

## HIGHWAY, GROUNDS & CEMETERY DIVISION

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Highway & Grounds Superintendent

The Concord Public Works, Highway and Grounds Division maintains approximately 107 miles of public streets along with the associated drainage systems consisting of approximately 59.6 miles of drain lines, 2,292 catch basins, 179 culverts, 950 drainage manholes, 431 outfalls, 205 leaching structures, 16 detention basins, 4 bio-retention areas, and 3 dams. In addition, the Highway and Grounds Division maintains 59 miles of sidewalks, 2,793 signs, more than 90 pieces of CPW vehicles and equipment, and manages the compost facility. It is responsible for 82 acres of public parks and grounds including 50 acres of active recreation areas which includes ten athletic fields. The Division maintains all public shade and park trees, under the direction of the Park and Tree Supervisor who is also the Town's Tree Warden.



*Highway and Grounds crew hard at work clearing snow*

### *Snow Removal Program*

The 2014 winter maintenance season was very busy for winter maintenance operations with a constant volume of activity for Department personnel, including the ongoing use of salt as well as brine to keep the roads and sidewalks safe and passable. Minimum amounts of sand were used as CPW continued their trial period of only salt usage on the roads matching many other Massachusetts towns' policies. There were eight major winter storm events requiring full mobilization of forces involving Town staff with plowing contractors called in on seven of these occasions. Two of the storms required snow removal operations in the business districts. The entire winter maintenance season included thirty-four events requiring a response for snow and ice maintenance. The major issue during the winter season was the extreme freeze-thaw cycles that

caused severe maintenance concerns on many roads in Concord as well as the Commonwealth.

### *Roads and Sidewalk Maintenance*

Due to major road maintenance needs because of extreme weather conditions, Highway staff commenced a pot hole/full depth patching program that included a Town-wide assessment of 107 miles of Concord roads to establish priority maintenance needs. A pot hole/full depth patching program began in early spring and continued through the entire construction season with well over 400 locations receiving maintenance attention. The program was also coordinated with CPW Engineering division to coincide with its scheduled construction projects and will continue into the 2015 construction season.

In addition to the typical duties of road repair and maintenance, sign repair/ replacement, roadside brush cutting and street sweeping, the Highway and Grounds Division completed many smaller projects in conjunction with the Engineering Division's road program. Cooperation continued in 2014 between the Concord Municipal Light Plant, Water and Sewer Division of CPW and the Natural Resources Division with other smaller repair projects being completed.

### *Drainage*

Catch basin repairs/replacements were completed during 2014 at numerous locations including Lexington Rd., Adin Dr., CPW yard, Partridge Lane, Simon Willard Rd., Old Bedford Rd. plus many other locations. Catch basin cleaning was completed in West Concord in the spring utilizing catch basin equipment operated by Highway staff. East Concord basin cleaning commenced immediately upon completion of locations in West Concord with approximately 75% of the East Concord structures cleaned by year end. Catch basin cleaning material was disposed of through a contracted competitive bid process compliant with all regulatory requirements. Cleaning and maintenance of over 1,600 structures took place in 2014. Flooding concerns continued in 2014 at numerous locations with water back-up occurring on Cambridge Turnpike that required continuous monitoring as well as beaver dam removal to control water levels.

### *Parks and Playgrounds*

The Park & Tree crews maintain almost 50 acres of athletic fields for use by the baseball, softball, soccer, lacrosse and other programs. These include Emerson, Rideout, Ripley, and Concord-Carlisle Regional High School (CCRHS)

artificial fields. Cushing and Sanborn playgrounds continued to be heavily used from spring through the fall and received the most attention with regard to mowing, raking, line painting, aerating, cleaning and clearing, slice&seeding and fertilizing. Sprinkler systems located at all locations received regular maintenance. The Ground's Division continued to provide support with maintenance of various conservation areas, as well as the community gardens, the Visitor's Center, Junction Park, the hanging plant program in West Concord, numerous gateway traffic islands and areas of public access in the business districts. Park and Tree staff participated in numerous projects including maintenance and infield repair and drainage maintenance at the premier Little League field at Ripley Field, playground site maintenance at Rideout and Emerson and daily maintenance at the Doug White Field facilities. The preparation of the winter ice rink at Emerson took place in January and staff was able to keep this very popular skating facility in operation through the end of February.



*Youths enjoying the ice rink at Emerson Field*

### *Trees*

Concord Public Works planted a total of 100 public shade and park trees. All shade trees were planted in accordance with the Department's policy of "the right tree in the right place" and included many trees planted on private property as public shade trees, in accordance with the shade tree setback planting policy. Along with the new plantings, the Park & Tree crews pruned 40+ trees and took down another 100+ trees that had been damaged or were in hazardous condition jeopardizing public safety and Town infrastructure. Trees continued to be pruned, removed and maintained at Sleepy Hollow Cemetery with five tree take downs required during this period for safety considerations. Park and Tree staff also continued their

assistance with CMLP staff concerning any tree work within close proximity of high voltage wires as well as storm related issues involving downed wires and damaged poles.

The "public shade tree protection policy" continues to be shared with the public, contractors and Town Departments. The Grounds Division continues to strive towards the goal of replacing at least one public shade tree for every one that is removed or dies. This continues to be increasingly more challenging with escalating costs of nursery stock and the need for more "set back" tree locations.

### *Cemetery*

In addition to routine maintenance, the Cemetery Division staff worked on numerous projects and provided contractor oversight on other projects. This included the repair of various stone walls, Old Hill tomb repair, brush and tree removals, roadway patching, and catch basin installation and cleaning. Contracted outside services for cemetery mowing and fall/spring maintenance in Sleepy Hollow continued with the third year of this outside service. This contracting option continues to be extremely successful allowing CPW Cemetery Division to reduce costs and gain efficiencies while focusing on other higher value maintenance and operational responsibilities. Staff continued their efforts with cemetery-wide trimming and removal of bushes and trees that had not been reviewed or completed for over ten years. Storm damaged and unhealthy trees were removed by the Ground's Division with assistance from a contracted crane service. This activity substantially improved the aesthetics of the Cemetery property.

The Melvin Memorial was monitored daily with maintenance activities performed including annual review and treatment of the slate tablets and rifle inserts. Long term conservation efforts are being planned with specifications for this conservation work being prepared for spring '15 advertising with work completed by late '15 or spring of '16.

In the twelve year of a multi-phase monument restoration program in the older cemeteries, the Concord firm of Fannin/Lehner Preservation Consultants continued their seventh year of assessment and physical conservation efforts at Old Hill Cemetery in Concord Center restoring a pre-set number of headstones and gravesites as well as assisting Cemetery staff with the placement and repair of storm-damaged headstones.