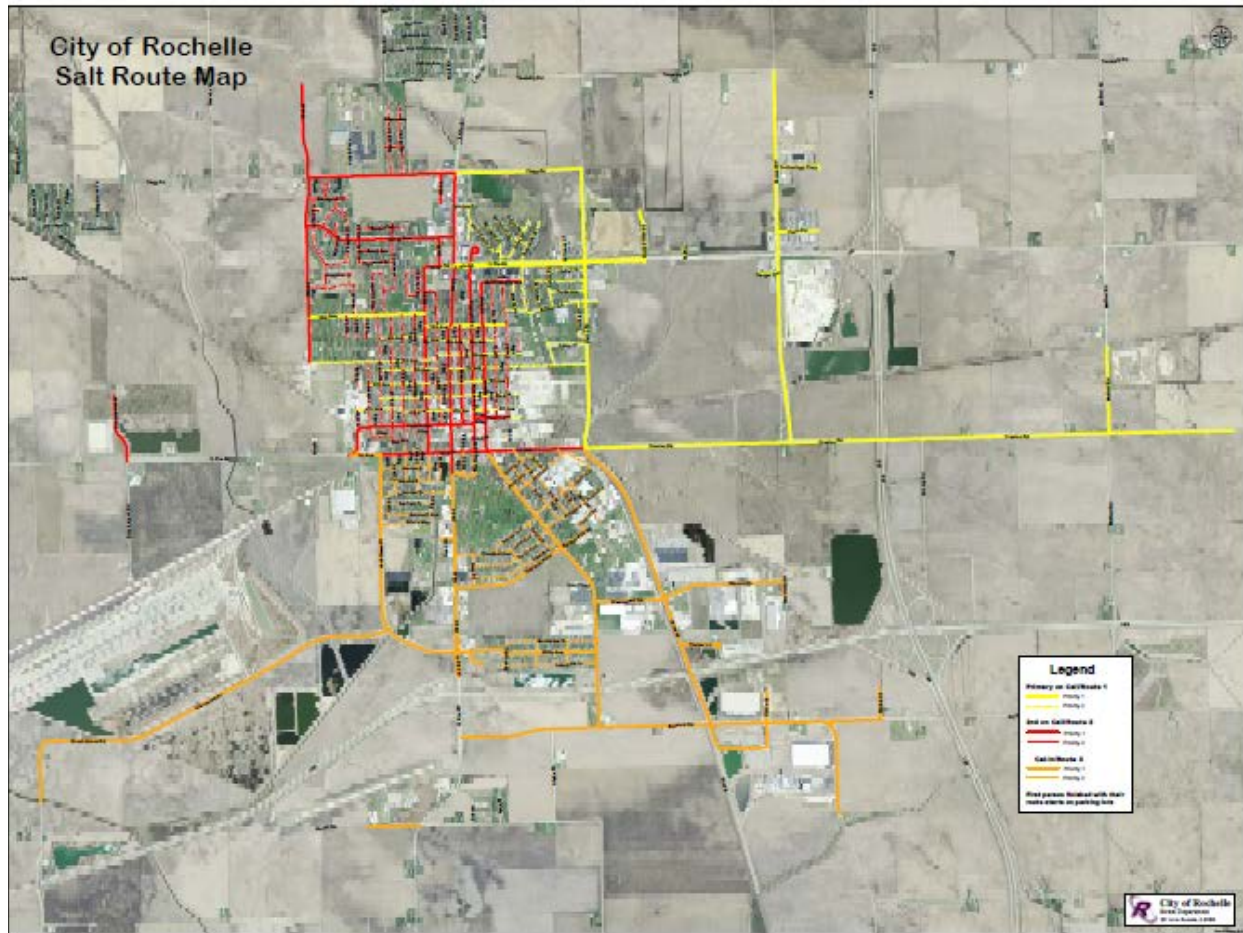


Exhibit L



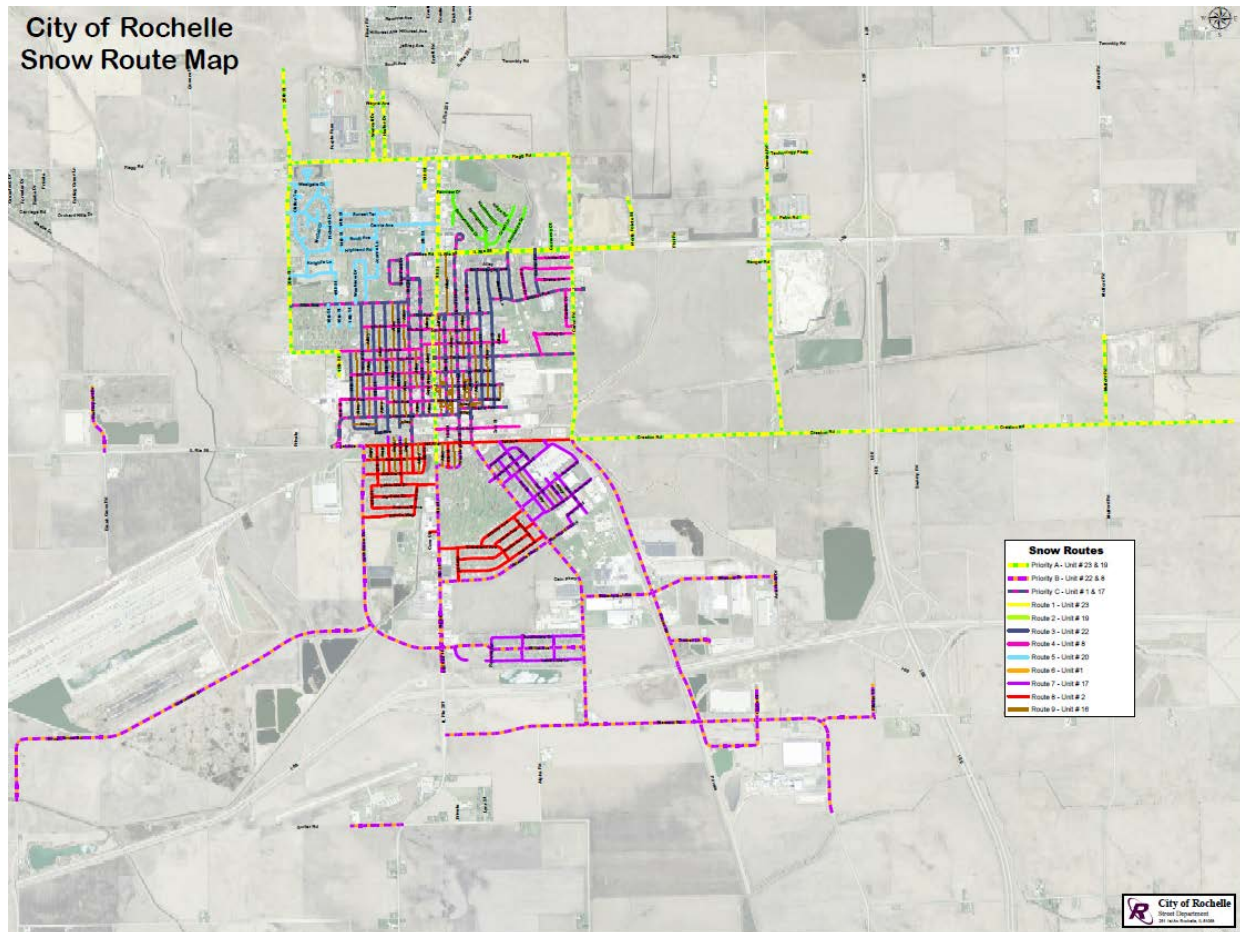
Sec. 94-297. - DEPOSITING SNOW ON STREET OR SIDEWALK. (a) It is unlawful for any person to deposit or cause to be deposited any snow upon any street or alley of the city on that portion of the traveled way cleared or scheduled for snow clearance. (b) It is also unlawful for any person to deposit or cause to be deposited any snow in such a manner as to obstruct a public sidewalk, that portion of a private driveway located on the parkway portion of a public street, or in such a manner as to hamper vision at an intersection of traveled roadways. (Code 1996, § 10.75.070)

Exhibit M



Sec. 94-297. - DEPOSITING SNOW ON STREET OR SIDEWALK. (a) It is unlawful for any person to deposit or cause to be deposited any snow upon any street or alley of the city on that portion of the traveled way cleared or scheduled for snow clearance. (b) It is also unlawful for any person to deposit or cause to be deposited any snow in such a manner as to obstruct a public sidewalk, that portion of a private driveway located on the parkway portion of a public street, or in such a manner as to hamper vision at an intersection of traveled roadways. (Code 1996, § 10.75.070)

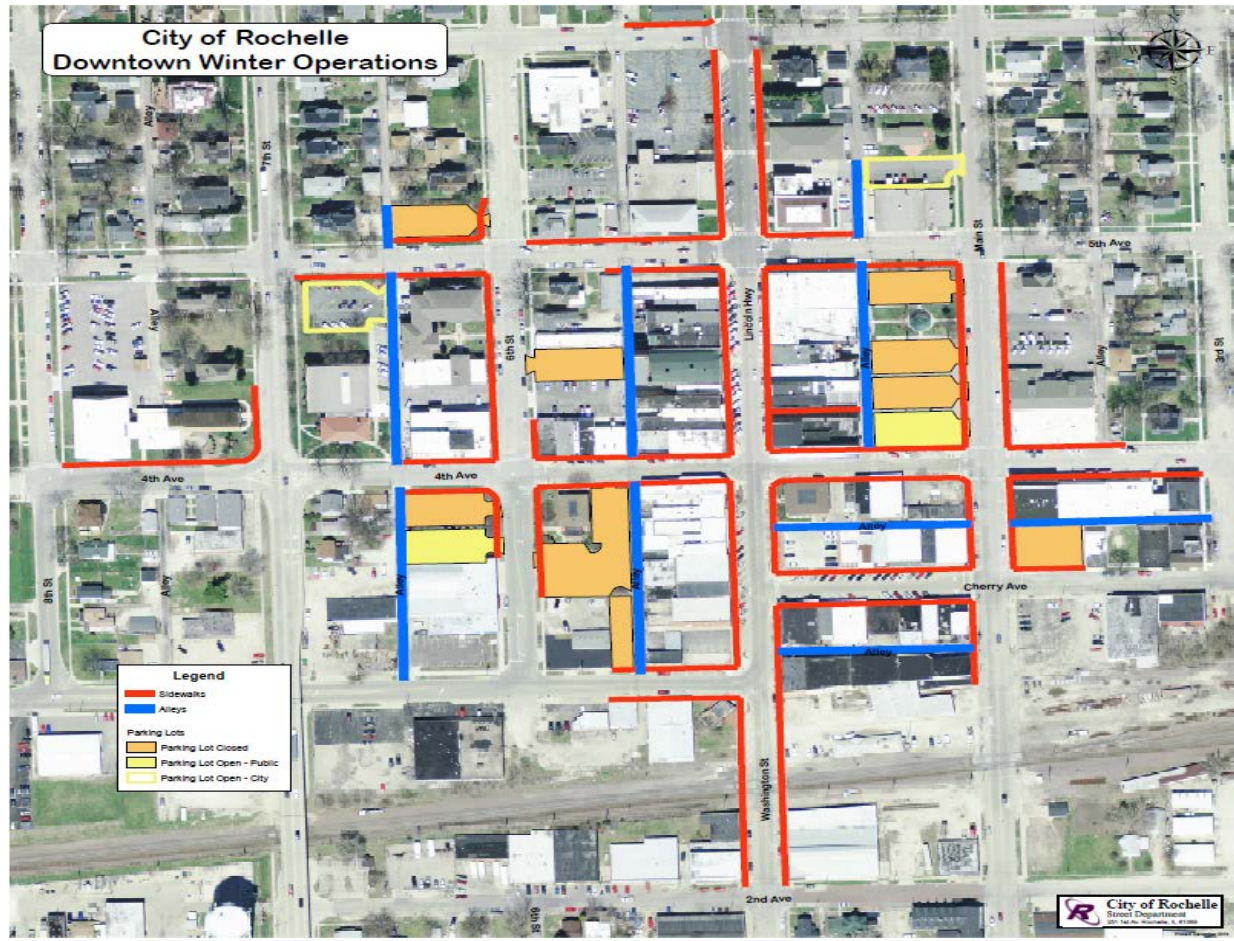
Exhibit N



Sec. 94-297. - DEPOSITING SNOW ON STREET OR SIDEWALK. (a) It is unlawful for any person to deposit or cause to be deposited any snow upon any street or alley of the city on that portion of the traveled way cleared or scheduled for snow clearance. (b) It is also unlawful for any person to deposit or cause to be deposited any snow in such a manner as to obstruct a public sidewalk, that portion of a private driveway located on the parkway portion of a public street, or in such a manner as to hamper vision at an intersection of traveled roadways. (Code 1996, § 10.75.070)

Downtown Winter Operations

Alleys - Parking lots - Sidewalks



Sec. 82-4. - REMOVAL OF SNOW FROM SIDEWALKS. It is unlawful for any owner or lessee of property abutting a public sidewalk within the area of the city bordered by Sixth Avenue on the north, Main Street on the east, Second Avenue on the south, and Sixth Street on the west to fail to remove snow within 24 hours after the accumulation of two or more inches. (Code 1996, § 12.25.025)

Mailbox Damage from Snow Plowing Policy

PURPOSE:

During the City's snow and ice control operations, there is a potential for mailboxes to be damaged either by direct contact with City equipment or by snow being cast by City plows. It is essential that the City clear the entire width of the roadway, either to the curb or road edge to enable traffic flow, drainage and access to mailboxes, as required by the U. S. Post Office. The purpose of this policy is to establish guidelines to be followed for the repair and/or replacement of mailboxes damaged by the City equipment during snow removal operations.

REPAIRS AND REPLACEMENT LIMITED TO DAMAGE FROM CITY SNOW REMOVAL EQUIPMENT:

The City of Rochelle will not be responsible for the repair and/or replacement of any mailbox or post unless the damage was a direct result of the City's snow removal equipment. Damage caused by private contractors, private vehicles, accidents not involving City equipment, or from an unknown cause will not be repaired by the City.

Notification of a broken mailbox and/or post must be provided to the Rochelle Street Department (815-562-2494) within 10 days of damage for repair or replacement by the City. Landscaping and planting materials added to the parkway or around mailboxes will be the sole responsibility of the property owner. These are high traffic areas subject to harsh conditions from necessary road and utility maintenance and snow and ice control operations. The City will not reimburse the owner for damage done to landscaping placed in the right-of-way resulting from City operations.

PROPER INSTALLATION OF MAILBOXES:

The placement of the mailbox, with respect to the back of the curb, is important and has a direct impact on the potential for damage. Mailboxes should be installed per the City of Rochelle guidelines outlined in this policy. These installation guidelines state mailboxes should be placed so that the front of the mailbox is 6" from the back of the curb or 12" from the edge of the pavement on streets without curb.

TEMPORARY MAILBOX:

If a mailbox has been damaged by City equipment during snow and ice control operations to the extent that it cannot be used for mail delivery, the City will provide and place a temporary mailbox until a permanent replacement can be installed. The resident must initiate this service by contacting the Rochelle Street Department.

MAILBOX REPLACEMENT:

If a mailbox has been damaged by the City during snow and ice control operations to the extent that it cannot be repaired, the City will provide and place a replacement mailbox when weather conditions permit. The replacement box and/or post will be of a standard type selected by the City of Rochelle. The City will not attempt repairs to custom mailboxes.

Exhibit P

IMPROPERLY INSTALLED MAILBOXES:

The City reserves the right to limit replacement for any improperly installed, previously damaged, or improperly maintained mailbox. Improperly installed mailboxes include those that are too close to the road edge or back of the curb, or those that were not installed per the City of Rochelle guidelines below.

