

City of Newark
Snow and Ice Control Plan



APPROVED BY:

DIRECTOR - PUBLIC WORKS AND WATER RESOURCES

CITY MANAGER

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1. Snow and Ice Control Summary

A. Statement of Objectives

The primary objective for City Field Staff during snow and icing events in the City of Newark is to provide for the passage of emergency vehicles. Secondary objectives for City staff is to provide for the safe and orderly movement of traffic and pedestrians on Newark's approximately 130 lane miles of streets, as well as providing services such as water, sewer and electric, uninterrupted, to the residents of Newark. Maintaining these systems requires access to all facilities in the event of an outage or disruption in service. This snow and ice control plan outlines the procedures used by the various Departments for snow removal operations.

The purpose of this Snow Plan is to transform the procedures and policies for snow and ice control that have been developed over the years into an effective and uniform set of actions; and to more efficiently provide standard response procedures to residents, elected officials, and third parties such as emergency response organizations, schools, etc. The actions to be taken by snow and ice response crews as described in this plan are a direct result of input provided by the City Manager's Office, multiple Department Director's and other management staff, resident and business community feedback, and City Council feedback.

This plan shall be comprehensive in nature and will encompass the many different parts and duties taken on by the various operating departments of the City of Newark. The Director of the Public Works and Water Resources Department is responsible for the development of this Snow and Ice Control Plan and will coordinate with other City Departments and the State Department of Transportation as necessary. This plan shall be reviewed annually to ensure it is kept up to date.

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2. Contact Information

A. City of Newark

City Manager's Office	302.366.7020
City Manager:	Carol Houck
Deputy City Manager	Andrew Haines
Public Works and Water Resources (PWWR)	302.366.7055
Director	Tom Coleman
Deputy Director	Tim Filasky
Field Operations Superintendent	Jason Winterling
Public Works Supervisor	Dave Dougherty
Water and Wastewater Supervisor	Bud Frederick
Maintenance Garage	Dave Vispi
Parks and Recreation Department	302.366.7060
Director	Charlie Emerson
Parks Superintendent	Tom Zaleski
Parks Supervisor	Rich Gregg
Planning and Development Department	302.366.7155
Director	Maureen Feeney-Roser
Parking Administrator	Marvin Howard
Newark Police Department	302.366.7111
Chief of Police	Paul Tiernan

B. Schools

Downes Elementary 220 Casho Mill Road, Newark, DE 19711	302.454.2133
Newark Center for Creative Learning 401 Phillips Avenue, Newark DE 19711	302.368.7772
KinderCare Learning Center 1520 Casho Mill Rd., Newark DE 19711	302.738.5953
Newark Day Nursery 921 Barksdale Rd, Newark, DE 19711	302.731.4925
Newark High School 750 E Delaware Ave, Newark, DE 19711	302.631.4700

West Park Place Elementary 302.454.2290
193 West Park Place, Newark, DE 19711

University of Delaware 302.831.2797

C. Outside Agencies

FIRE

Aetna Hose Hook and Ladder 302.454.3300
410 Ogletown Road Newark, DE 19711

POLICE

University of Delaware Police Department 302.831.2222
413 Academy Street Newark, DE 19717

Delaware State Police 302.739.5901
1441 N. DuPont Highway Dover, Delaware 19903

New Castle County Police 302.573.2800
3601 N. DuPont Highway New Castle, DE 19720

HOSPITALS

Main Street 'ER' 302.738.4300
324 East Main Street Newark, Delaware 19711

TRANSPORTATION NETWORK

CSX Railroad 877.835.5279
Norfolk Southern 855-667-3655
Amtrak Railroad 800.331.0008
DelDOT(Public Works) 302.326.4679

STATE PARKS

White Clay Creek State Park 302.368.6900
Park Office - 880 New London Road, Newark, DE 19711

OUTSIDE UTILITIES

United Water 302.633.5900
Artesian Water 302.453.6930
New Castle County (Sewer) 302.395.5700
Delmarva Power 800.898.8042

3. Snow and Ice Control Departmental Responsibilities

A. PWWR Management Operations

1. When a snow storm is predicted, PWWR Department Director, or his assign, shall confer with Management staff to discuss forecasted snow amounts. The primary source of forecasts shall be the National Oceanic and Atmospheric Administration's National Weather Service (NOAA-NWS). The associated website, Weather.gov, provides a detailed forecast discussion. Other sources may be used for informational purposes, but all decisions regarding storm response will originate from NOAA-NWS.

2. Management's discussion shall focus on size and timing of the event, staffing levels and equipment availability. The weather forecast and the predicted intensity of the storm will dictate the required level of staffing for the snow storm. Equipment and personnel from all necessary divisions (Streets, Refuse, Water, Wastewater, and Maintenance) will be used to staff equipment.

3. If the event is forecast to commence outside of work hours, scheduled or emergency call-in procedures have been established for each division to determine how employees are called to respond for emergency snow removal and ice control duties. A general call in procedure is included within the PWWR Contact List, which is maintained and updated by PWWR.

4. The Public Works and Water Resources Department has overall responsibility for development and execution of the Snow and Ice Control Plan. The Street Division is responsible for carrying out the majority of the snow and ice removal operations. During September and October of each year, in preparation for the upcoming snow season, the Streets Division will provide mandatory training sessions in order to familiarize department personnel with snow and ice control operations. Additionally, contact persons will be established for coordinating labor and equipment utilization. Departmental positions and their responsibilities for snow removal are described below:

a. Director of Public Works and Water Resources

- Monitor weather conditions
- Consult with City Manager for declaration of Emergency Snow Removal Routes and City Hall closure
- Establish Snow and Ice Control policies
- Review snow and ice control performance and recommend changes
- Send out letter/postcard to remind residents about sidewalk and fire hydrant responsibility.

b. Deputy Director of Public Works and Water Resources

- Monitor weather conditions

- Update Snow and Ice Control Plan annually
- Review and optimize snow routes
- Respond to citizen complaints and issues

c. Field Operations Superintendent - Public Works and Water Resources

- Responsible for the implementation of the snow and ice control policies
- Update the Snow and Ice Control Plan annually
- Review and optimize snow routes
- Establish personnel and equipment requirements based on plan
- Direct and monitor overall snow and ice control operations in conformation with the plan
- Identify and mark critical sag areas in streets to facilitate clearing to allow snowmelt to drain from roadway
- Recommend road closures
- Keep the Police Dispatch aware of storm conditions
- Request call out of additional personnel from other divisions
- Request call out of private contractors, if necessary
- Coordinate development and scheduling of operational training each year
- Coordinate driver training on actual routes prior to November 1 of each year. This shall include both daytime and nighttime operations.
- Ensure that current call out lists are available
- Ensure that materials are available and stockpiled each year
- Respond to citizen complaints and issues

d. Street Division Supervisor

- Responsible for carrying out the snow and ice control operations
- Provide status reports of manpower and equipment to the Director or his assign
- Provide periodic reports to Police Dispatch regarding status of routes and road conditions
- Ensure that equipment designated for snow and ice control operations is operable each year
- Ensure that proper de-icing material applications and/or plowing routes are being used
- Identify areas that need additional attention for meltwater draining across roadway
- Implement Street Division call out procedures as appropriate based on impending storm conditions
- Notify Field Operations Superintendent of additional personnel or equipment needs
- Preparation of post event reports

- e. **Additional Field Supervisors (Field Ops. Supt., Deputy Director, Director)**
 - Assist or replace the Street Division Supervisor, as needed, to patrol areas and monitor field operations
 - Prepare post storm reports
 - Supervise operators/drivers
 - Perform other snow removal functions as may be delegated by the Streets Supervisor

- f. **Water and Wastewater Division of PWWR**

The Water and Wastewater Division is responsible for clearing the snow at each of the City's Water and Wastewater Facilities. This includes the sidewalks that front any streets along the City property. A list of Facilities is included in Appendix C.

- g. **Maintenance Division of PWWR (Garage)**

The Maintenance Division is responsible for properly staffing the service and repair facility to keep equipment operational during snow and ice control operations. The division will provide adequate staff to minimize equipment downtime. Division staff may also be called to operate equipment during staff shortages in other divisions or departments.

B. Various City Department Responsibilities

The following sections outline the duties and responsibilities of various City Departments that will assist the PWWR Department in snow and ice removal. When a weather forecast calls for a winter type storm, regardless of its forecasted severity, all applicable departments shall be alerted to the possibility of providing assistance to the PWWR Department for snow or ice removal operations.

1. Newark Police Department (NPD)

Police Dispatch shall notify the Streets Division at the onset of the precipitation and road condition status. The Police Department will be called upon for assistance in such street operations as traffic control, blocking off traffic where immediate hazards exist and reporting dangerous conditions to the Police Dispatch. They will also enforce emergency traffic regulations and parking restrictions.

2. City Manager's Office

The City Manager's Office shall act as the liaison between council and department staff during all storm events requiring a response. Closure of City Hall must come at the direction of the City Manager after conference with PWWR staff. Declaration of Emergency Snow Removal Routes shall also come from the City Manager.

a. Purchasing – City Manager's Office

Purchasing shall provide the annual Salt and Sand contract and contact information for salt purchases and deliveries. The current

annual budget for snow melt materials is \$50,000. At current prices, this equates to roughly 900 tons of salt. The salt shed at the maintenance yard can hold approximately 600 tons. The Purchasing Department will prepare Purchase Orders, at the request of PWWR, for contractors that will provide equipment or services in the case of storms requiring staffing levels beyond current City resources. These Contractors will be called in by the Director of Public Works and Water Resources if augmentation is required.

b. Public Relations – City Manager’s Office

Public Relations Officer shall be responsible for disseminating information to the general public through the appropriate channels, such as Email, Social Media, Press Release and Channel 22. The information shall be provided to Public Relations from all participating Departments.

3. Information Technology

GPS and Internet connectivity are integral to executing this snow plan. IT will make sure all network functioning is up and running throughout the event.

4. Parks and Recreation Department

The Parks and Recreation Department maintains a separate snow plan for snow and ice control at City facilities. Coordination with the Streets Division is necessary for equipment and materials. Appendix G details the Parks and Recreation Department Snow and Ice Control Plan.

5. Parking Division of Planning and Development Department

The Parking Division will be responsible to assist PWWR with enforcing the Emergency Snow Removal Routes as well as limited clearing of sidewalks and parking spaces.

C. Snow Command Centers

1. Newark Police Station

Police Dispatch is located at the City of Newark Municipal Building at 220 South Main Street. All off-hours calls are automatically routed to Dispatch.

This Snow and Ice Control Plan will be maintained in the Newark Police Station by Police Dispatch. The Public Works and Water Resources Department shall be responsible to update the plan as necessary and provide a bound copy to Dispatch.

2. Street Division Operations Center

Public Works and Water Resources Operations Center shall be located at the Field Operations and Maintenance Yard at 406 Phillips Avenue. This center shall be furnished with the proper office and communications equipment necessary to

perform the various functions detailed throughout this plan. This center provides a staging area for employees involved in snow removal to receive information during the winter storm. The Operations Center will be operated by a varying number of personnel reflecting the intensity and severity of the storm. In any snow and ice control operation where the Operations Center is staffed, the Operations Center shall be under the administrative direction of the Director of Public Works and Water Resources or his designee. On hours calls regarding the snow storm and street conditions will be referred to the Street Division, telephone number 302.366.7055.

D. Snow Removal Priorities

All streets in Newark are prioritized into groups for conducting snow removal operations. The following summarizes the snow removal priorities. The list contained in Appendix A detail the classification of each road throughout the City.

Priority Level 1 Roads

The minimum roadway network that must be kept open to provide a transportation system that connects emergency centers throughout the city. Hospitals, fire stations, police stations and essential service facilities are all located on Level 1 Roads. Select steep roads and bridges are considered Level 1 in order to keep open for continuing plowing operations. Roads may also be considered Level 1 if essential employees must use the road to travel to and from work during the emergency conditions.

Priority Level 2 Roads

The remaining higher traffic volume roads not included as a Level 1 route above are considered Level 2 Roads. Schools, nursing homes, city recreation facilities and access to subdivision and residential streets are located on Level 2 Roads. Level 2 Roads may also be roads with steep grades that need to be treated or plowed in order to gain access during curb to curb clearing operations.

Priority Level 3 Roads

All Roads not classified or listed as a Level 1 or Level 2 shall be considered Level 3. Most subdivision and residential streets are classified as Level 3 Roads. These routes will be serviced after the Level 1 and Level 2 Roads are completed, unless the grade or presence of a bridge dictates that they be maintained with the Level 2 Roads.

E. Detailed Snow and Ice Removal Procedures

1. Winter Storm Categories

Typical winter storms that occur in our area may be categorized into four basic types. The response to the storm is different for each category. The following discussion presents information concerning these categories, the service levels that can be expected and the materials used for each type of storm. Later sections

will discuss the staffing and response levels in more detail. If at any time, the forecasted level of storm is surpassed, the response will be modified to more closely align with the response for a larger storm.

a. Category 1

Predicted Snow Fall Amount: Icing conditions and snowfall Less than 2”

Service Level:

Snow: Maintain Level 1 Roads on each route during storm. Level 2 and 3 Roads will only be plowed if requested due to safety concerns.

Icing: Maintain Level 1 Roads and spot treat Level 2 and 3 Roads, as necessary.

Materials: Salt as directed by supervisor.

Snow Procedure: Road treatment primarily consists of applying salt to Level 1 Roads, if necessary, prior to the onset and during the storm. Plowing will be required depending upon the weather conditions. If plowing is required, Level 1 Roads are maintained throughout the storm. Level 2 and 3 Roads will not be plowed or salted outside of regular working hours unless requested by the Police Department with concurrence from the Street Supervisor.

Icing Procedure: Road treatment primarily consists of applying salt to Level 1 Roads, all bridges and hills, as described in Appendix A, prior to the onset and during the storm. Level 2 and 3 Roads will not be salted outside of regular working hours unless requested by the Police Department with concurrence from the Street Supervisor. The supervisor on duty may also dispatch the drivers to locations of known icing or as requested by Police Dispatch. Re-freeze of snow melt or rain shall also be considered when evaluating staffing needs for these events.

Staffing: Category 1 staffing shall be minimal, typically a Supervisor, two (2) Snow Plow Drivers and one (1) Loader Operator would be necessary to maintain service. Staff may be scheduled when predicted temperatures and road conditions are favorable for icing.

b. Category 2

Predicted Snow Fall Amount: 2” – 4”

Service Level: Maintain Level 1 and Level 2 roads during the storm. Level 3 Roads will require service after the snowfall has ceased and the threat of additional snow has passed.

Materials: Salt as directed by supervisor.

Procedure: Storms in this category require all available snow plows from the Street Division. Level 1 and Level 2 Roads will be maintained throughout the storm. Level 3 Roads will be plowed when the snow has stopped and will be plowed to allow for traffic in both directions to pass. Road treatment primarily consists of applying salt as the storm

commences and during the storm. One (1) snow plow driver will be assigned to each route.

Staffing: Category 2 events will typically require a fully staffed response. Typically one (1) Supervisor, six (6) Snow Plow Drivers and one (1) Loader Operator would be necessary to maintain service. One (1) Mechanic from the Maintenance Division will also be required in the case of any necessary equipment repairs.

c. Category 3

Predicted Snow Fall Amount: 4" – 8"

Service Level: Maintain Level 1 and Level 2 roads during storm. Level 3 Roads will require service at the end of the storm. Potential hauling of snow from Downtown Snow Removal Area.

Materials: Salt and Sand mixture.

Procedure: The PWWR Director or his assign will recommend activation of Emergency Snow Removal Routes to the City Manager.

Storms at this level require all available equipment including snowplows and heavy equipment. Typically, multiple work shifts over more than one day are needed to maintain the road system in passable condition. Road treatment may initially consist of applying salt at the onset of the storm, but typically progresses quickly to snow plowing on all Level 1 Roads.

During the storm, Level 1 and Level 2 Roads are maintained to allow for the passage of emergency vehicles and one way traffic. Level 3 Roads are plowed to allow for one lane passage after 4 inches of snow has fallen and after the Level 1 and Level 2 routes are adequately addressed.

The PWWR Director and City Manager will determine the need to remove snow from Main Street that has been plowed into parking spaces. Due to staffing required to maintain the road network for storms in this category, a contractor may be utilized to remove snow from Main Street.

Staffing: Storms in this category require all available Street Division personnel and equipment and may include personnel and equipment from other divisions. One (1) Supervisor, six (6) Snow Plow Operators, one (1) Loader Operator and one (1) Mechanic will be on duty at all times. The first shift will be a 12 hour shift, followed by an 8 hour shift of relief drivers. If additional shifts are required, the first shift will be called back for another 12 hour shift. The Streets Supervisor may modify shifts depending on available staffing and timing of the storm.

d. Category 4

Predicted Snow Fall Amount: 8" or more

Service Level: Level 1 and Level 2 Roads remain passable during storm event.

Level 3 Roads are plowed after the Level 1 and Level 2 Roads are fully opened and passable, typically when the storm ends, or earlier if determined by the Public Works and Water Resources Director.

Materials: Salt will be used prior to the storm and after the plows have made a pass.

Procedure: This category includes storms with sufficient snowfall to cause a major disruption in the transportation system. Schools and Municipal Offices will likely be closed. Activation of the Snow Removal Emergency Routes will be necessary as early as possible ahead of the storm to allow for residents along these routes to make alternate plans for parking and allow for enforcement activities to ensure a clear route when the storm commences.

During the storm, Level 1 Roads will be cleared and Level 2 Roads will remain passable. All other Roads will be plowed as personnel and equipment permit, typically after snowfall has ceased. If large amounts of snow would dictate preliminary plowing of Level 3 roads, the supervisor on duty may instruct snow plow operators to go onto Level 3 roads to open a path. This will be followed by complete clearing of the streets at a later time.

Staffing: Storms in this category require all available Department personnel and equipment and may include contracted snow removal personnel and equipment. Two shifts will be necessary and will be scheduled by the Street Supervisor or other management acting in the supervisor capacity. One (1) Supervisor, six (6) Snow Plow Operators, one (1) Loader Operator and one (1) Mechanic will be on duty at all times. The first shift will be a 12 hour shift, followed by an 8 hour shift of relief drivers. If additional shifts are required, the first shift will be called back for another 12 hour shift. The Streets Supervisor may modify shifts depending on available staffing.

Snow will be removed from the Downtown Snow Removal Area as soon as practical following a storm. A contractor will likely perform this task as City resources may not be sufficient.

2. Plowing and Salting Operations

- a. The Streets Supervisor will be responsible for determining the number of personnel and types of equipment to dispatch during each snow storm, using the above Category guidelines. Each storm is variable in amount, timing and type of snow, which shall be considered when assignments are determined.
- b. Salting operations shall begin as soon as possible when conditions warrant. The supervisor on duty shall determine the application rate of the materials. Bridges and hills shall receive early attention as well as known trouble spots for each snow route.
- c. Snow plowing shall begin when the snow depth warrants. Snow routes shall be plowed in order of their priority as defined in this snow plan.

Streets generally will be plowed to the inside of both curbs before service is complete.

- d. Snow plow operators shall plow with the normal flow of traffic.
- e. Supervisors on duty shall routinely report street conditions and problem areas to the Director as necessary during the storm. Supervisors shall also notify the Director when equipment is out of service or when personnel shortages occur. The supervisor on duty shall maintain a list at the beginning of each shift as to the personnel and equipment assignments for each snow route. The supervisor shall also monitor the condition of snow routes that have been treated.
- f. The on-duty Maintenance personnel shall be responsible for maintaining all equipment in working order throughout any snow storm. Additional maintenance personnel shall be called as directed by the Streets Supervisor.
- g. Supervisors shall approve all time cards for employees from all divisions on duty for each shift.
- h. In severe Category 4 storms, housing for employees may be provided at either a local hotel or at the Yard. This will ensure relief drivers are available for the next work shift. In multiple shift storms, food may be provided for employees working shifts.
- i. Employees from the Water and Wastewater Division may not be available due to possible water emergencies inherent to cold weather.
- j. Standard road salt generally loses efficacy at temperatures below 20° F. The streets supervisor may halt or limit salting operations at temperatures below 20° F. Sand or a salt/sand mixture may be used at critical intersections. Sand has been shown to have negative environmental effects, therefore, it should be used sparingly.
- k. Active Plowing speeds are limited to 15 mph. Where sidewalks are adjacent to the roadway and the potential for casting snow onto the sidewalk exists, the limit shall be reduced to 10 mph.
- l. The supervisor on duty has the authority to park all fleet vehicles in the event the storm conditions present a safety concern, such as whiteout conditions.
- m. Cul-de-sac snow shall be piled where it will not interfere with mailboxes, fire hydrants or driveways. Residents will not be cited for piles of snow left by City personnel on cul-de-sac sidewalks.
- n. Equipment operators are to follow instructions of assigned supervisors concerning methods of treatment and assignments.
- o. Status reports shall be given to supervisor and inform supervisor of any breakdowns, delays or difficulties.

3. Snow Plow Routes

- a. Snow removal routes have been developed through years of snow plowing operations and have been optimized to get the maximum amount of roads cleared in the shortest time possible utilizing a full crew, which is one driver on each route.

- b. When possible, two trucks will be dispatched to the Level 1 Roads on each route. Once the Level 1 areas are passable, one driver will remain on the route, while the other is assigned to a different route.
- c. Appendix A includes a written description of all routes.

4. Downtown Snow Removal Area, Main Street Clearing, Hauling and Dumping Operations

- a. Select Category 3 and all Category 4 events will require the snow and ice to be hauled from the Downtown Snow Removal Area. Category 1 and 2 events will have snow pushed into designated parking spots along the route and leave a majority of the spots open for use. The limits of the Downtown Snow Removal Area shall be inside of the curbs of East Main Street between Tyre Avenue and South College Avenue. Dump sites are located throughout the city. Snow shall be hauled to each dump site as determined by the Streets Supervisor or his assign. Dumping shall be conducted to maximize space at each site and can be pushed with the loader as requested by the drivers. The following locations have been designated as snow dump sites. They are listed here in order of use preference:

- 1. Old Paper Mill Park (Across from Newark Reservoir)
- 2. Leroy Hill Ballfield Parking Lot
- 3. Louviers Water Tank
- 4. Chrysler Site – UD STAR Campus(Coordinate with UD)

5. Equipment

- a. Equipment used are fleet vehicles from the Streets Division, supplemented with equipment from other operating divisions. Descriptions and capabilities of this equipment is listed below. It is the responsibility of each division to inform the Maintenance Division of any equipment issues in order to maintain their equipment in good operating condition for snow removal. All of the equipment from the Water and Wastewater Division may not available for snow removal duty because of the need to hold trucks for water emergencies. The Street Division does not have sufficient employees available to staff all of their equipment. Employees from other operating departments are essential for having all equipment fully operational during snow events. All departmental vehicles are used throughout the year in many different capacities. As winter approaches, plows and spreaders are fitted to applicable trucks to ensure working order. The snow removal equipment remains in service of other PWWR duties until the need arises for snow removal. The following is a list of equipment available to the department for snow removal:

Street Division

Seven (7) Dump Trucks outfitted with Plows and Salt Spreaders
One (1) Backhoe
One (1) Rubber Tire Loader
Two (2) Pickups (4x4) outfitted with Plows, No salt
One (1) Dual Rear Wheel Pickup (4x4) with Plow and Salt Spreader
PWWR Emergency Response Trailer

Water and Wastewater Division

One (1) Backhoe
One (1) Dump Truck outfitted with Plow and Salt Spreader
One (1) Walk behind Snowblower

Fleet as of July 28, 2014, subject to change prior to update of plan based on equipment purchase capital program.

6. Towing Procedures

- a. Towing stalled or abandoned vehicles may be necessary so that the snow and ice control operations can be effective in keeping a priority snow route open for safe traffic flow. When authorized by the Director of Public Works and Water Resources, towing of stalled or abandoned vehicles in consultation with the Police Department may be necessary to keep the street open to safe traffic flow. Upon request from the Street Division Supervisor, the Police Department will dispatch a commercial towing company to provide the required assistance. The Police Department and Maintenance Division of PWWR maintain a rotating list of commercial towing companies who have contracts with the City to provide this service.
Towing procedures for Snow Emergency Routes are included within the referenced Code Section in Appendix B.

7. Road Closures

- a. During certain winter maintenance operations it may become necessary to close streets or portions of streets to traffic. It shall be the responsibility of the Street Division to obtain, maintain and place all barricades. Other operating department personnel may be used to help place barricades on roadways for closure. Variable message board signs may also be used during winter conditions. The PWWR Emergency Response Trailer may be used to transport signage and barricades, if necessary.

8. Post Storm Activities

- a. When the storm is over, the Field Operations Superintendent or his designee, shall prepare a written report of the snow and ice control

operation that will contain detail storm characteristics, manpower required, materials and equipment used as well as any problems encountered and recommendations for the next event. The Snow and Ice Report Form shall be submitted to the Director of Public Works and Water Resources for information and review. In addition, Fleet vehicles shall be washed at a car wash to reduce the effects of salt corrosion. See Appendix D for Snow and Ice Event Reporting Form.

9. Property Damage

- a. Minor property damage may occasionally happen during snow removal. Requests from residents shall be investigated immediately by the Streets Division and repaired or replaced as necessary. These issues typically involve residential mailboxes and grassplots behind the curb. The replacement should be as close to existing material and placement as possible. If the location of the mailbox is such that it will likely be hit again, the Street Division Supervisor shall discuss possible relocation of the mailbox with the resident.

Appendices

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Appendix A
PWWR Snow Plow Routes

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Snow and Ice Control - ROUTE 1

Level 1 Route

1. Leave yard on Phillips Avenue
2. Left on Ritter
3. Right on Orchard
4. Right on West Park Place
5. Continue on East Park Place
6. Left on South Chapel
7. Continue on North Chapel
8. Continue on Paper Mill Road
9. Right onto Possum Park Road
10. Right on Cullen Way
11. U-Turn at Beagle Club Way
12. Retrace route back to Yard.

Level 2 Route

1. Turn right on Old Paper Mill Road to Paper Mill Falls. Turn right on Fallbrooke Drive, go to end, make U-turn to Old Paper Mill Road.
2. Turn right on Old Paper Mill Road to Ridgewood Glen. Turn left on Shenandoah, go to end, make U-turn to Old Paper Mill Road, make u-turn to Nightingale Circle.
3. Turn left on Nightingale Circle, go to end, make u-turn to Shenandoah Drive. Turn left on Shenandoah Drive to Moss Court. Turn left on Moss Court, go to end, make u-turn to Shenandoah Drive.
4. Turn left on Shenandoah Drive to Wood Song Circle. Turn left on Woodsong Circle, go to end, make u-turn to Shenandoah Drive.
5. Turn left on Shenandoah Drive to Glenview Place. Turn right on Glenview Place, go to end, make u-turn to Shenandoah Drive.
6. Turn right on Shenandoah Drive to Meadow Wind Circle. Turn left, go to end, make u-turn to Shenandoah Drive. Turn left, follow to Old Paper Mill Road, turn right on Old Paper Mill Road.
7. Turn right on Old Paper Mill to Paper Mill, turn right on Paper Mill Road to Wharton Drive.
8. Turn right on Wharton Drive, go to end, make U-turn to Paper Mill Road.
9. Turn right on Paper Mill Road to Jenney's Run. Turn right on Register Drive, go to end, make U-turn to Paper Mill Road.
10. Turn right on Paper Mill Road to Wyncliff Lane. Turn right, go to end, make U-turn to Paper Mill Road.
11. Turn right on Paper Mill Road to Pine Meadow. Turn right on Cook Way, go to end, make U-turn to Paper Mill Road, turn right on Paper Mill Road.
12. Turn right on Paper Mill Road, go to Woods of Louviers. Turn right on Odessa Way, go to end, make U-turn to Winterthur Lane. Turn left on Winterthur Lane to Odessa Way to Paper Mill Road.
13. Turn right on Paper Mill Road to Winterthur Lane. Turn right on Winterthur Lane to

- Odessa Way, make u-turn to Paper Mill Road.
14. Turn right to Paper Mill to Possum Park Road. Turn right on Possum Park Road to Middle Run Meadows. Turn right on Middle Run Road, go to end, make U-turn to Possum Park Road.
 15. Turn right on Possum Park Road, turn right on Eleanor's Way to the dead-end and make a U-turn to Possum Park Road.
 16. Turn right on Possum Park Road to Cullen Way.
 17. Follow Cullen Way to Beagle Club Way. Make a right on Beagle Club Way to Cullen Way. Turn right on Cullen Way, follow around to Bowman Way.
 18. Turn left on Bowman Way. Go to cul-de-sac, make u-turn to Cullen Way. Turn left on Cullen Way to Walker Way.
 19. Turn left on Walker Way. Go to end, make u-turn to Hayden Way, turn right towards Woods. Make u-turn to Hayden Way, follow around to Walker Way to Cullen Way.
 20. Turn right on Amoroso Way to Crowe Way. Turn right on Crowe Way, go to cul-de-sac, make u-turn to Amoroso Way. Turn right on Cullen Way.
 21. Turn left on Cullen Way to Walker Way. Turn left on Walker Way, follow to Bird Way. Turn left on Bird Way, go to end, make u-turn to Walker Way.
 22. Turn right on Walker Way. Go to Amoroso Way. Turn left on Amoroso Way, follow to Cullen Way. Turn right on Cullen Way to Possum Park Road.

Level 3 Route

1. Follow Paper Mill Road to Cleveland Avenue, to Woodlawn Avenue.
2. Turn right on Woodlawn Avenue.
3. Turn left on Poplar Avenue.
4. Turn right on Capitol Trail.
5. Turn right on Orchard Avenue.
6. Turn left on Woodlawn Avenue.
7. Turn left on Ash Avenue.
8. Turn right on Capitol Trail.
9. Turn right on Elm Avenue.
10. Turn right on Stafford Avenue, go to end, make U turn.
11. Turn right on Woodlawn Avenue.
12. Turn right on Hawthorne Avenue.
13. Turn left on Stafford Avenue.
14. Turn left on Adelene Drive to Hawthorne Avenue.
15. Turn right on Hawthorne Avenue to Magnolia Circle.
16. Turn right on Magnolia Circle, go to dead end make U-turn to Hawthorne Avenue.
17. Turn right on Hawthorne Avenue to Stafford Avenue to Woodlawn Avenue.
18. Follow Woodlawn Avenue to Capitol Trail.
19. Continue on Paper Mill Road.
20. Turn right on Curtis Paper Mill Road.
21. Go in Paper Mill Farms - come out.
22. Turn left on Old Paper Mill Road to Creek Bend dead end, make U turn to Creek Bend Court.

23. Turn left on Creek Bend Court to dead end make U turn to Old Paper Mill Road.
24. Turn right on Paper Mill Road to Jenny's Run, go to end make U-turn to Paper Mill Road.
25. Turn right on Paper Mill Road to Pine Meadow, turn right on Cook Way to LaSalle Way, go to end, make U turn to other end cul-de-sac.
26. Make U turn to Cook Way, make right on Cook Way to Paper Mill Road, turn right on Paper Mill Road to Woods of Louviers.
27. Turn right on Odessa Way, go to end, make U turn to Nemours Lane, turn left on Nemours Lane, go to end, make U turn to Odessa Way.
28. Turn left on Odessa Way to Killens Pond Court, turn left on Killens Pond Court, go to end, make U turn to Odessa Way.
29. Turn left on Odessa Way to Mistletoe Court. Turn right, go to end, make u-turn to Odessa Way.
30. Turn left on Odessa Way to Winterthur Lane. Follow to Rockwood Court. Turn left on Rockwood Court, go to end, make u-turn to Winterthur Lane.
31. Turn left on Winterthur Lane to Willington Square Way. Turn left on Willington Square Way to Henlopen Court.
32. Turn right on Henlopen Court. Go to end, make u-turn to Willington Square Way. Turn right on Willington Square Way to Winterthur Lane.
33. Turn right on Winterthur Lane to Longwood Lane. Turn left on Longwood Lane, go to end, make u-turn to Hagley Lane.
34. Turn right on Hagley Lane. Go to end, make u-turn to Longwood Lane. Turn right on Longwood Lane to Fenwick Court.
35. Turn right on Fenwick Court. Go to end, make u-turn to Winterthur Lane. Turn right on Winterthur Lane to Paper Mill Road.
36. Turn right on Paper Mill Road to Possum Park Road, turn right on Possum Park Road to Middle Run Meadow.
37. Turn right on Middle Road go the end, make U-turn to Middle Court, make U-turn to Middle Road.
38. Turn left to Delanco Court, make right Delanco Court, go to dead end, make U-turn to Possum Park Road.
39. Turn left on Possum Park Road to Paper Mill Road.
40. Turn left on Paper Mill Road to N. Chapel Street and back to yard

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Snow and Ice Control – Route 2

Level 1 Route

1. Leave yard on Phillips Avenue
2. Right on Ritter
3. Right on South College Avenue
4. Continue on South College Avenue
5. Left toward Old Cooches Bridge Road
6. U-Turn and Right onto South College Avenue
7. Continue on South College Avenue
8. U-Turn at Park Place
9. South on S. College Ave.
10. Right on W. Chestnut Hill Road
11. U-Turn at Highfield Drive
12. Right on S. College Ave.
13. Right on Welsh Tract Road
14. U-Turn over bridge
15. Left on S. College Ave.
16. Right on Old Chestnut Hill Road
17. U-Turn and back to S. College Ave
18. Right on S. College and back to Yard

Level 2 Route

1. Start South College Avenue on Southside of S. College Avenue Bridge
2. Turn right on W. Chestnut Hill Road
3. Turn right on Arbour Drive follow Arbour Drive around.
4. Turn left on Lark Drive
5. Turn left on Oriole Drive
6. Turn right on Dove Drive
7. Turn right on Blue Jay go to end - Make U turn continue to end, make another U turn.
8. Turn right on Dove Drive
9. Turn left on Arbour Drive.
10. Turn left on Oriole Drive
11. Turn right on Lark Drive go to end, make U turn.
12. Turn left on Arbour Drive.
13. Turn left on West Chestnut Hill Road.
14. Make right turn into Cobblefield Drive to East & West Cobblefield Court to dead end make U turn to West Chestnut Hill Road. Turn Right on W. Chestnut Hill Road
15. Turn left on Minquil Drive.
16. Turn left on Park Drive to end, make U turn.
17. Continue to South College Avenue.
18. Turn right on South College Avenue, continue to Plymouth Drive.
19. Turn right on Plymouth Drive to West Chestnut Hill Road.

20. Turn right on West Chestnut Hill Road to South College Avenue.
21. Turn right on South College Avenue to Welsh Tract Road extension.
22. Turn right on Old Cooches Bridge Road, go to end and make U-turn, proceed to Bellevue Road.
23. Turn right, clean Bellevue Road down to railroad tracks, make U-turn, come back out to Old Cooches Bridge Road.
24. Turn right to Welsh Tract Road.
25. Turn left, to South College Avenue.
26. Turn right, proceed to Park Place.
27. Make a left on West Park Place, go to Elkton Road, make U-turn, come back to South College Avenue.
28. U turn and back to Apple, left on Apple.
29. Right on Chrysler
30. Right on Elkton Road
31. Right on West Park Place Right on Willa, Clear Willa.

Level 3 Route

1. Start South College Avenue and Kells Avenue.
2. Turn right on Wollaston Avenue.
3. Turn right on Water Works Lane - go to end, make U turn.
4. Turn left on Academy Street.
5. Turn right on Kells Avenue.
6. Turn right on Manuel (prefer to back in).
7. Turn right on Kells Avenue to end, make U turn.
8. Turn right on Manuel Street.
9. Turn left on East Park Place.
10. Turn left on Academy Street.
11. Turn right on Kells Avenue.
12. Turn left on South College Avenue.
13. Turn right on Marvin Drive - go to end, make U turn.
14. Turn right on South College Avenue.
15. Turn left on Welsh Tract Road Extension.
16. Turn right on Cooches Bridge Road - go to end, make U turn.
17. Turn right on Bellevue Road, go to end, make U turn.
18. Turn right on Cooches Bridge Road.
19. Turn right on Edjil Drive.
20. Turn right on Anita Drive.
21. Turn right on Janice Drive.
22. Turn right on Donna Drive.
23. Turn left on Anita Drive.
24. Turn left on Edjil Drive.
25. Do NOT plow Kitty Lane or Karen Lane.
26. Turn right on Janice Drive.
27. Turn right on Edjil Drive to Yorkshire Woods, turn right on Douglas D Alley Drive, follow around to Edjil Drive.

28. Make right, go onto Matthew Flocco, follow around, U-turn and follow out to Edjil Drive.
29. Turn left on Edjil Drive.
30. Turn left on Cooches Bridge Road, turn right at Welsh Tract Road, Extension.
31. Turn right on South College Avenue.
32. Turn right on East Chestnut Hill Road to Cannon's Gate, turn right on Cannon's Way, go to end, make U-turn to East Chestnut Hill Road.
33. Turn right on Route 4 to Rt. 72, turn right on 72 to Bellevue Road, turn right on Bellevue, go to end, make U turn to 72.
34. Turn left on Rt. 72 to Route 4, turn left to Route 4
35. Turn left on West Chestnut Hill Road to Plymouth Drive, turn left on Plymouth Drive to Brook Drive.
36. Turn left on Plymouth Drive, go across West Chestnut Hill Road to Brook Drive.
37. Turn left on Park Drive.
38. Turn left on Minquil Drive.
39. Turn left on Lenape Lane.
40. Turn left on Minquil Drive.
41. Turn right on West Chestnut Hill Road.
42. Turn right on Art Lane, go to end, make U turn.
43. Turn right on West Chestnut Hill Road.
44. Turn left on Rock Lane, go to end, make U turn.
45. Turn left on Crystal Court, go to end, make U turn.
46. Turn left on Rock Lane.
47. Turn left on West Chestnut Hill Road.
48. Turn left on Delgrove Avenue, go to end, make U turn.
49. Turn left on Pennwood Street, go to end, make U turn.
50. Turn left on Delgrove Avenue.
51. Turn right on West Chestnut Hill Road to South College Avenue.
52. Take East Chestnut Hill Road to Cannons Gate, go to end make U-turn back to South College Avenue.
53. Turn left on South College Avenue.
54. Turn left on West Park Place.
55. Turn left on Beverly Road.
56. Turn right on Ritter Lane.
57. Turn left on Apple Road, go to end, make U turn.
58. Turn right on Dallas Avenue, go to end, make U turn.
59. Turn right on Beverly Road.
60. Turn right on Ritter Lane.
61. Turn left on Townsend Road.
62. Turn left on Manns Avenue.
63. Turn right on Apple Road.
64. Turn left on West Park Place.
65. Turn right on Peach Street.
66. Turn left on Murray Road, turn left on Elkton Road.
67. Turn left on West Park Place.
68. Turn right on Willa Road.

69. Turn right on Firethorn Court, go to end, make U turn.
70. Turn left on Willa Road to Lehigh Road.
71. Turn left on Lehigh Road, go to Alexandria Drive, make U turn.
72. Turn right on Kenyon Lane.
73. Turn right on Chrysler Avenue.
74. Turn left on Swarthmore Drive.
75. Turn left on Susquehanna Circle, go to end, make U turn.
76. Turn left on Swarthmore Drive.
77. Turn right on Lehigh Road, go to end, make U turn.
78. Turn right on Short Lane.
79. Turn left on Binns Service Road, go to end, make U turn.
80. Come back to Elkton Road.
81. Turn left at Gravenor Lane, go to end, make U turn.
82. Turn right on Elkton Road.
83. Turn right on Chrysler Avenue.
84. Turn right on Cornwall Drive.
85. Turn right on Alexandria Drive.
86. Turn left on Devon Drive.
87. Turn right on Cornwall Drive, go to end, make U turn.
88. Turn right on Shull Drive, go to end, make U turn.
89. Turn left on Chrysler Avenue.
90. Turn right on Bradford Lane.
91. Turn right on Devon Drive.
92. Turn right on Shull Drive.
93. Turn right on Leeds Lane.
94. Turn right on Devon Drive.
95. Turn right on Cornwall Drive.
96. Turn right on Chrysler Avenue.
97. Turn right on Bradford Lane.
98. Turn left on Devon Drive.
99. Turn left on Chrysler Avenue.
100. Turn right on Willa Road, go to end, make U turn.
101. Turn left on Chrysler Avenue.
102. Turn left on Apple Road.
103. Turn right on Ritter Lane.
104. Turn left on Orchard Road.
105. Turn left on West Park Place.
106. Turn left on Beverly Road.
107. Turn left on Manns Avenue.
108. Turn right on Orchard Road.

Snow and Ice Control – Route 3

Level 1 Route

1. Leave yard on Phillips Avenue
2. Right on Ritter
3. Left on S. College Ave.
4. Left on W. Main St.
5. Continue on W. Main
6. Continue on Nottingham Road
7. U-Turn at Wedgewood Road
8. Merge onto South Main St.
9. Left on Delaware Ave.
10. Left on S. College Ave.
11. Left on W. Main St.
12. Right on New London Road
13. U-Turn at New London Road Water Tank
14. South on New London Road to Hillside Road
15. Right on Hillside Road
16. Left on Apple Road
17. Back to Yard

Level 2 Route

1. Start Ritter Lane and South College, Go North.
2. Turn left on West Main Street.
3. Turn half right on New London Road
4. Turn right on Fremont Road
5. Turn left on Lynn Drive - go to Fremont Road - make U turn.
6. Back in on Winfield Court.
7. Turn right on Lynn Drive.
8. Turn left on Woodhill Court - make U turn
9. Turn right on Wakefield Drive
10. Turn right on Fremont Road
11. Turn right on New London Road - go past Water Tank, make U turn.
12. Turn right on Country Club Drive.
13. Left on Windsor Drive.
14. Turn left on Delrem Drive
15. Turn right on Nottingham Road - go to City Limits - make U turn
16. Make sharp left on New London Road.
17. Make left on Hillside Road.
18. Turn right on Nottingham Road.
19. Turn right on Delrem Drive.
20. Turn right on Windsor Drive.
21. Turn left on North Country Club Drive, continue around.
22. Turn left on Stamford Drive to end - make U turn.

23. Turn left on Danna to end - make U turn.
24. Turn left on Stamford Drive.
25. Turn left on Hilltop Drive to end - make U turn.
26. Turn left on Stamford Drive.
27. Turn left on Cambridge Drive.
28. Turn right on New London Road.
29. Turn right on Corbit Street.
30. Follow Corbit Street to Nottingham Road to Delrem Drive. Turn right on Delrem Drive into West Branch.
31. Make a right on E. Mill Station Drive.
32. Continue west back to E. Mill Station Drive.
33. Come back to Fair Valley Court.
34. Go to Point Avenue.
35. Go to Boundary Road.
36. Go to Clear Spring Lane.
37. Back to Casho Mill Road on Nottingham Road.
38. Make right on Nottingham Road.
39. Go into Christianstead.
40. Make right on Farmhouse Road.
41. Make a left at Headwater Lane, go to cul-de-sac, make u-turn to Farmhouse Road.
42. Make left on Farmhouse Road to Fallen Tree Court, make right on Fallen Tree Court, go to cul-de-sac, make u-turn to Farmhouse Road.
43. Make right on Farmhouse Road to Hidden Valley Drive, turn right on Hidden Valley Drive, go to end, make u-turn to Haywood Court, turn left on Haywood Court, go to end, make u-turn to Hidden Valley Drive.
44. Make left on Hidden Valley Drive, go to end, make u-turn to Rising road, turn right on Rising Road to Bridgeview Court, turn right on Bridgeview Court, go to end, make u-turn to Rising Road.
45. Make right on Rising Road to Wedgewood Road, turn left on Wedgewood Road to Nottingham Road.

Level 3 Route

1. Continue from Church Road to Casho Mill Road to Delrem Drive to Windsor Drive into Fairfield.
2. Turn right on Windsor Drive.
3. Turn right on Country Club Drive.
4. Turn left on Danbury Road.
5. Turn right on Meriden Drive.
6. Turn left on Cambridge Drive.
7. Turn left on Wilshire Lane.
8. Turn left on Meriden Drive.
9. Turn right on Stamford Drive, go to end, make U turn.
10. Turn left on Locust Street, go to end, make U turn.
11. Turn left on Stamford Drive.

12. Turn right on Hearn Place, make U turn.
13. Turn left on Stamford Drive.
14. Turn right on Cambridge Drive.
15. Turn right on Fairfield Drive, make U turn.
16. Turn right on Cambridge Drive.
17. Turn right on Hempstead Drive, make U turn.
18. Turn right on Cambridge Drive.
19. Turn right on Hanover Place.
20. Turn right on North Country Club Drive to Stamford, make U turn.
21. Turn right on Darien Drive, prefer back up, return to North Country Club.
22. Turn right on North Country Club Drive.
23. Turn left on Hartford Place, make U turn.
24. Turn left on North Country Club Drive.
25. Turn left on Wilshire Lane.
26. Turn left on Cambridge Drive.
27. Turn left on New London Road to Scotch Pine Drive (Evergreen).
28. Turn right follow around Scotch Pine Drive to Red Pine Circle.
29. Go to dead end make U turn to New London Road.
30. Turn left on New London Road to Andrew's Way (Northgate Commons).
31. Turn right on Heather Court to dead end make U turn to Renee Court.
32. Turn right to New London Road.
33. Turn right to Grays Avenue.
34. Turn right on New London Road.
35. Back in on Grays Avenue.
36. Turn right on New London Road.
37. Turn right on Corbit Street.
38. Turn right on Terry Lane.
39. Turn right on Kennard Drive, make U turn.
40. Turn left on Terry Lane.
41. Turn right on Corbit Street.
42. Back into Wilson Street.

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Snow and Ice Control – Route 4

Level 1 Route

1. Leave yard on Phillips Avenue
2. Right on Ritter
3. Left on West Park Place
4. Right on South Main St.
5. Right on W. Delaware Ave.
6. Left on South College Ave.
7. Left on W. Main St.
8. Left on South Main St.
9. Continue onto Elkton Road
10. Right on Casho Mill Road
11. U-Turn at train tracks underpass
12. Back to Elkton Road
13. Right on Elkton Road
14. U-Turn at Macintyre Boulevard
15. Continue on Elkton Road/S. Main St.
16. Repeat loop of S. Main St./ Elkton Road to clear both lanes
17. Right on S. College back to Yard

Level 2 Route

1. From Yard turn right on Orchard
2. Left on Amstel
3. Left on S. Main St.
4. Continue on Elkton Road
5. Left onto Sandy Drive
6. Clear Sandy Drive and Markus Court
7. Right on Sandy Brae road
8. Right on Elkton
9. Left on Apple, over bridge
10. Right on Hillside
11. Left on Dallam
12. Right on Radcliffe
13. Right on Nottingham
14. Right on Bent Lane
15. Right on Vassar
16. Right on Casho Mill Road
17. Right on Nottingham Road
18. Back to S. Main St.

Level 3 Route

1. Start at West Main Street.
2. Turn left on Old Oak Road.
3. Turn left at Sypherd Drive.
4. Turn left at Hillside Road.
5. Turn left at Dallam Road.
6. Turn left at Old Oak Road.
7. Turn left at Hullihen Court, make U Turn.
8. Turn left at Old Oak Road.
9. Turn right at Briar Lane.
10. Turn right at Hullihen Drive.
11. Turn right at Old Oak Road.
12. Turn right at Briar Lane.
13. Go to Bent Lane, make U turn.
14. Turn left at Cheltenham Road.
15. Turn left at Old Oak Road.
16. Turn right at Sypherd Drive.
17. Turn left at Wilson Road - Back up to Cheltenham Road.
18. Drive straight to Wilson Road and Briar Lane.
19. Turn right at Bent Lane.
20. Turn right at Dallam Road.
21. Turn left at Hillside Road.
22. Turn right at Forrest Lane, Make "Y" turn.
23. Turn left at Hillside Road.
24. Turn right at Cheltenham Road.
25. Turn right at Old Oak Road.
26. Turn left at Dallam Road.
27. Turn right at Briar Lane.
28. Turn right at West Main Street.
29. Turn right at Tanglewood Lane.
30. Turn right at Bent Lane.
31. Turn right at Briar Lane.
32. Turn left at Dallam Road - Turn right at Baylor Drive.
33. Turn left at Vassar Drive.
34. Turn left at Colgate Lane.
35. Turn left at Radcliffe Drive.
36. Turn left at Harvard Lane.
37. Turn right at Vassar Drive.
38. Turn right at Fiske Lane.
39. Turn left at Radcliffe Drive.
40. Turn left on Lafayette.
41. Turn right at Baylor Drive.
42. Turn left at Dallam Road.
43. Turn right at Lafayette Road.
44. Turn left at Amherst Drive.
45. Turn left at Fiske Lane.
46. Turn left at Dallam Road.

47. Turn left at Lafayette Road.
48. Turn right on Amherst Drive.
49. Turn left at Tufts Lane - Back Down to Baylor Drive and drive out Vassar Drive.
50. Turn right at Vassar Drive.
51. Turn right at Old Casho Mill Road.
52. Turn right at West Main Street.
53. Turn right at Elkton Road.
54. Turn left at Amstel Avenue.
55. Turn right at South College Avenue.
56. Turn right at Kent Way.
57. Turn left at Orchard Road.
58. Turn right at Sunset Road.
59. Turn right at Townsend Road.
60. Turn right at Winslow Road.
61. Turn right at South College Avenue.
62. Turn right at Sunset Road.
63. Turn right at Apple Road.
64. Turn right at Winslow Road.
65. Turn right at Townsend Road.
66. Turn left at West Park Place.
67. Turn left at Orchard Road.
68. Turn right at Sunset Road.
69. Turn right at Indian Road.
70. Turn right at West Park Place.
71. Turn right at Beverly Road.
72. Turn left at Sunset Road.
73. Turn left at Apple Road.
74. Turn left at Grantham Place.
75. Turn left at Beverly Road to Elkton Road.

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Snow and Ice Control – Route 5

Level 1 Route

1. Leave yard on Phillips Avenue
2. Left on Ritter
3. Right on Apple
4. Right on Hillside Road
5. Left on New London Road
6. Left on Corbit St.
7. Left on W. Main St.
8. Right on Hillside Road
9. Continue on Barksdale Road
10. Right on Casho Mill Road
11. U-Turn at Nottingham Road
12. Continue on Casho Mill Road
13. Right on Barksdale Road
14. U-Turn at City Line
15. Continue East on Barksdale Road
16. Right on Casho Mill to train track tunnel
17. U-Turn at tunnel and go north on Casho Mill Road
18. Right on Barksdale
19. Right on Apple
20. Right on S. Main St.
21. Right on Veterans Lane – Clear Veterans Lane to rear parking area
22. Right on S. Main St.
23. Right on Thorn Lane to City Line
24. U-turn back to S. Main and back to yard

Level 2 Route

1. Leave Yard on Phillips Avenue
2. Left on Ritter
3. Right on Apple
4. Left on Barksdale
5. Right on Casho Mill
6. Left on Church Road
7. U-turn at Springwater Way
8. Left on Panorama
9. U-turn at Nottingham Road
10. Continue on Panorama
11. Right on Timberline U-turn at end
12. Cross Church Road Left on Panorama
13. Left on Church Road
14. Right on Casho Mill
15. Right on Rahway

16. U-turn at Barksdale
17. Right on Webb
18. Right on Picket
19. Left on Rahway
20. Right on Barksdale
21. Right on Blue Hen Ridge
22. U-turn at Squirrel
23. Right on Country Place Drive
24. Right on Chickory
25. U-turn at Hammerhead back to Barksdale
26. Right on Barksdale
27. Right on Country Hills Drive
28. U-turn at end back to Barksdale
29. Cross over Barksdale to Abbotsford Lane
30. U-turn at Kinross
31. Right on Barksdale
32. Right on Colonial Court
33. Clear to fork and back to Yard

Level 3 Route

1. Leave Yard on Phillips Avenue
2. Left on Ritter
3. Right on Apple
4. Left on S. Main St.
5. Right on Lincoln
6. Right on Madison
7. Left on Thorn lane
8. U-turn at S. Main St.
9. Continue on Thorn
10. Right on Madison
11. Left on Lincoln
12. Right on S. Main
13. Right on O'Daniel
14. Right on Connell Circle(Call in if cars blocking Culdesac)
15. U-turn to O'Daniel
16. Right on O'Daniel to Westfield
17. Cross Casho Mill Road to Westfield Circle
18. U-turn and cross Casho Mill to Westfield
19. Right on Phelps
20. U-turn at O'Daniel and back to Westfield
21. Right on O'Daniel
22. Left on S. Main
23. Left on Apple
24. Left on Barksdale
25. Left on Colonial Drive

26. Clear Ethan Allen, Nathan Hale, Patrick Henry and Alleyways
27. Left on Barksdale
28. Left on Sawmill
29. Right on Sluice to culdesac
30. Right on Sawmill to culdesac and back to Barksdale
31. Left on Casho Mill
32. Left on Blair Court to culdesac and back to Casho Mill
33. Left on Casho Mill
34. Right on Julie
35. Right on Sue Lane to U-turn at Barksdale
36. Right on Allison
37. Left on Julie at culdesac bubble
38. U-turn at Casho Mill
39. Right on Francis – Clear culdesac
40. Right on Julie
41. Right on Allison
42. Right on Sue
43. U-turn at Julie, take Sue to Barksdale
44. Right on Barksdale
45. Left on Casho Mill
46. Left on Pheasant
47. Left on Quail Ct. and back to Quail Lane
48. Left on Pheasant
49. Left on Casho Mill
50. Left on Timber Creek
51. Left on Casho Mill
52. Left on Church Road
53. Right on Timberline
54. Left on Panorama
55. Right on N. Townview
56. Left on S. Townview
57. Right on Panorama
58. Right on Church
59. Right on Springwater Way – Clear culdesac
60. Right on High Pond Drive – Clear culdesac
61. Right on Springwater Way
62. Right on Stone Barn – clear culdesac
63. Right on Springwater Way
64. Left on Church
65. Right on Panorama
66. Right on Woodshaw – clear culdesac
67. Right on Panorama
68. Right on Timberline
69. Right on N. Wynwyd
70. Continue on S. Wynwyd
71. Right on Pagoda to culdesac

72. Right on S. Wynwyd
73. Right on Timberline
74. Right on Swallow Circle – clear culdesac
75. Left on Timberline
76. Left on S. Wynwyd
77. Continue on N. Wynwyd
78. Left on Timberline
79. Left on Panorama
80. Right on Woodsman
81. U-turn at Timberline back up Woodsman – clear culdesac
82. Right on Panorama
83. Cross Church Road
84. Left on S. Townview
85. Right on N. Townview
86. Left on Panorama
87. Right on Timberline
88. Left on Church Road
89. Right on Casho Mill
90. Right on Timber Creek – clear bubble
91. Right on Pheasant
92. Right on Quail
93. Left on Pheasant
94. Right on Casho Mill
95. Right on Rahway – Check entrance road to Downes Elementary
96. Left on Rockmoss
97. Right on Webb
98. Right on Kenilworth
99. Left on Rahway
100. Left on Aster
101. Right on Webb
102. Right on Pickett
103. Left on Rahway
104. U-turn at Barksdale back to Pickett
105. Right on Pickett to Casho Mill – Uturn at Casho Mill
106. Right on Webb
107. Left on Aster
108. Right on Rahway
109. Right on Kenilworth
110. Left on Webb
111. Left on Rockmoss
112. Right on Rahway
113. Right on Webb to U-turn on Pickett
114. Right on Rahway to U-turn at Casho Mill
115. Take Rahway to Barksdale
116. Right on Barksdale
117. Right on Blue Hen Ridge

118. Right on S. Fawn
119. Continue to N. Fawn
120. Cross over Blue hen Ridge
121. Continue to S. Fawn
122. Left on Blue hen Ridge
123. Right on N. Fawn
124. Continue to S. Fawn
125. Cross Blue Hen Ridge
126. Continue to N. Fawn
127. Left on Blue Hen Ridge
128. Right on Squirrel to culdesac
129. Back to western culdesac on Squirrel
130. Right on Blue Hen Ridge
131. Right on Country Place Drive
132. Right on Chickory to hammerhead back to Barksdale
133. U-turn at Barksdale
134. Right on Country place Drive
135. Right on Blue Hen Ridge
136. Right on Barksdale
137. Right on Country Hills Drive
138. Right on High Ridge Court to culdesac
139. Right on Country Hills Drive
140. Right on Timber Ridge Court to culdesac
141. Right on Country Hills Drive to end
142. U-turn and Right on West Ridge Court to culdesac
143. Right on Country Hills Drive
144. Right on Long Meadow Court to culdesac
145. Right on Country Hills Drive
146. Right on Green Meadow Court to culdesac
147. Right on Country Hills Drive
148. Right on Barksdale
149. Right on Valley Road
150. Right on Briar Creek to culdesac
151. Right on Kaiser Court to culdesac
152. Clear 'V' between Briar and Kaiser
153. Left on Valley Road
154. Left on Barksdale
155. Right on Abbotsford Lane
156. Right on West Galloway
157. Right on Tantalou Court to hammerhead
158. Right on W. Galloway to hammerhead and back to Abbotsford Drive
159. Right on Abbotsford
160. Right on W. Shetland to hammerhead and back to Abbotsford
161. Right on Abbotsford
162. Right on MacDuff
163. Right on Alford Court to culdesac and back to Kinross

164. Left on Nethy
165. Right on MacDuff
166. Right on Braemar
167. Left on Kinross
168. Left on Abbotsford
169. Right on MacDuff
170. Right on Mackenzie
171. Left on Kinross Court to culdesac
172. Right on Mackenzie
173. Right on MacDuff Court to culdesac
174. Left on Abbotsford
175. Right on Kinross
176. Right on Braemar
177. Left on MacDuff
178. Left on Nethy
179. Right on Kinross
180. Right on MacDuff
181. Right on Abbotsford
182. Left on Kinross to culdesac
183. Back to Kinross
184. Right on MacDuff
185. Right on Nethy
186. Left on Kinross
187. Left on Abbotsford
188. Right on East Shetland to hammerhead and back Abbotsford
189. Right on Abbotsford
190. Right on East Galloway to hammerhead and back to Abbotsford
191. Right on Barksdale and back to yard

Snow and Ice Control – Route 6 - Downtown

Level 1 Route

1. Leave yard on Phillips Avenue
2. Left on Ritter Lane
3. Right on Orchard Road
4. Continue on Orchard to W. Delaware Ave.
5. Right on W. Delaware Ave.
6. Continue on East Delaware Ave.
7. Left on Library Ave.
8. Left on East main St.
9. Continue on W. main St.
10. Left on South Main St.
11. Left on W. Delaware Ave.
12. Repeat Numbers 5-11 pushing snow from left lane to the left and right lane to the right
13. Left on S. College Ave.
14. Left on W. Main St.
15. Right on N. College Ave.
16. Left on Ray St.
17. Left on New London Road
18. Left on W. Cleveland Ave.
19. Continue on E. Cleveland Ave.
20. Left on Capitol Trail
21. U-Turn over Capitol Trail Bridge
22. Right on E. Cleveland Ave.
23. Repeat Numbers 19-22 for 4 lane road
24. Continue on W. Cleveland Ave. to Hillside Road and back to Yard.

Level 2 and Level 3 Route

1. Continue on Capitol Trail (6) go over Bridge (7), make U turn.
2. Turn left on South Dillwyn Road (8), make U turn after first speed bump past Adelene Avenue on S. Dillwyn Road, go back to Capitol Trail.
3. Turn left on Capitol Trail, go over bridge make U turn, come back to connection road into Stafford, Anna Way to right on Giliberti Lane.
4. Make U turn back to Capitol Trail.
5. Make a left on Capitol Trail, proceed West on Main Street.
6. Turn right on North College
7. Turn right on White Clay Drive make U turn.
8. Turn left on North College Avenue.
9. Turn right on Cleveland Avenue.
10. Turn right on Rose Street.
11. Turn left on Ray Street.

12. Turn left on New London Road.
13. Turn left on Cleveland Avenue, proceed to Paper Mill Road.
14. Turn right onto Annabelle and proceed on Annabelle and Margaret Street and return to Paper Mill Road.
15. Turn right on Delaware Avenue.
16. Turn left on Tyre Avenue to Main Street, make u-turn.
17. Turn left on Delaware Circle.
18. Turn right on Caldwell Place, go to end, make u-turn.
19. Cross Independence Circle, go to end, make u-turn.
20. Turn left at Delaware Circle.
21. Continue on Delaware Circle, back into Bassett Place, Delaware Avenue and McKean Place.
22. Turn left on Thompson Circle.
23. Turn right on Haslet Place, make u-turn.
24. Turn right on Thompson Circle.
25. Turn left on Washington Street.
26. Turn left on Main Street.
27. Turn right on Center Street.
28. Back into Linden Street.
29. Turn right on Center Street.
30. Turn right on New Street.
31. Turn right on Choate Street.
32. Turn right on Main Street.
33. Turn right on Center Street.
34. Turn right on New Street.
35. Turn left on North Chapel Street.
36. Turn right on Margaret Street.
37. Turn left on Annabelle Street, go to end, make u-turn.
38. Turn left at Margaret Street.
39. Turn left at Ray Street.
40. Turn left at North Chapel Street.
41. Turn left at Cleveland Avenue.
42. to New Street.
43. Make a right on New Street to Choate Street.
44. Make a left on Choate Street to Main Street. Follow Main Street to Center Street. Make a right on Center Street to Linden Street.
45. Go right on Linden Street, go to dead end, make a u-turn back to Center Street.
46. Turn right on Center Street to New Street.
47. Turn right on New Street to N. Chapel Street.
48. Turn left on N. Chapel Street to Cleveland Avenue.
49. Turn left on Cleveland Avenue.
50. Turn right on Wilbur Street.
51. Turn left on Prospect Avenue.
52. Turn right on North College Avenue.
53. Turn right on North Street.
54. Turn right on Wilbur Street.

55. Turn right on Prospect Avenue.
56. Turn right at Capitol Trail to Ogletown Road. Turn left on Ogletown Road to Marrows Road, turn right on Marrows Road to White Chapel Drive.
57. Turn right onto White Chapel Drive. Follow to Dunsmore Road.
Go to Turnbridge Road, to Farnsworth Road to Aylesboro Road to Whitherspoon Lane. Plow entire development to the left of White Chapel, then proceed back to Marrows Road.
58. Turn left on Main St.
59. Turn left on Delaware Avenue.
60. Turn right on Academy Street.
61. Turn left on Courtney Street.
62. Turn right on Haines Street.
63. Turn right on E. Park Place.
64. Turn right on Manuel Street.
65. Turn right on Courtney Street, proceed to Ashley Road.
66. Turn left on S. Chapel Street.
67. Turn left on Wyoming road to end, make u-turn.
68. Turn left on S. Chapel Street.
69. Turn left on Chambers Street.
70. Turn right on Benny Street.
71. Turn left on Lovett Avenue.
72. Turn right on Haines Street.
73. Turn right on Continental Avenue.
74. Turn right on S. Chapel Street.
75. Turn right on Lovett Avenue, go to Academy Street, make u-turn, come back to Haines Street

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Appendix B

Ordinances and Regulations pertaining to Snow and Ice Control

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The following is per code as of July 28, 2014, any revisions to the code shall apply to this section.

Emergency Snow Routes

Sec. 20-104. Emergency snow removal routes.

Upon those streets and portions of streets described in Schedule IX, no person shall park or leave parked, or leave standing any motor vehicle upon the declaration of a snow removal emergency by the city manager or a state of emergency by the governor. The snow removal emergency parking ban shall remain in effect until rescinded by the city manager. The city manager is authorized to install appropriate signs along such emergency snow removal routes.

During a snow removal emergency or state of emergency, the city manager or his designee may have cars removed from emergency snow removal routes for the purpose of clearing snow curb to curb, and the city manager or his designee may limit traffic city-wide to essential emergency personnel vehicles.

Sec. 20-218. Emergency snow removal routes.

In accordance with Section 20-104, the following streets or portions thereof are hereby designated as emergency snow removal routes:

- (1) East and West Main Street (Nottingham Road)—Entire length.
- (2) East and West Delaware Avenue—Entire length.
- (3) East and West Park Place—Entire length.
- (4) East and West Cleveland Avenue—Entire length.
- (5) Elkton Road—Entire length in city.
- (6) New London Road—Entire length in city.
- (7) Academy Street—East Main Street to East Park Place.
- (8) South College Avenue—Entire length.
- (9) Hillside Road—New London Road to West Main Street.
- (10) North Chapel Street and Paper Mill Road—Entire length in city.
- (11) South Chapel Street—East Main Street to East Park Place.
- (12) Stamford Drive—Country Club Drive to Locust Drive.
- (13) Lovett Avenue, from Academy Street to Haines Street.
- (14) Casho Mill Road—Elkton Road to Nottingham Road (within city limits).
- (15) Phillips Avenue—Ritter Lane to city maintenance yard.
- (16) Holton Place—Old South College Avenue to city maintenance yard.
- (17) South Main Street—Entire length.

Sidewalk Responsibility

Sec. 26-3. Removal of snow and ice from sidewalks and private property; enforcement; penalties.

(a)The owner, tenant, or occupant of every building or lot within the city, or owner, claimant, agent, or person having same in charge or control when the same is not tenanted or occupied, or the owner of any property which is occupied by multiple businesses or multiple dwelling units, shall remove all snow or ice from the sidewalk abutting such property within 24 hours from the time the snow ceases to fall or the ice to form so as to provide a clear pathway at least five feet in width in business and commercial districts and three feet in width in residential districts unless such sidewalk is less than three feet in width, in which case the entire width of the sidewalk shall be cleared, and if the same cannot be wholly removed, shall sprinkle or cause to be sprinkled thereon sand or other proper substance so that such sidewalk shall be safe for pedestrian travel subject to the following:

(1)No snow or ice removed from any sidewalk shall be placed in the gutter or street.

(2)Whenever, according to this section or Section 26-2, any sidewalk would have to be cleaned on Sunday, the same may be cleaned instead within six hours after sunrise on the following day.

(b)No person shall plow or cause to be plowed any snow or ice from private property onto a city street so as to obstruct traffic, pedestrian sidewalks, public parking spaces, or line of sight.

(c)The director of public works, in cooperation with the police department, shall enforce the provisions of this section and Section 26-2 after the expiration of the applicable time limit.

(d)Any tenant, occupant, owner, claimant, agent or person in charge of a building or lot within the city which building is assigned an "RS" classification under the city's electric service rate classification system and who violates any provision of this section or Section 26-2 hereinabove shall, upon conviction, be sentenced to pay a fine of from \$5.00 to \$25.00 for each day offenses continue, and costs for each and every offense. Each day the offense continues shall constitute a separate offense.

(e)Any tenant, occupant, owner, claimant, agent or person in charge of a building or lot within the city which building is assigned any classification other than "RS" under the city's electric service rate classification system and who violates any provision of this section or Section 26-2 hereinabove shall, upon conviction, be sentenced to pay a fine of from \$125.00 to \$300.00 for each day on which such offense continues, plus court costs. Each day on which any such offense continues shall constitute a separate offense.

(f) In lieu of subsections (d) and (e) above, the director of public works or his/her designee or a code enforcement officer, may serve a citation for any violation of this section which shall constitute a civil violation and shall impose a fine of \$100.00 for each such violation, subject to a required appearance in the alderman's court or payment of the fine in lieu of a court appearance, either in person or by mailing the citation and the amount of the fine to the alderman's court pursuant to subsection 2-22.2(b)(2). Failure to appear in the alderman's court or to pay such fine within 30 days shall cause the fine to be doubled to \$200.00. If the person to whom a citation has been issued fails to appear in answer to the citation or to pay the fine prescribed for the violation within the time specified in the citation a warrant for his or her arrest may be issued and he or she may be found in contempt of the alderman's court.

(g) In the event the owner, tenant, or occupant of every building or lot within the city, or owner, claimant, agent, or person having same in charge or control when the same is not tenanted or occupied, or the owner of any property which is occupied by multiple businesses or multiple dwelling units, shall fail to comply with the provisions of this section, the city may clean snow and/or ice from such sidewalk or apply sand or other proper substance when the same cannot be removed. The city shall not be held liable for any damages to sidewalks or private property as a result of this snow/ice removal process.

(h) When the city has effected the removal of any snow and/or ice from sidewalks or has paid private contractors for the removal of the same in accordance with this section, the city shall charge the proper person or entity, the actual cost, plus 50% in city overhead, plus accrued interest at the rate of 12% per annum from the date of completion of the work. In no case shall the city charge less than \$100.00 to the owner or person in control of such property, and said charge shall be due and payable by the owner by the due date shown on the invoice for such services.

(i) Where the full amount due the city is not paid by such owner on or before the due date shown on the invoice for such services, then a notation of the lien for the provision of such services shall be entered in the Municipal Lien Docket and such lien shall remain on the Municipal Lien Docket until such lien is paid in full. When such lien has been satisfied by payment, the date of payment and the words "Satisfied in Full" shall be entered in such docket.

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Appendix C

PWWR Water and Wastewater Facilities

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PWWR WATER DIVISION DEPARTMENT FACILITIES
Updated July 2014

SEWER SYSTEM

Bellevue Road Lift Station	524 Bellevue Road
Cooches Bridge Pump Station	1323 Old Cooches Bridge Road
Silverbrook Pump Station	177 West Chestnut Hill Road
Creek Road Sewer Meter	Creek Road Near Bridge

WATER SYSTEM

Arbor Park Booster Station	307/309 Dove Drive
Northwest Booster Station	109 Delrem Drive
Highfield Booster Station	291 West Chestnut Hill Road – In Road near Electrical Pole
Evergreen Booster Station	Entrance to Evergreen - Scotch Pine and Red Pine Roads
Papermill – Milford Booster Station	500 Paper Mill Road
Reservoir Pump Station	215 Paper Mill Road
Academy Street Pump Station	67 Waterworks Lane (Waterworks Ln. and Academy St.)

TANKS

Windy Hills Tank	4/6 Mulberry Road, Windy Hills
West Main Tank	315 West Main Street
Dallam Road Tank	290 Dallam Road
New London Tank	601 New London Road (at City Line)
Arbor Park Tank	307/309 Dove Drive(Shared Access)
Paper Mill Tank(Concrete Tank)	500 Paper Mill Road
Louviers Tank	(Milford Crossroads) 400 Thompson Station Road
South Well Field	916 South Chapel Street
Clearwell under NWTP	215 Paper Mill Road

Newark Reservoir	240 Old Paper Mill Road
------------------	-------------------------

TREATMENT PLANTS

Newark Water Treatment Plant(Curtis)	215 Paper Mill Road
South Well Field Treatment Plant	916 South Chapel Street

WATER SUPPLY

WELLS

10 – South Well Field	916 South Chapel Street
11 – South Well Field	50 Blue Hen Drive
12 – South Well Field	916 South Chapel Street
13 – South Well Field	916 South Chapel Street
14 – South Well Field	916 South Chapel Street
15 – 402 Bellevue Road	
16 – 42 Brookhill Drive, South Chapel Industrial Park	
17 – Access Road to the left of 1979 Old Cooches Bridge Road. Near rear entrance to Glasgow High School	
20 – Along Raceway at NWTP	
21 – Backyard of 214 Old Paper Mill Road	
23 – Along Creek Road	
25 - Along Fremont Trail (Fairfield Crest)	

SURFACE WATER

White Clay Creek – Surface Intake	} NO ADDRESSES AVAILABLE
Diversion Dam on the Creek	
Raceway Feeding the Reservoir Pump Station	

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Appendix D

PWWR Snow/Ice Event Report

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PWWR Snow/Ice Event Report

Time of Initial Call from Police Dispatch:

Nature of Call:

Event Start Date:

Event Start Time:

Event End Date:

Event End Time:

Predicted/Forecasted snow amount:

Final measured snow amount:

Amount of Salt Used:

Preparations Completed(Initial as completed):

- Plows attached and working
- Spreaders installed and working
- Trucks full of fuel
- Trucks plugged in
- Recommend salt order? If yes, Amount?

Names of Management Personnel

Supervisor:

Superintendent:

Maintenance Personnel

Mechanics(Including when used as drivers):

Drivers on each route:

Route #1 - Shift 1:

Shift 2:

Route #2 - Shift 1:

Shift 2:

Route #3 - Shift 1:

Shift 2:

Route #4 - Shift 1:

Shift 2:

Route #5 - Shift 1:

Shift 2:

Route #6 - Shift 1:

Shift 2:

Notes:

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Appendix E

Snow Fleet Pre-Season Preparations for Senior Mechanic II

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SNOW FLEET PRE-SEASON PREPARATIONS FOR SENIOR MECHANIC II
Complete and Return to Director of PWWR

Date:

Initials:

Verify that the pre-season inspection has been completed for the following vehicles and complete the checklist below:

Vehicle Checklist Received

- 511 Street Backhoe
- 531 Street Rubber Tire Loader
- 504 Street 1 Ton Pickup
- 542 Street 1 Ton 6-Wheel Dump
- 523 Street Swap Loader
- 553 Street Swap Loader
- 522 Street Dump Truck
- 528 Street Dump Truck
- 550 Street Dump Truck
- 554 Street Dump Truck
- 552 Street Dump Truck
- 714 Water 1 Ton Pickup
- 207 Water Dump Truck
- 220 Water Backhoe

Inventory- check stock of the following:

- warning lights
- plow markers
- hydraulic hoses
- cutting edges
- curb guards
- plow jacks and wheels
- spinner and spreader motors
- shaft bearings
- spreader lights

Contact Parks Supervisor to assess any special needs for Parks Department plowing operation and assist with getting all of their equipment ready for winter operation.

Comments:

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Appendix F
**Snow Fleet Individual Vehicle Pre-Season
Preparations – Maintenance Garage**

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SNOW FLEET INDIVIDUAL VEHICLE PRE-SEASON PREPARATIONS - MAINTENANCE GARAGE

Date:

Vehicle Number:

Initials:

Install snowplows and salt spreaders on vehicles to check for proper operation and complete checklist below:

Snowplows/Trucks

- inspect hydraulic hoses
- fittings
- safety chains
- cutting edges
- curb guards
- lift and angle cylinders
- safety chains
- plow jacks and wheels
- plow markers
- Breakdown Warning Kit(triangle, flare, etc.)

Salt Spreaders

- inspect hydraulic hoses
- fittings
- spinner and spreader motors
- shaft bearings
- spreader light
- spreader calibration
- Inspect all safety warning systems and lighting on vehicles for proper operation.

Comments:

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Appendix G

Parks and Recreation Department Snow and Ice Control Plan

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Parks and Recreation Department Snow and Ice Control Plan

Snow and Ice Control Summary

The Parks and Recreation Department has four (4) primary areas of responsibility during snow events. They are:

1. City hall and downtown parking lots
2. Sidewalks in and adjacent to parks and public open space areas
3. Hard surface trails
4. Park parking lots

When snow events begin, during off work hours, our efforts are triggered by a phone call from the police department to our park supervisor indicating that snow is beginning to stick to road and sidewalk surfaces. He immediately comes in to assess the conditions and determines the level of workforce needed at the early stage of a storm. We generally work with a minimal crew early in storm events to simply keep city hall open and the downtown parking lots cleared. We become most busy at the conclusion of storms as we begin to clear nearly 13 miles of sidewalks and hard surface trails and 17 park parking lots in addition to keeping city hall and the downtown lots clear. Clearing sidewalks which are adjacent to streets has and will continue to be a challenge given that DeIDOT and city street plows clear roadways from curb to curb throwing snow onto sidewalks often times resulting in significant piling. This can often times be slow and tedious work, depending on how deep the piling is and how frozen it has become.

Snow and Ice Control Priority List

Priority "A"

- City Hall sidewalks & parking lots
- Downtown parking lots (7) including Farmers Lane

Priority "B"

- Apple Rd. & Sunset Rd. horticulture site sidewalk
- Apple Rd. Bridge sidewalk – west side only
- Barksdale Rd. from Williamsburg Village west to church & from church to park property line with homes backing up to Barksdale Road sidewalks.
- Casho Mill Rd. sidewalk – west side only – Barksdale Rd to Timbercreek Ln
- Casho Mill Rd. at CSX Bridge sidewalks
- Delaware Circle R.O.W. sidewalk
- Elan Park sidewalk including Barksdale Rd. and corner lot on Rahway Dr.
- George Read Park sidewalk & parking lot
- George Wilson Center Park sidewalk & parking lot
- Hall Trail and all access points

- Handloff Park sidewalk & parking lots
- Hill Park sidewalk & parking lot
- Lewis Park sidewalk & parking lot
- New London Rd & Cleveland Ave. horticulture site sidewalk
- New London Rd. sidewalk east side from Cleveland Ave. north to Ray St.
- Pomeroy Trail and all access points
- Reservoir sidewalk & parking lot
- Train Station entrance way & parking area
- West Park Place & South College Ave. horticulture site sidewalk

Priority "C"

- Anna Way sidewalk
- "B" Street sidewalk
- New London Rd., Fremont Rd. to Evergreen east sidewalk
- Apple Rd. & Barksdale Rd. horticulture site sidewalk
- Apple Rd. & Winslow Rd. horticulture site sidewalk
- Briar Ln. & Bent Ln. sidewalk
- Chapel St. & Cleveland Ave. horticulture site sidewalk
- Church Rd. at Christina Creek Open Space sidewalk
- Courtney St. open space sidewalk
- Curtis Park sidewalk & parking lot
- Dallas Ave sidewalk at drainage bridge
- Dickey Park sidewalk & parking lot
- Douglas D. Alley Park sidewalk
- Dorothy Miller Park sidewalk Capitol Trail
- East Park Place open space sidewalk
- Fairfield Park sidewalk & parking lot
- Folk Park parking lot, trail and sidewalk through Cobblefield
- Grantham Place sidewalk at drainage bridge
- Hidden Valley Park sidewalk
- Karpinski Park sidewalk & trail
- Kells Park sidewalk & parking lot
- Kershaw Park/White Clay Creek Bridge sidewalks
- Lumbrook Park sidewalk & parking lot
- South College Ave. & Chestnut Hill Rd. horticulture site sidewalk
- Main St. & Elkton Rd. horticulture site sidewalks
- Mann's Ave. sidewalk at drainage bridge
- McDonald's Circle horticulture site sidewalk
- McKees Solar Park sidewalk
- Middle Run Meadow sidewalk at basin
- Olan Thomas Park sidewalk
- Paper Mill Rd. east sidewalk, White Clay Creek Bridge to state park sign
- Paper Mill Rd./Old Paper Mill Rd. horticulture site sidewalk
- Paper Mill Rd., Redd Park sidewalk
- Park Place Apts open space sidewalk

- Park Place sidewalk at drainage
- Phillips Park parking lot, "B" Street sidewalk & Hall Trail connector
- Rahway open space sidewalk
- Rahway Park sidewalk
- Redd Park parking lot & sidewalk (Odessa Way)
- Ridgewood Glen sidewalk
- Rittenhouse Park sidewalk & sidewalk on West Chestnut Hill Rd.
- Ritter Lane sidewalk at drainage bridge
- Stafford Park sidewalk
- Sue Ln. sidewalk
- Sunset Road sidewalk at drainage bridge
- Tyre Ave. open space sidewalk
- West Chestnut Hill Rd. – footbridge/sidewalks over Christina Creek
- West Main St. Electric Substation sidewalk
- White Chapel Park sidewalk
- Winslow Road sidewalk at drainage bridge
- Woodlawn Ave. & Capitol Trail horticulture site sidewalk
- Woods At Louviers sidewalks at two (2) basins
Yorkshire Woods II sidewalk at basin

Last Updated 10/14

Snow and Ice Control Equipment List

Equipment used are fleet vehicles from the Parks Department. Descriptions and capabilities of this equipment is listed below. It is the responsibility of the Parks Department to inform the Maintenance Division of any equipment issues in order to maintain their equipment in good operating condition for snow removal.

All departmental vehicles are used throughout the year in many different capacities. As winter approaches, plows and spreaders are fitted to applicable trucks to ensure working order. The snow removal equipment remains in service of other Parks duties until the need arises for snow removal. The following is a list of equipment available to the department for snow removal:

Vehicles:

One (1) - Pickup with plow and salt spreader

Three (3) - Pickups with plow and no salt spreader

Two (2) - 4 wheel drive Kubota tractor

Note: These units, depending on conditions, can be equipped with the following attachments: snow blower, v-plow or angled plow blade

One (1) - 4 wheel drive front end loader

One (1) - tractor with broom light duty for sidewalks only

One (1) - 4 wheel drive articulating tractor with power angle plow

Other Equipment for sidewalks and trails:

One (1) - Tow behind salt spreader (Epoke)

Two (2) - Walk behind snow blowers

Hand tools for tight areas

Hand operated (push) broadcast spreader

Appendix H

Documentation of DeIDOT responsibility for snow removal
on streets within the city

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PUBLIC WORKS DEPARTMENT
CITY OF NEWARK

220 Elkton Road / P.O. Box 390 / Newark, Delaware 19715-0390 / 302-366-7040 / Fax 302-366-7160

October 27, 1997

Mr. Chuck Lightfoot
DelDOT
250 Bear-Christiana Road
Bear, DE 19701

RE: 1997 Snow Route Maintenance

Dear Mr. Lightfoot:

We wish to thank you and Andy Berger for the time you spent in our office on October 23, 1997, discussing the coordination of snow removal and de-icing on State-maintained roads. I feel that this meeting was very beneficial and agree that an annual meeting to discuss changing conditions will keep up both informed in the future. The discussion is summarized as follows:

° DelDOT will take care of the following roadways as primaries:

- 1) South College Avenue, from southern City limits to East Main Street.
- 2) Christina Parkway
- 3) Elkton Road, from City limits to Delaware Avenue.
- 4) Kirkwood Highway
- 5) Library Avenue
- 6) Ogletown Road
- 7) Marrows Road
- 8) Cleveland Avenue, from Kirkwood Highway to Paper Mill Road
- 9) Paper Mill Road

° The City of Newark will take care of the following:

- 1) Casho Mill Road, from Nottingham Road to Elkton Road.
- 2) Barksdale Road
- 3) Church Road
- 4) Nottingham Road
- 5) East and West Main Street
- 6) Delaware Avenue
- 7) New London Road
- 8) North College Avenue up to White Clay Drive.

October 27, 1997

- 9) Wyoming Road
- 10) West Chestnut Hill Road, from South College Avenue to City limits.
- 11) South Chapel Street, from RR to Cleveland Avenue.

• The City of Newark will plow to obtain two way traffic on Nottingham Road and New London Road. DelDOT will provide curb to curb clearing on these roads after primaries are taken care of.

• Other roadways to be maintained by DelDOT as secondary or tertiary roads:

- 1) Welsh Tract Road
- 2) Cooches Bridge Road
- 3) Old South Chapel Street, from RR to Library Avenue.
- 4) North College Avenue, from White Chapel to City Limits.
- 5) Old Paper Mill Road.
- 6) West Chestnut Hill Road
- 7) Chestnut Hill Road

I believe the above reflects our discussion during our meeting; however, if you notice any discrepancies, please contact me at 366-7040.

Very truly yours,



RICHARD M. LAPOINTE
PUBLIC WORKS DIRECTOR

RML/tk

cc: Andy Berger, DelDOT
Pat Bartling, P. W. Supt.
Pat Michini, Street Supervisor