

Melrose Department of Public Works Annual Report - Fiscal Year 2019



Mission Statement

To maintain the city's roadways and sidewalk infrastructure for the safe and efficient movement of vehicles and pedestrians; provide dependable solid waste, recycling and yard waste pickup; promote recycling; provide safe water distribution and sewer collection; and expand and improve the city's infrastructure systems to meet the future needs of its citizenry.

John V. Scenna
Director of Public Works

Administration

Director of Public Works: *John Scenna*
Assistant Director of Public Works: *Ann Waitt*
Operations Manager: *Peter Pietrantonio*
Senior Account Clerk: *Tina Bright*
Senior Account Clerk: *Marisa Kelly*
Solid Waste & Recycling Coordinator: *vacant*
Residential Service Representative: *Lynda Garron*



Engineering/Water and Sewer Billing Division

City Engineer: *Elena Proakis Ellis, P.E., BCEE*
Water and Sewer Billing Administrator: *Lisa Patterson*
Enterprise Fund Manager: *Donna Cardillo*
Staff Engineer: *Rick Cantone*
Project Engineer: *Scott Dixon*
Administrative Clerk: *Amy Heidebrecht*
Administrative Clerk: *Diane Ardizzoni*
Engineering Intern: *Matt Connolly (June-Sept. 2018)*
Engineering Intern: *Jacqueline Blayer (June-Aug. 2018)*
Engineering Intern: *Caroline Passalacqua (Jan-May 2019)*
Engineering Intern: *Mateo Gomez (Jan-May 2019)*
Engineering Intern: *Will Pzegeo (May-Aug. 2019)*

Operations - Highway Division

Division Foreman *Derek Lanphere*
HMEO Driver *Charles Thomas*
HMEO Operator *John Bartlebaugh*
Laborer *Jack Sasso*

Operations - Water and Sewer Division

Division Foreman Operator D-3: *John Belliveau*
Water Foreman/HMEO Operator D-2: *Tom Bagarella*
Sewer Foreman: *Robert DiVola*
Operator HMEO: *Joe Brancato*
Operator HMEO: *Eric Arria*
HMEO: *Kris Vozzella*
Driver MEO: *James French/Ryan Wheelock/Doug Hanlon*
Skilled Laborer: *Dennis Cashman*
Water/Sewer Meter Foreman: *Brendan Cahill*
Skilled Laborer: *Bob McKenzie*
Laborer: *Paul Gould*



Operations - Sanitation

Working Foreman: *Nichols Heller*

Laborer: *Shaun Foss*



Operations - Park & Forestry Division

Superintendent of Mount Hood and Public Open Space: *Joan Bell*

Park Commission Secretary: *Cindy Brickley*

Division Foreman: *John Doherty, Sr.*

Tree Foreman/HMEO: *Carman Sorrentino*

HMEO: *Joe Dello Russo*

MEO: *Alejandro Guerra*

MEO/Acting Foreman: *Michael Sasso*

Laborer: *Nick DaCova*

Laborer: *Mike Nee*

Laborer: *Brian West*

Laborer: *Nick Vrooman*

Operations - Cemetery

Cemetery Administrator: *Angela Pisacreta*

Division Foreman: *Jack Rossi*

Laborer: *Scott Rush*

HMEO Operator: *Ray McGrath*



Fleet Division

Mechanic/Welder Foreman *Mike Kuleszka*

Mechanic/Welder *Paul Pastos*

Mechanic/Welder Jr *Reed Williamson*



Facilities Division

Facilities Manager: *Ann Waitt*

Division Foreman: *Scott Enos*

Plumber: *Ryan Means*

Tradesman: *Joe Dello Russo*

Tradesman: *David Filipiak*

Tradesman: *Peter Hickey*

Custodian MVMMS: *Kevin Cronin*

Custodian MVMMS 2nd shift: *Nick White*

Custodian High School: *Rich Curran*

Custodian High School 2nd Shift: *Angelo Dacova*

Custodian High School 2nd shift: *Nick Shelton*

Custodian Lincoln School: *Trevor Rudolph*

Custodian Hoover School: *Mike Mackey*

Custodian Winthrop School: *Paul Thomas*

Custodian Roosevelt School: *Ed Mrozowski*

Custodian Horace Mann School: *Lenny MacLean*

Custodian Franklin Early Childhood Education: *Tommy Murphy*

Custodian City Hall and Milano Senior Center: *Will Altidor*

Custodian Library and Police Station: *Dan Guevin*

Custodian Library and Police Station: *Louis Peck*



Administration

The Melrose Department of Public Works (DPW) Administration Division handles issues and requests from the residents of Melrose concerning Public Works responsibilities with the assistance of E-Gov, a web based technology software. Under the direction of the Director of Public Works, the Administration Division provides necessary budget management, payroll, and clerical support services for the Department of Public Works. The employees in this division track finances and complete administrative and clerical tasks requested by members of the City's largest department.

Curbside Collection

Melrose DPW provides curbside solid waste, recycling and yard waste pickup to all residents living in buildings with 6 or fewer units in the city - totaling 8,905 households. Trash and recycling service is provided weekly to residents, schools and municipal buildings by JRM. Yard waste and trash from public parks and the downtown district is collected by the Public Works Department.

The City of Melrose pays a tipping fee of \$64/ton. This fee is set to rise annually through the end of the current contract (through 2021). In FY2019, Melrose generated 7804.13 tons of municipal trash and 2536.27 tons of recycling.

DPW collects curbside yard waste 15 weeks per year and Christmas trees 2 weeks per year. Residents can set out up to 10 bags or labeled barrels per week.

Residents with curbside trash and recycling service can also purchase stickers for curbside pickup of metal items at the DPW Operations Facility or City Hall during weekday hours of operation. DPW carries out metal goods pickups every Tuesday of the year.



DPW Recycling Facilities

In addition to curbside trash, recycling and yard waste pickup service, Melrose DPW offers access to paper, cardboard, and commingled (plastic, glass and aluminum containers) recycling to all members of the public – including businesses – during all hours of operation at the DPW Operations Facility and Recycling Center at 72 Tremont Street. By doing so, DPW endeavors to make recycling easily available to all Melrose residents and businesses, regardless of their living situation or access to recycling pickup services at their home or business. Residents of Melrose may also bring their yard waste (leaves and brush) to the DPW Operations Facility during all hours of operation, which include seasonal Saturdays from the beginning of April until mid-December. This yard waste is hauled by DPW to the City's land on Rt. 99 where it is composted and brought back to the DPW Operations Facility for free distribution to the residents.

Additional items that are collected from residents at the DPW Operations Facility and Recycling Center during weekday hours of operation include rechargeable and button cell batteries, books, CFL bulbs and fluorescent tubes, electronics, eyeglasses, fire extinguishers, dried latex paint, mercury items, propane tanks, textiles and tires. In order to cover costs of proper disposal, fees do apply to some of these items, while others are free.

The City Yard and Recycling Center was open 36 Saturdays for drop off from April through mid-December. DPW also held nine special Saturday recycling events and two Household Hazardous Waste (HHW) Days. These special events included recycling of dehumidifiers, plastic bags, dried latex paint, and

Styrofoam. This year two special events included the collection of motor oil, gas and antifreeze. The collection of this hazardous liquid on two additional days helped reduce the number of cars at the HHW collection days. Again this year, Melrose partnered with Stoneham and each City/Town hosted a Saturday HHW day in which residents from both Melrose and Stoneham could drop off household hazardous waste.

DPW Day

The Department of Public Works, together with Melrose Mayor Gail Infurna, held its sixteenth annual DPW Day on Thursday, May 16, 2019. The theme this year was DPW Truck Extravaganza! DPW Day is a departmental open house which brought over 1,150 kindergarten through second grade students from Melrose's elementary schools to the Public Works Operations Facility and Recycling Center for a day of education and enlightenment relative to our field of work, the services we provide, and the equipment we use to provide them. Children got to meet employees from all divisions of our department, experience the equipment they use and listen to what Public Works employees do, and how they accomplish their daily responsibilities. DPW partnered with D&R General Contractors, Hood Ice Cream, Bay State Textiles, Stantec Inc, MWRA, Tata & Howard, Chartwells, Mass in Motion, Whole Foods, Weston & Sampson, Zero Waste Melrose and JRM Hauling & Recycling to provide a fun and educational day. Students also had the opportunity to climb on trucks, bobcats, loaders, backhoes and other equipment.



Social Media

The Department of Public Works keeps the lines of communication open with Melrose residents through many avenues. Residents can make a request or report an issue by calling, emailing, or submitting a work order thru E-Gov or See Click Fix. Event information can be obtained from the City of Melrose website, Twitter, Facebook and the Melrose Recycles Blog. Currently the [Twitter account](#) has 983 followers, increasing by over 13% since last year. Our [Facebook page](#) has 901 people who "like" (or follow) it. In the past year the page has increased followers by approximately 16%.

DPW utilizes the E-Gov Link work order system to keep track of requests for all its divisions. This system is available 24/7 from any computer or mobile device with internet access. City staff can search and sort work orders by date, address, category, status, reporter, and more. The work order system has proven to be a useful tool for City employees and residents. Schools and City Departments use the on-line work order system to report and track requests. Work orders are updated as work progresses and eventually closed out, and viewers can see up-to-date information.

Another 24/7 tool that residents can use to report issues such as potholes, graffiti, and trash and recycling problems is See Click Fix. See Click Fix is a digital communication system. Residents can use this mobile app to report nonemergency issues in their neighborhood. With the See Click Fix app, residents can take pictures of an issue and attach it to their requests. The picture helps the DPW staff find and correct the issue quickly and easily.

DPW continuously works to improve our technology options and ways for residents to communicate with Public Works.

Engineering Division

The City of Melrose's Engineering Division consists of four full-time staff and one to two rotating intern positions.

The mission of the Melrose Engineering Division is to provide all engineering functions and support for the City's infrastructure, including roadways, sidewalks, traffic signals, street lights, drainage, water distribution, wastewater collection and conveyance, and public buildings, while also supporting DPW Operations and Facilities Divisions as needed and providing support to the general public. Public interaction includes permitting and oversight of work within or impacting the City's right-of-way and/or utilities connected to the City's infrastructure, assistance with walk-in needs related to DPW functions (e.g., collecting billing discount forms, arranging metal goods pickups, etc.), and answering questions and concerns regarding the City's construction projects. Each year, the Engineering Division procures and oversees improvements to all types of City-owned infrastructure, as described herein.

Project Reviews and Permitting

In FY2019, the Engineering Division issued 202 permits for work within the right-of-way. This included 53 permits for water utility upgrades or replacement, 18 permits for sewer upgrades or replacement, 7 new service/cut and cap water and sewer permits, 51 permits for National Grid gas work (services and/or mains), 14 permits for curb cuts or other right-of-way modifications, 25 occupancy permits such as placement of Dumpsters within the right-of-way, and 34 miscellaneous permits that fell into other categories.

In addition to reviewing, issuing, and overseeing permits for small private projects, the Division also performed detailed reviews of cases submitted to the Planning Board and the Zoning Board of Appeals (ZBA). In FY2019, reviews were provided for 27 ZBA cases, as well as private development projects undergoing Planning Board review at 24-28 Hurd Street, 732 Newburyport Turnpike, and 8 Greenleaf Place. Also, the Engineering Division provided comments on ten grant of location requests to the Board of Aldermen. Lastly the Engineering Division continued to monitor construction of the Regan's Way subdivision, the Blueberry Hill Lane townhouse development, and redevelopment of buildings at 844 Main Street, 880 Main Street, 10-14 Corey Street, 524-530 Main Street, 419-429 Main Street.

Regulatory Compliance and Funding Reporting

The Engineering Division ensures that the City remains in compliance with many regulations applicable to DPW functions. Additionally, the City uses state and federal funding for projects that require periodic reporting. Some of these programs are noted below:

- An Annual Statistical Report is submitted to MassDEP each spring pertaining to the City's water distribution system, detailing system performance with regard to water quality, leak detection, unaccounted-for water, cross-connection control, and staffing.
- MassDEP also conducted a Water System Sanitary Survey on May 22, 2019. This assessment is a regulatory requirement every three years. The City was found to be in compliance with water system requirements.
- An annual Consumer Confidence Report is mailed to all water system customers via the MWRA, including community-specific information prepared by the Engineering Division in conjunction with the Director of Public Works.

- Lead and Copper Rule sampling is conducted one or two times per year, depending upon the results of past sampling events, as dictated by both state and federal regulations. In FY2019, one sampling round was conducted, in September 2018, based on the prior year's compliance. While the FY19 results were also fully in compliance with state and federal drinking water regulations, the City continued removing lead service lines in the public way as opportunities arose and continued to encourage private lead service line replacement.
- The Massachusetts Lead and Copper Control Act contains guidelines for lead sampling and follow-up actions in school facilities. Over the course of FY19, the City continued to monitor lead and copper levels at select school facilities based on FY18 results, with the assistance of the Massachusetts Water Resources Authority (MWRA), and to address issues where identified.
- An annual Municipal Discharge Permit Application is submitted to the MWRA to allow the City to discharge its wastewater to the MWRA sewer system. This application was submitted in January 2018 and the permit was issued shortly thereafter. The City has consistently maintained compliance with the provisions of this permit.
- An annual report is required to be submitted each year in accordance with the City's National Pollutant Discharge Elimination System "Phase II" stormwater permit. On July 1, 2018, a new permit from the US EPA took effect, which required a new Notice of Intent to be submitted within 90 days. This document was submitted in September 2019 and detailed a long list of measures the City is taking to improve stormwater quality such as street sweeping and catch basin cleaning. Also required by the new permit, the City completed a new Stormwater Management Program (SWMP) and posted it to the City website.
- The City utilizes the MWRA's Grant and Loan Assistance Programs for water and sewer infrastructure upgrades. These programs require periodic reporting to continue to secure funding eligibility. These reports have been submitted to the MWRA throughout FY2019 as needed.
- The state provides roadway improvement funding through the Chapter 90 program. This program also entails frequent reporting to ensure funding disbursement. Such reports were submitted in FY2019 to receive reimbursement for all Chapter 90 roadway improvements.
- The City had applied for and received a Complete Streets grant in the amount of \$377,211 from the Massachusetts Department of Transportation in FY18. During FY19, the City completed the design of the subject projects and began construction. The three projects are described further in a subsequent section of this report.
- The City received a \$100,000 Community Mitigation Fund grant from the Massachusetts Gaming Commission in association with the Encore casino project in Everett, Massachusetts, since Melrose is a neighboring community. The first \$26,000 of this funding is being used for a corridor study for Washington Street, Pleasant Street, and West Wyoming Avenue for improvements to pedestrian and bicycle access to the Oak Grove MBTA station. The remainder of the funding is anticipated to be used in a future year to implement the recommendations of this study. A contract for the study was signed in February 2018 and field work and analysis were conducted during FY19.

Annual Contracts

The Engineering Division procures a number of annual contracts for services and supply, to allow for continuous operation of the DPW Operations and Facilities Divisions. In FY2019, the following contracts were either bid and awarded or renewed:

Service Contracts Bid or Awarded in FY2019:

On-Call Electrical Services & Repairs
Tree and Brush Grinding & Disposal
Tree Removal
Supply Water System Stops and Wastes
Supplying Signage
Roadway and Sidewalk Reconstruction
Utility System Repairs (Water/Sewer/Drain)

Service Contracts Renewed in FY2019:

Athletic Field Turf Maintenance
Catch Basin Cleaning
Elevator Repair and Maintenance
Irrigation System Maintenance & Repairs
Masonry Services
Plumbing Services and Repairs
Pump Station and Ell Pond Floodgate Routine Maintenance
Street Sweeping
Traffic Line Painting
Traffic Signal and Street Light Maintenance
Furnishing and Installing Trees
Supplying Bituminous Materials
Supplying Catch Basin and Manhole Frames and Covers
Supplying Fire Hydrants and Gate Valves
Supplying Liquid Calcium
Supplying Rock Salt

Infrastructure

The infrastructure of the city requires continual maintenance and evaluation for adequacy. To do this efficiently, the Department of Public Works (DPW) has developed data-driven tools to evaluate infrastructure priorities in Melrose, allowing the City to make the best use of its limited funding. The DPW relies on accurate and current data and has increasingly made greater use of geographic information systems (GIS) to map and prioritize needs. In FY19, the City has continued the use of the following information sources in order to prioritize and execute work:

- 1) The City's water system Capital Efficiency Plan (Tata & Howard, February 2017) continues to be used to guide decisions regarding streets that require water main replacement or rehabilitation.
- 2) The 2016 roadway condition assessment continues to be used to determine which roadways are in need of repaving or reconstruction. This analysis considered thirteen different parameters for each segment of roadway (from cross street to cross street) and calculated a respective roadway ranking

based on a formula to process the individual parameter ratings. This analysis resulted in four categories of roadway conditions: poorest, poor, fair, and good/excellent. In FY19, the City has continued to prioritize the paving of 'poorest' and 'poor' condition roadways.

- 3) The City submitted its Complete Streets Prioritization Plan with assistance from engineers from the BETA Group in August 2017 and received approval from MassDOT in September 2017. This plan guides the expenditure of Complete Streets grant fund and also dovetails with other roadway and utility projects to ensure Complete Streets goals are being met.
- 4) Working with Weston and Sampson Engineers, the City continues to identify locations with infiltration and inflow into sewer pipes and coordinates this work with other roadway and utility work where feasible.
- 5) The City receives annual GIS data updates from National Grid which show the material of gas mains throughout Melrose, to identify mains that require replacement as part of National Grid's program to replace all leak-prone pipe within its network.

The DPW and its Divisions continue to invest in upgrading data for each infrastructure system, so that objective prioritization analyses can be completed using GIS tools to guide infrastructure replacement plans. In spring 2019, the Engineering Division presented the third year of the City's multi-year roadway and utility improvement program, aimed at holistically addressing infrastructure repair needs in select areas that present the greatest level of need based on the GIS analyses performed using these data sets.

Additionally, to ensure that private developments adhere to the same high standards applied to public works projects, the Engineering Division is continuing to work on the development of written policies, standards, and details for the installation of water, sewer, and drainage lines, as well as roadways and sidewalks. Having written policies that are adopted by the City carries more weight when working with private developers. In FY19, the demolition checklist continued to be used and the Division's permitting continued to be tracked using GIS.

The combination of these efforts addresses previous issues faced by the DPW when maintenance was reactionary rather than proactive. Having robust, up-to-date data ensures that DPW and its Divisions know what the status and condition of the City's infrastructure is and can effectively prioritize projects to make the best use of funding. Melrose's infrastructure systems fall into four main categories: water distribution, wastewater collection and conveyance, storm water management, and right-of-way/traffic management. Each of these systems is discussed herein. In addition, while the City does not own the natural gas distribution system, it plays a significant role in the City's right-of-way and is thus included in the discussion below.

FY2019 Projects

Each year, a large focus of the Engineering Division is the planning, design, bidding, and construction oversight of capital projects. These projects span the range of City-owned infrastructure and are oftentimes interrelated, such as neighborhoods that receive utility upgrades followed by roadway reconstruction. The major projects performed in FY2019 are described below by infrastructure type.

Water Distribution System

2017 -2018 Water Main Replacement Project

The City awarded the 2018 Water Main Replacement Project to Granese & Sons in the fall of 2017. The project included replacement of water mains and services on Altamont Avenue, Day Street, and Perkins Street from Warwick Road to the Stoneham line. In addition, the project included abandoning the existing 6-inch water main on Warwick Road from Vinton Street to the Lynn Fells Parkway and conversion of all hydrants, water services, and side-street tie-ins over to the existing 16-inch water main in Warwick Road. This project was funded by MWRA Water Local Assistance Program 0% interest loans and reached substantial completion in May 2018 with a total loan amount of approximately \$930,000, covering both design and construction. Final punch list items extended into July 2018, after which the project was closed out.

2018 – 2019 Water Main Replacement Project

The City's consultant, Tata & Howard, initiated design work in FY19 on the 2018 Water Main Replacement Project, which includes replacement of water mains on Florence Street, Hurd Street from Florence to Trenton, Ashmont Street, Ashmont Park, Garfield Road, and East Emerson Street from Stratford Road to Lincoln Street. This project was bid in September 2018, after which time construction began on Florence and Hurd Streets. The water mains and services on Florence and Hurd Streets were completed in fall 2018, and work resumed in spring 2019 to advance work on the remainder of the streets, which extended into the beginning of FY20. This project was also funded using the MWRA's local assistance program loans.



Other Water Main Replacement Projects

At the beginning of FY19, Deloury Construction completed water main and service replacement on Forest Street between Lebanon Street and the Malden line. This work was paid for by the developer of the Blueberry Hill Lane development and was completed in August 2018. The developer then had utility mains installed up the new roadway on Blueberry Hill Lane. The City replaced the adjacent water main and services on Hunts Terrace in spring 2019. The City also performed in-house water main and service replacement projects on Sherman Road (October-November 2018) and Owego Park (April 2019).

Water Service Replacements

City forces resolved 61 lead service work orders in FY19. Some of these were replacements, and others were confirmed in the field to not have lead materials. Service replacements in FY19 included replacing all substandard services with copper on the following streets: Sixth Street between First and Foster, Frances Street, Bartlett Street, Woodland Road, Vinton Street, Stratford Street, Perkins Street (between Warwick and the Parkway where the water main was not replaced), Sanford Street between Florence and Cleveland, Sheffield Road, a segment of Porter Street near Sheffield Road, and Larchmont Street between the Parkway and Country Club Road. In addition to these individual service replacements, water services are replaced from the main to the shut-off valve on all roads on which water mains are replaced.

Water Service Line Tie Card Inventory

In FY2019, the City continued its work to develop an inventory of all water service lines serving the City's over 8,000 water customers. Paper cards presently log water service information such as location, material, size, and date of installation. In FY2019, the Engineering Division continued to update and scan all of these service cards, linking each scan to an address. Subsequently, the most relevant data from the cards was entered into a database which will ultimately be linked to the City's Geographic Information System (GIS) locational data. This inventory, once completed, will allow City personnel or the public to easily retrieve water service material information and to query the data to determine the number of lead service lines connecting the water mains to customers in Melrose. At the end of FY2019, the scanning was completed for all streets beginning with the letters A through L.

Sewer Collection System

Sewer Infiltration and Inflow (I/I) Investigations and Rehabilitation

The City of Melrose's sewer collection system is among the oldest in the country, with many pipelines dating back over 100 years. In an effort to reduce infiltration and inflow (I/I), which contribute clean groundwater and rainwater into the City's sewer system, the City has undertaken a comprehensive program to reduce I/I where feasible and cost effective. Following up on the spring 2016 flow metering performed throughout the City's sewer system, the City performed follow-up investigations to identify the pipe segments contributing the highest volumes of extraneous flows to the sewer system. These investigations, called a Sewer System Evaluation Survey (SSES), focused on Subareas 3, 3A, 7, 7A, 15, 18, and 20A, and included closed circuit television inspections of over 90,000 linear feet of sewer pipelines, measurement of nighttime flows in each pipe segment between manholes, and manhole interior inspections. This work was performed in FY2017 by Weston and Sampson Engineers, working with a subconsultant, Inland Waters, Inc. The final piece of this work, completed in FY2018 (fall 2017), was smoke testing of sewers in these subareas to look for interconnections with drainage infrastructure.



The data resulting from these investigations were then analyzed to develop a targeted construction program to reduce I/I. The first construction project was designed, bid, and largely constructed in FY2018. As part of this project, approximately 33,500 linear feet of sewers were lined by a contractor, Rapid Flow, using cast-in-place lining technology. A portion of this work extended into FY2019, including the lining of pipes in a difficult-to-access easement between Windsor Street and Carlida Road. In areas where deficiencies were identified during the SSES program that could not be lined, Weston and Sampson designed an "open cut" sewer repair contract, which was bid and partially constructed in FY2019. This work was completed by Unified Contracting.

With the repairs in the first phase of subareas well underway, investigations were performed in the second phase of subareas in spring 2019. This phase included approximately 62,000 linear feet of sewer mains in Subareas 12, 13, 19, and 23. The same investigatory techniques were used, including CCTV inspections and nighttime flow isolation, performed by the same contractor used in Phase 1 (Inland Waters), and smoke testing and manhole inspections performed by Weston and Sampson Engineers. In addition, further flow metering was started at the end of FY2019 in Subarea 15, part of Phase 1 that was identified as having the highest levels of rainfall-induced inflow. The investigations in this subarea are ongoing.

In November 2018 through January 2019, Inland Waters performed cementitious manhole lining in approximately 20 manholes via a separate contract. This work entailed the lining of over 200 vertical feet of sewer manholes identified as contributing significant infiltration to the sewer system.

Prior to paving on Sheffield Road as part of the City's capital roadway projects, sewer deficiencies were identified, and City forces performed open-cut repairs in September 2018.

At the end of FY2019, a sewer backup on Brazil Street caused damage to several residential homes, and investigations began into the causes and necessary rehabilitation to improve sewer flow and pipeline conditions in this neighborhood.



Infiltration and Inflow Mitigation Fund

After an ordinance was passed in June 2016, the City developed policies and procedures in FY2017 to formalize the methodology for assessing and collecting the I/I Mitigation Fees specified in the ordinance. The Engineering Division now reviews all projects for which a building permit is sought which may require assessment of the I/I fee. Fees are collected prior to the issuance of a building permit, deposited in a dedicated I/I Mitigation Fund, and tracked for future reference. In FY2019 the Engineering Division collected \$33,698.30 in I/I fees.

Drainage

The City's drainage system consists of approximately 1,644 catch basins, 1,162 drainage manholes, and drainage pipes ranging in diameter from 4 to 48 inches. Several drainage projects were undertaken in FY2019, as described below.

Stormwater Management Program (SWMP)

As noted previously, the City completed a new Stormwater Management Program in FY2019, which will guide the City's efforts over the new National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit term. This document can be viewed publicly on the City's website and is intended to be a working document, with updates provided as various compliance requirements are met and new information becomes available.

Ell Pond FEMA Study

In FY2018, the City worked with CDM Smith to submit documentation to the Federal Emergency Management Agency (FEMA) to request lowering of the 1-percent annual chance flood elevation (100-year flood elevation) for the Ell Pond watershed. Work performed in prior years, including a hydraulic and hydrologic investigation of the pond and its watershed, concluded that the base flood elevation should be adjusted. A Letter of Map Revision (LOMR) was submitted to FEMA in December 2017 to request this change. The City received approval of the new base flood elevation, effective December 3, 2018.

Orient Avenue Rain Garden Project

Following up on the prior MassDEP 604b grant to investigate storm water quality within a portion of the drainage watershed that is tributary to Ell Pond, and a later design grant from the Massachusetts Office of Coastal Zone Management to develop final design documents for four rain gardens within the Ell Pond watershed, a construction grant was received for installation of the rain gardens. Storm water collection and discharge typically does not include treatment, and the system upstream of Ell Pond is no exception. The CZM construction grant was ultimately used to install three above-ground rain gardens and one underground storm water treatment system within the City-owned grass strips on Orient Avenue. A T P Environmental provided consulting support for this project, and the Canniff Company performed the installation. The systems installed are now providing storm water quality improvements for runoff from Orient Avenue that eventually flows into Ell Pond. During the course of this project, the City also received free technical assistance from the Trust for Public Land in developing renderings of the proposed rain garden plantings, to aid with public discussion about the project. While the installation project was completed in June 2018, the City performed monthly evaluations of the rain gardens throughout FY19.

Natural Hazards Mitigation Plan Update and Municipal Vulnerability Preparedness Program

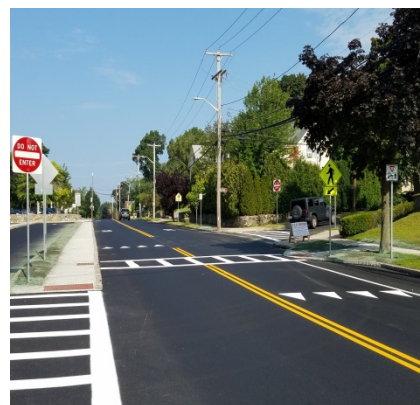
In October 2017, the City signed an agreement with CDM Smith to update the outdated 2004 Natural Hazards Mitigation Plan (HMP). With this plan updated, the City now qualifies for FEMA grant funding for projects identified within the plan. Tied to this initiative was participation in the state's Municipal Vulnerability Preparedness (MVP) program, for which the City held two workshops in spring 2018 to discuss vulnerabilities and mitigation strategies to respond to climate change-related hazards. The MVP program was funded through a \$19,000 state grant and was completed with a final report submitted in June 2017. This initiative was spearheaded through combined efforts of the Engineering Division and the Office of Planning and Community Development. The development of the new HMP was completed in FY19 and the document received FEMA approval effective 6/28/2019. The Board of Aldermen formally voted to approve the plan and its implementation. In January and April 2019, the City submitted grant applications for FEMA funding for a backup power generator for City Hall and for drainage improvements to the neighborhood at the intersection of Lebanon and Sylvan Streets.

Roadway/Sidewalks

Several major right-of-way projects were either completed or started in FY2019, as described below. Many of the project components follow a "Complete Streets" design aesthetic. All of the construction projects described below were performed using the City's on-call contractors, including D&R General Contracting (paving, curbing, and sidewalks), HiWay Safety Systems (line painting), and Permaline (sign materials).

Melrose Complete Streets Policy

Melrose's Complete Streets program strives to safely connect people to where they want to go. The City's goal is to enhance the transportation network for all modes by connecting home, work, school, shopping, dining, recreation and more. In June 2016, the City adopted a Complete Streets Policy which was subsequently approved by the state. In order to qualify for state grant funding to assist in the implementation of our Complete Streets goals, the City completed a Prioritization Plan, identifying the top ranked projects recommended for construction. These projects were discussed by the City's Complete Streets Working Group, and a Prioritization Plan was



submitted to MassDOT for approval in August 2017. Funding for technical assistance for the Prioritization Plan, which was performed by the BETA Group, was provided by a “Tier 2” Complete Streets grant from MassDOT.

After receiving approval for the Prioritization Plan, the City submitted a Tier 3 construction grant application in September 2017 for the following projects:

- High School/Middle School Pedestrian and Bicycle Improvements
- North-South Bike Route (Wakefield line to Wyoming Avenue)
- Howard Street Improvements (Green Street to Nelson Road/Ruggles Street)



The City was informed in spring 2018 that a Tier 3 Complete Streets grant of \$377,211 was awarded to Melrose to implement these three projects. Following the grant award, the City began design of each project, which is being funded through both operating funds and a FY2019 Road Bond, approved in spring 2018 for \$1,685,000. Design input for the High School/Middle School project was supplemented via free technical assistance through the Mass in Motion program.

The first project was completed in summer 2018 and included pedestrian and bicycle safety improvements on both Melrose Street and Crystal Street near the High School and Middle School campus. The North-South Bike Routes were started in FY2019 and include both a commuter route on Main Street and a lower stress neighborhood route that parallels Main Street but avoids the most congested areas for safer and more comfortable travel by bike.

The third project, on Howard Street, began with the reconfiguration of the intersection at Clifford and Elm Streets to improve vehicular and pedestrian safety, along with the installation of a rectangular rapid flashing beacon (RRFB) pushbutton crosswalk signal at the intersection of Howard, Nelson, and Ruggles Streets. The final component of that project was the reconfiguration of the intersection of Howard and Green Streets into a roundabout. This project was started in spring 2019 and extended into FY2020.

North and South High Streets

Improvements to the neighborhood of North and South High Streets had long been discussed. In FY2018, the City undertook improvements to this neighborhood including water service replacement, sidewalk reconstruction and addition, installation of bituminous berm, and roadway pulverization and repaving. This work was largely performed in May and June of 2018 but extended into the beginning of FY2019 with the installation of fencing and final landscaping.

First Street (Ashcroft Road to Sixth Street), Sixth Street (First Street to East Foster), Winthrop School Drop-off Area

In August 2017, following the completion of water main work in the neighborhood, First Street was repaved between Ashcroft Road and Sixth Street with a first course of pavement. In addition, the City designed and constructed a new drop-off driveway at the Winthrop School along this block, in conjunction with the addition of new modular classrooms on the school site. Major sidewalk improvements were also made along First Street, and the teacher parking lot at the Winthrop School was modified to add additional parking spaces.

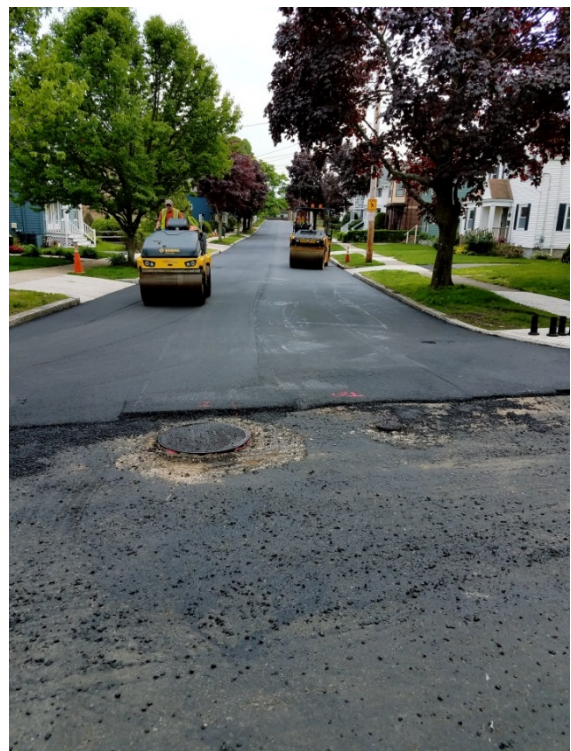
In April and May 2018, as an extension of this project, the City added sidewalks to the west side of Sixth Street, between East Foster Street and First Street, as this is a highly traveled area located one block from the Winthrop School. Accessible curb ramps were also added at street crossings. The final phase of this project was final paving of First Street from Ashcroft Road to Sixth Street, and Sixth Street from Foster Street to First Street in August 2018.

Altamont Avenue

The City repaved (milled and overlaid) Altamont Avenue following water main construction in that neighborhood. Based on the City's Complete Streets Prioritization Plan and input at a neighborhood meeting, the City was aware of a desire for the addition of a sidewalk on this roadway. Therefore, prior to paving, the City added a concrete sidewalk on one side of the road. Final paving took place in August 2018.

Frances Street, Bartlett Street, and Sheffield Road

After the completion of gas main replacement on both streets, the neighborhood of Frances and Bartlett Streets was repaved in September and October 2018. The project also included sidewalk and curbing improvements and tree planting. Similarly, Sheffield Road also had gas main replacement by National Grid followed by paving, sidewalk and curbing improvements, and tree planting. All of these streets were completely reclaimed and paved.



Warwick Road and Perkins Street

Warwick Road and Perkins Street, from Warwick Road to the Stoneham line, had been the locations of water main and service replacement projects in FY2018. In addition, gas mains and services were replaced on all of Warwick Road and Perkins Street (Lynn Fells Parkway to the Stoneham line). With all of this utility work complete, in fall 2018, these roadways were both repaved (milled and overlaid). This project also involved sidewalk and curbing repairs, and replacement of the flashing red light traffic signals at the intersection of Warwick Road and Perkins Street.

Additionally, curb alignments were changed at Stevens Place, Dyer Avenue, and Sears Avenue, to narrow these wide intersections, shortening pedestrian crossing distances and providing traffic calming by visually changing the width of Warwick Road in these areas. Two new crosswalks were also added across Warwick Road near Maple Road and Stevens Place, including accessible curb ramps, new signage, and line painting. The project concluded with landscaping and the installation of two solar speed feedback signs for additional traffic calming.

Sidewalks & Curbing Vinton Street

With National Grid gas work having been performed on Vinton Street between Foster Street and West Emerson Street, in conjunction with pavement restoration performed by National Grid's contractor, the City replaced curbing and sidewalks in this area where deficiencies existed.

Cherry Street Reconstruction

In November 2018, the City received a grant from the Massachusetts Housing Choice Community program to reconstruct Cherry Street and add accessible sidewalks and curb ramps. The intermittent, substandard width, severely deteriorated asphalt sidewalks were replaced with a new, wider sidewalk on one side of the road. Granite curbing was added to both sides, and new curb ramps were installed at the crosswalks on either end of the street. The project also included new signage and line painting, as well as a new retaining wall and fence at the back of the sidewalk along the adjacent church property that also contains a daycare. The project resulted in substantial improvements to safety and accessibility in a neighborhood that serves a large number of pedestrians including many toddlers and senior citizens. This project was on the City's Complete Streets Prioritization Plan list for implementation in the third funding round. (The City is currently finishing the work of the first round of projects, as noted above.) Thus the grant funding received allowed the City to advance the project several years earlier than originally planned. Final completion of this project took place in June 2019.

Florence Street (Wyoming to Foster), Sanford Street (Florence Street – Cleveland St), Hurd Street (Florence Street – Trenton Street)

The City completed water main construction and National Grid completed gas main construction in the neighborhood of Florence Street and portions of Hurd and Sanford Streets. In fall 2018, these streets were paved to binder course, and in April and May 2019, new sidewalks were installed along all of Florence Street, and sidewalk repairs were performed on the adjoining streets. The project allowed for a consistent grass strip to be installed between the sidewalk and the granite curbing, which provided a location for subsequent tree planting. Final paving of this neighborhood is scheduled for FY2020.

New Crosswalks

Three locations had been approved for new crosswalks by the Traffic Commission that were able to be installed once funding was available. This funding was provided through contributions from Rideshare fees and allowed for the installation of crosswalks on Washington Street near the Little Sprouts daycare, on Sylvan Street at Mount Vernon Avenue near Pine Banks Park, and on Upham Street near Simonds Road, where a crosswalk previously existed but was missing curb ramps.

In addition, the City installed new crosswalks in June 2019 using FY2018 retained earnings on Lebanon Street at Beech Ave. and Appleton Street, and on Howard Street at Carlida Road. These projects, also approved by the Traffic Commission, were in response to resident requests for more crosswalks at highly desired crossing locations for each neighborhood.

All of these projects included accessible curb ramps, signage, and line painting, and all locations were confirmed to meet recommended line of sight distances for safe roadway crossing.

Traffic Commission

In addition to the roadway work described above, the Engineering Division participated in four quarterly meetings of the Melrose Traffic Commission, with the City Engineer serving as the Chair and another Division employee serving as the Committee's Clerk. The Traffic Commission continues to address requests from the public or City personnel for regulatory changes to the City's Traffic Code. Also in FY2019, the Engineering Division finished reviewing all available meeting minutes from meetings since 2009 in order to update the Traffic Code. Final updates to the code are still in progress and are anticipated to be completed in FY2020. A GIS layer was created showing all items in the Traffic Code, to aid with identifying discrepancies

between code language and existing signage. This layer is also being used to finalize the updates to the Traffic Code.

National Grid Work

The Engineering Division supervised the following National Grid gas system replacement work in FY2019, most of which was performed by National Grid's contractor RJ Deveraux Corporation:

- Perkins Street (Stoneham line to Lynn Fells Parkway) – started in April 2018, completed in July 2018
- Portions of Beech Avenue, Granite Avenue and Wheeler Road – started in April 2018, completed in July 2018
- Blueberry Hill Lane, Portion of Forest Street and Hunts Terrace – started in April 2018, completed in July 2018
- Swains Pond Avenue, Goss Avenue, and Staples Street– February through June 2019
- Larchmont Road (Country Club Road to Lynn Fells Parkway) - March through April 2019
- Ashmont Street and Ashmont Park - March through June 2019
- Damon Avenue (Cochrane Road to the Horace Mann School) - started June 2019 and extended into FY2020
- Felton Place and Upham Street (Lebanon Street to Felton Place) – started June 2019 and extended into FY2020

Due to an employee “lockout” within the National Grid organization in June 2018, work was stopped at that time and resumed in February 2019.

Facilities

The Engineering Division also provided assistance as needed with three projects related to City facilities in FY2019:

- East Fire Station retaining wall
- Public Safety Building Study
- Memorial Hall Study

Operations Division

The City of Melrose's DPW Operations group is broken down into the following divisions: Water and Sewer, Highway, Fleet, Parks and Forestry, and Cemetery.

Water and Sewer Division

The objective of Melrose's water distribution system is to distribute clean, safe water effectively throughout the City for residential and commercial use, and to provide water for fire emergencies. The City obtains water from the Massachusetts Water Resources Authority (MWRA). Water is distributed via natural (gravitational) flow throughout most of the City. The exception is at high elevation areas in which the water is distributed through two pumping stations, as described below.

There are approximately 82 miles of water mains in the Melrose water distribution system ranging in size from 2 to 16 inches in diameter. These pipes receive water from several large MWRA transmission mains

in Melrose and are the responsibility of the City to operate and maintain. Pipe materials include cement lined ductile iron (CLDI), unlined and cement lined cast iron, and copper. Most water mains installed after approximately 1975 (representing 30 percent of all mains in the City) are CLDI pipe, which is the current industry standard. The remaining piping network is mostly comprised of unlined cast iron, with some copper pipes typically of smaller diameters.

The purpose of Melrose's wastewater collection and conveyance system is to remove wastewater coming from residential and commercial properties and convey it to the MWRA's wastewater interceptor pipes. The MWRA treats Melrose's wastewater at the Deer Island Wastewater Treatment Facility and charges the City by metering the volume both entering and leaving Melrose and calculating the difference. There are roughly 76 miles of sewer mains in the City, ranging in size from 4 to 24 inches, approximately 2,286 sewer manholes, and 5 City-owned sewer pump stations. The current standard pipe for wastewater conveyance is polyvinyl chloride (PVC) pipe. However, many of Melrose's sewer pipes are made of clay.

Water and Sewer Pump Stations

The City owns and maintains two water booster stations to provide additional pressure and volume to customers in areas of the City located at high elevations. These are in the northwest (Botolph Street and surrounding areas) and southeast (Park Street and surrounding areas) corners of the City, and the booster stations are located on Greenwood Street and Glendower Road, respectively. The high-pressure service systems are small, representing only about 10 percent of the total system demand. Both pumping stations were replaced by new facilities in the summer of 2003 and are operating as intended. Water Division personnel inspect the stations weekly, and an outside contractor (Weston & Sampson) provides detailed monthly inspections.

The City also owns and maintains five sewer pump stations. These stations convey wastewater from low lying areas via force mains up to the gravity sewer system. All sewer flows in Melrose ultimately flow to the MWRA collection system and to the Deer Island Wastewater Treatment Facility. Similar to the water booster stations, City personnel inspect the sewer stations weekly, and Weston & Sampson inspects them monthly.

City inspections follow written protocols established by the Engineering Division and include confirmation of normal operation of facility equipment and a lack of alarm conditions. Consultant inspections include more detailed preventative maintenance of equipment and equipment replacement when needed.

Major pump station repair items undertaken in FY2019 included the following:

- Pump #1 at Fellsway Sewer Station was rebuilt
- The wetwells at all five sewer stations were cleaned to remove excessive grease and other materials by an outside contractor

In addition, the City owns and maintains the Ell Pond Flood Gate, which controls the elevation within the pond, allowing for the pond level to be adjusted as needed to minimize flooding within the City. City personnel check the elevation of the pond weekly and make adjustments prior to predicted heavy rain storms. Weston and Sampson also inspects the flood gate monthly along with their pump station inspections.

Preventative Maintenance and Repairs

City personnel respond year-round to address water and sewer system preventative maintenance needs and respond to system emergencies. Through the City's work order system, activities are tracked and brought to closure. In FY2019, the following items were addressed:

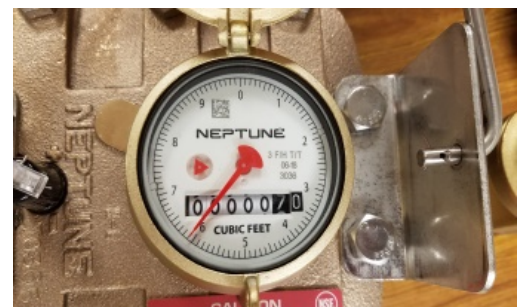
- 6 water leak repairs
- 14 sewer main blockage (as well as 13 other blockages that were responded to but were determined to be on private property)
- 61 water service replacements or resolutions
- Weekly bacteria sampling of the City's drinking water in nine locations
- One round of lead and copper drinking water sampling at 15 residential locations and two schools
- Testing of all backflow devices two times annually through a private contractor (Water Safety Services, Inc.)
- Monthly inspections of known locations of sewer main issues (43 locations) and drainage pipe and catch basin issues (26 locations)
- Monthly inspections of major drainage system outfalls (6 locations)
- Catch basin cleaning covering approximately one half of the City's total catch basins annually

Each year, the City brings in a private contractor to perform a comprehensive leak detection survey throughout the City. This survey was performed in November 2018 to January 2019, and the issues identified in the subsequent report were then addressed by the Water Division.

Unidirectional water main flushing is performed every two years and was completed most recently in fall 2017. This work includes flushing all water mains in the City to improve water quality, as well as exercising many valves and hydrants, allowing an opportunity to identify any deficiencies requiring repairs. Hydrant caps are also lubricated at this time. In FY2019 the city prepared for the next round of Flushing scheduled to begin August 2019.

Water and Sewer Billing

The Water and Sewer Billing office manages the water, sewer and trash billing programs for the City. This includes reviewing monthly meter reads, processing and inputting billing data, and processing adjustments and discounts. Personnel are frequently called on to respond promptly, sensitively and constructively to citizen inquiries, requests and complaints. The Water and Sewer Billing personnel schedule water meter readings, shutoffs, installations, final reads, and utility mark-outs. They also analyze high consumption accounts to determine customers who appear to have leaks and proactively notify those customers to help manage their high usage.



In FY19, the Water and Sewer Billing Division performed the following special projects:

- Implemented a new on-line payment system where customers can view, print, and pay their bill
- Participated in the 3rd annual Senior Citizen Discount Fair; there are currently have 663 seniors receiving the water and sewer discount and 307 receiving the trash discount

- Continued the Citywide meter replacement project, focusing on commercial accounts, problem accounts, and second meters.
- Worked on getting the new mobile drive-by reading equipment up and running
- Continued the implementation of opt-in monthly billing, which increased from 598 to 712 accounts, up 114 since FY18.

In FY19, the water rate increased from \$6.34 to \$6.44, with no change in the water base fee. The FY19 volumetric sewer rate did not change, but the sewer base fee increased from \$14.25 to \$19.95 per quarter.

Highway Division

The City has approximately 83.5 miles of streets and 170 miles of sidewalks. The roadway layouts consist of concrete, asphalt and grass. The Highway Division is also responsible for street signs, potholes, fences, line painting, street sweeping, snow plow damage, traffic signals, street lights, curb side compost collection, and trash pickup at all parks, street receptacles, and schools.

Street sweeping has a fall cleaning schedule done by wards and main drags. This program is done by an outside contractor for the months of November and December. The City sweeps in-house every Friday for the months of April to October.

The list below describes the majority of work orders performed by this Division in FY19:

- Preparation for and staffing all city events: 100th Anniversary of the Melrose Symphony Orchestra, Victorian Fair, Summer Stroll, Four Corners Concert, Memorial Day Parade, Fourth of July Parade, Trick or Treat Downtown, Home for the Holidays, Porchfest, etc.
- 57 signs installed
- 20 traffic signs made in-house
- 471 potholes filled
- 3 sinkholes addressed
- 91 sidewalk repairs/assessments
- 65 snow damage repairs
- 2 Victorian poles replaced
- 3 fence repairs in parks and schools
- 821 curbside metal goods pickups
- 19 block party setups/take-downs
- 240 crosswalks painted
- Blocking of streets for 19 events
- 16 weeks of curbside compost pickup
- 106 bicycle symbols and sharrows painted

Fleet Division

The Public Works Fleet Division is responsible for maintenance, repairs, specifications and disposal of all DPW equipment. There are approximately 140 vehicles in our fleet consisting of front end loaders, dump trucks, garbage compactors, recycling trucks, leaf vacuums, tractors, street sweeper, wood chipper, pickup trucks, vans and automobiles. We are also responsible for small equipment such as chainsaws, lawnmowers, weed whackers, etc. In addition, we maintain sixteen vehicles for the Melrose Police Department. Mechanics are involved with the equipment repair and maintenance process. The Fleet

Division is also responsible for the seasonal change-over of equipment for snow and ice control, leaf collection, street cleaning and other projects completed by DPW. The Fleet Division also has a preventive maintenance program and tracking system to record parts and labor expended on each piece of equipment, identify mechanical issues, and determine when equipment should be replaced. The Fleet Division is in the implementation phase for a computerized asset management system that will improve record keeping and inventory for fleet activities. Our average age for our fleet is 10 years old.

The Fleet Division is also responsible for preparing specifications for the purchase of new and replacement equipment each year when there is money available. After new equipment is received, it is verified that it meets all bid specifications. Through initiatives from the Melrose Energy Commission and Energy Efficiency Manager, Martha Grover, Public Works purchased a Ford Fusion Electric Vehicle. The vehicle is shared amongst City employees.

The DPW was able to purchase equipment, parts, and repairs in FY19, including approximately \$565,000 of water and sewer fund retained earnings. The following equipment was purchased:

- F550 11ft Knapheide water truck
- Case 590SN water backhoe
- Water 6-wheeler freightliner
- F350 sewer truck
- Sewer push camera
- Two radios
- Lettering/painting
- Sign board
- Light tower

Parks & Forestry Division

There are 81 sites that the Parks Division maintains from parks and street islands, to public buildings. The Forestry Division maintains over 6,000 street trees that are on public property. They take down trees, trim, plant and have a pruning program in place.

On Saturday morning, April 27, 2019, DPW, past and present little league volunteers, and participants recognized the leadership and commitment of Jim Ward. Jim was a longstanding member of the League's Board and served as President from 1992 to 2001. During Jim's time as President, over 2,000 boys and girls, along with their parents, siblings, grandparents, and friends enjoyed the fun, laughter and bright blues skies at the many ball fields around the city. DPW created a memorial garden in which a memorial plaque was dedicated to Jim for his many years of service.

The Forestry Division, as well as outside contractors working for the City, planted new trees throughout the city. These divisions also installed memorial benches at Ell Pond, Gooch Park, the Common and a memorial "buddy" Bench at the Winthrop School. In addition, an adopt-a-site sign inventory was done, and 15 adopt-a-site signs were replaced, two being new adoptees. Friends of Ell Pond hosted their annual cleanup day, spearheaded by Dave Dickerson. Eight road races were organized with the help of DPW and the Melrose Police Department.

Below is a list of work orders and routine activities completed in FY2019 by these divisions:

- Cut grass daily
- Irrigation installations and repairs
- Seeded fields and islands
- Fertilized fields and islands
- Installed spring flowers in 11 locations
- Installed fall flowers in 11 locations
- Repaired and/or installed playground equipment
- 192 tree assessments
- 134 tree removals
- 236 tree trims
- 137 trees planted
- 145 stumps ground
- Watered the city hanging plants in spring and summer
- Decorated downtown for the holidays
- Replaced Main Street banner 16 times
- Lined fields and painted for high school and youth in the spring and fall
- Dropped and spread mulch at the beginning of the school year and the beginning of spring

Other notable projects performed are as follows:

Gazebo

Replaced cast iron moldings on post
Dedicated a memorial bench

Foss Park

Repaired an outdoor checker table

Lebanon St Park

Installed a new equipment box

Dog Park

Added a new Trex bench
Groomed mulch back from fence and weed wacked
Spread 30 yards of mulch

Morelli Field

Removed fire station side backstop and replaced with a longer and higher one to try to protect more of the tot lot
Placed conditioner on softball infield

Fred Green

Made a storage opening on field for football sled
Field turf repairs and conditioning was done

Knoll

WWII Memorial refinished

New electrical storage shed and lines added for new memorials

Lewis Monk

Batting Cages replaced

Wooden bleachers rebuilt and painted

Cemetery Division

The mission of Wyoming Cemetery is to serve the citizens of Melrose by meeting their final needs with compassion and dignity. The Wyoming Cemetery Commission and staff continued their commitment, as always, to serving the needs of the Melrose community. Fiscal year 2019 saw many.

During FY2019, the Wyoming Cemetery had a total of 133 burials, of which, 78 of them were casket burials and 55 were cremation burials.

The Cemetery Division of the Department of Public Works maintains the cemetery on a daily basis. In addition to burials, the cemetery crew is responsible for the cutting and watering of the grass at reasonable intervals, the raking and cleaning of the grounds, the planting of a seasonal displays of flowers, the pruning of shrubs and trees, the placement of foundations, and the installation of flat markers and veterans government-issued headstones.

Memorial Day activities this year included the following:

- The Cemetery Office was open on Saturday of Memorial Day weekend from 8:00 a.m. to 3:00 p.m. and Sunday from 8:00 a.m. to 3:00 p.m. for the convenience of volunteers and visitors.
- Flags were placed on veterans' graves on Saturday, May 25th by volunteers.
- A flag burning ceremony took place on Saturday, May 25th.
- The parade took place on Sunday, May 26th concluding at the cemetery. A tent and chairs were setup for elderly participants.
- On Monday, May 27th flags were lowered at sunrise and raised at 12:00 noon

In preparation for the Memorial Day holiday, outside of the regular mowing and maintenance, the following took place:

- The Administration Building interior was cleaned, including floors, carpets, and bathrooms, etc.
- The planting beds around the Administration Building and at both entrances were cleaned and fresh mulch installed.
- The Zina Greenwood waterfall area was cleaned and the fountain itself was readied for operation.
- Pavers were installed at front walkway of the Administration Building.
- All roadways were swept and potholes repaired within the cemetery.

Flower Program

The usual seasonal displays of flowers enhanced the cemetery grounds, in particular, the wonderful summer flowering displays of large canna, impatiens, begonias, petunias, etc. The beds were edged and mulched, and the lawn in front of the building was loamed and seeded. An irrigation system provides water to that area. The beds at the Lebanon Street entrance of the cemetery were also landscaped.

Perpetual Care Flower Fund Program

Twice-yearly seasonal tributes are placed on designated graves of those who subscribed to the Perpetual Care Flower Fund. Baskets of mixed plants are placed on graves in time for Memorial Day, in addition to a winter basket of holiday greens in mid-December. This year the cemetery staff placed sixty (60) baskets of each.

Memorial Bench Program

The Cemetery Commission determined that the cost for family members wishing to participate in the Memorial Bench Program would be \$1,100.00. This would include an epitaph on the bench seat. The cemetery will choose a location as close as possible to the family's desired location.



Although there was considerable interest, no benches were installed this year.

Memorial Tree Program

The cost for family members wishing to participate in the Memorial Tree Planting Program is \$600.00. This includes a granite marker that is placed at the base of each tree that is planted. No trees were planted this fiscal year.



Fiscal year 2019 saw a number of improvements to the Wyoming Cemetery grounds and facilities. In the field, we saw the following:

- A solar light was installed on the flag pole at the cemetery entrance. The United States Flag Code Section 6(a) states it is the universal custom to display the flag only from sunrise to sunset on buildings and on stationary flagstaffs in the open. However, when a patriotic effect is desired, the flag may be displayed 24 hours a day if properly illuminated during the hours of darkness.
- The Evergreen Garden Cremation Section walkway was power washed and an accent border added. Additionally, flowering plants were added to the circular planting bed in that section.
- A certified land surveyor began the process of laying out and pinning the proposed new expansion area on Vesper Avenue.
- The completion of the perimeter wall repointing and structural repair was set into motion. The \$100,000.00 grant awarded to restore the historical cemetery wall has been spent to date. The masonry contractor has completed work up to the first gate on the Sylvan Street side of the cemetery.
- A plan was put in place to identify, and a list compiled, of roadways within the cemetery in most need of repair.
- Adam R. Lehman presented the Cemetery Commission a proposal, approved by the Boy Scouts of America, to restore approximately three hundred (300) white government veteran headstones at Wyoming Cemetery. The graves most in need of cleaning were the primary subject of the project. The headstones are covered with moss and other naturally occurring contaminants. Adam advised the Commission that he would be using a product following the NCPPT guideline for “Best Practice Recommendations for Cleaning Government Issued Headstones.” He was assisted by other Boy Scout members. Lisa Lord, President of Melrose Veterans Memory Project, also volunteered her assistance. Adam accomplished this task in mid-October in preparation for Veterans Day.

An administrative accomplishment of the Cemetery Department was as follows:

- The cemetery software plan that was initiated continued in FY 2019. The next phase to be realized would be linking the scanned data to the maps. Additional funding has been committed for this phase of the project to take place in the fall of 2019.

Facilities Division

The Facilities Division consists of both custodial staff and tradespeople. The Facilities Division completed over 3,800 work orders while maintaining 15 municipal buildings and schools covering 1.5 million square feet. The Division continued to increase the number and types of projects completed in-house. In-house projects included: roof repairs, thermal imaging and reporting, masonry repairs, Melrose Veterans Memorial Middle School courtyard railing, Beebe School steps, and Library steps, larger paint projects, fence building, and doors and frames installation. Work orders ranged from window repairs to adjusting faucets, to name a few.



Masonry repairs were done to the stairs at City Hall, the Beebe School, the Melrose Public Library and the Melrose Police Department.

At the Horace Mann Elementary School, the all purpose room was repainted and floors were sanded and refinished. In addition, new shades and sound panels were installed. The library walls and hallway ceilings were painted on the second floor.

At the Roosevelt Elementary School, the Facilities Division added new security at the entrance to the gym, including security panel glass, to minimize public access to the rest of the building during events in the gym. A sink was added to the old music room and new tiles were installed in the cafeteria. New tiles were also installed in one classroom. All exterior doors were painted, grease traps in the kitchen were cleaned out, and new walkways were installed on the Brunswick Park side.

At the Franklin Early Childhood Center, new basement floors tiles were installed. Sidewalk repairs and roofing repairs were also performed. Inside stairs received safety tape applied to the treads, and new coat racks were installed. Also, several classrooms were painted.

At the Winthrop Elementary School, a new music suite was developed in the basement which included a new ceiling, new wall, and painting. Also, a new security door to boiler room was installed. New child safety coat racks were installed on all floors. The third floor boys' and girls' bathrooms got new floors, and the same boy's bathroom also got a new cabinet for storage. Bricks were repointed on the Ashcroft Road side of the building exterior, and areas around windows that were leaking were caulked and silicone. A security vision panel was installed inside the school secretary's area. New tiles were installed in Room 22, and all classrooms and hallways were painted.

At the Hoover Elementary School, some railings and classrooms were painted as needed. Additionally, sound panels were installed for the second grade classrooms.

At the Lincoln Elementary School, a large sink was removed in the third floor hallway, and new tiles were installed. The air conditioning unit on the roof was sound proofed. A few classrooms were painted as needed, and carpets were replaced in the halls at all four entrance doors. Also, numerous ceiling tiles were replaced.

At Melrose Veterans Memorial Middle School, five classrooms and several hallways were painted. White boards and smart boards were installed where needed. Also, miscellaneous masonry work was performed on the outside staircase, and new railings were installed.

Finally, at Melrose High School, classrooms were painted as needed, along with hallway ceilings. Pipes were insulated in the kitchen areas and the gymnasium, and two new doors were installed at the Marcoux gym. Fencing was installed for custodian storage. Some clay sinks and cabinets were repaired. Lastly, a third floor classroom into a black room.

Depending on the work order requested and building the work is being performed in, facilities employees have staggered shifts in order to make repairs without disruption to the occupant's regular schedule. The Division's staff starts as early as 6:00 AM and ends as late as 10:30 PM. The early shift gives us the opportunity to solve issues before buildings open, and the later shift allows work to be performed in buildings after the regular day has ended.

During the summer, regular preventative maintenance and annual testing occurred and included: generators, grease traps, genie lifts, kitchen hood, bleachers and stands, rigging, boilers, fire extinguishers, fire alarms and sprinklers, science lab fume hoods, pest control, and emergency shower and eyewash stations. Crews and vendors cleaned carpets and rugs, moved furniture, painted classrooms, halls, and gyms, and cleaned and sanitized building. City staff provided support for such events as Friends of the Library Book Sales, Grad Night and High School sporting events.

The City continued load shedding at the Middle School and High School. Load shedding is a concept where buildings make an effort to consume less energy on days when energy usage normally peaks to save money. Since the power company has to account for the maximum capacity of power usage, lowering the peak consumption helps reduce rates for the entire year. The Division's HVAC specialist utilizes an energy management system to manage load shedding and minimize the effects on people's comfort. The City saves thousands of dollars yearly by load shedding at our public buildings.

Training continued to be a top priority for staff. The Facilities Division continued to work on procedures and methods to keep buildings as clean, safe and running as smoothly as possible. Several employees participated in OSHA safety training.

The Facilities Division continues to provide essential services, through both routine cleaning and preventative maintenance, and as-needed repairs, to all of our City buildings, including City Hall, Police and Fire Stations, the Library, the Milano Center, the Beebe Estate, the City Yard, and all of our City-owned school buildings. The work of this division ensures that the City's facilities are maintained for continued operation, to meet the many needs of the community.

The DPW looks forward to continuing our important work into FY2020, to maintain the beautiful, clean, and vibrant community we all have come to expect. The Department of Public Works' dedicated professionals take pride in our work and strive for excellence in all that we do.