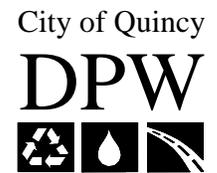




DEPARTMENT OF PUBLIC WORKS



ANNUAL REPORT

Fiscal Year 2013

In 1888, as Quincy transitioned from a Town to a City form of governance, the Department of Public Works was established. At that time, sleds, horses, ploughs and stone crushers were utilized to perform the responsibilities of the newly organized Public Works Department. In 1900, the population of Quincy was 23,899. Today, more than 100,000 people live, work and play in Quincy every day. Over the past century, our work has become more diversified, automated, complex, computerized, technical and multi-faceted.

What has not changed, however, is the dedication of public works employees and their steadfast commitment to meet the needs of the public that they are honored to serve each and every day. The Department is pleased to provide you with its 2013 Annual Report.

We want to keep you informed about the excellent work that we have performed and the quality of services that we have delivered to you over the past year. As you will see, we are proud of our accomplishments and we thank you for support and for taking the time to review our Report.



The latest in snow fighting equipment (1922)

MISSION STATEMENT

Through the judicious use of personnel, materials, equipment, resources, and scheduling: to plan, construct, maintain and facilitate through inter Divisional cooperation, past, present, and future municipal infrastructure, wetlands and open space, thereby providing the best possible environment for the citizens of Quincy.

The Department of Public Works was managed by the Commissioner of Public Works and the Superintendent of Public Works Lawrence Prendeville. Its 126 employees performed their respective duties and responsibilities through the following five Divisions, namely: Sewer/Water/Drain, Highway, Waste Management, Engineering and Traffic & Parking.

SEWER/WATER/DRAIN DIVISION

The Sewer/Water/Drain Division was responsible for sewer services, water distribution, and drain/storm water management for the commercial and residential occupants of the City. Operations were conducted 24 hours a day, 7 days a week by a workforce that consisted of Business Manager Michael Coffey, Civil Engineer Peter Hoyt, 2013 Employee of the Year General Foreman Mark Vialpando and 53 highly skilled, experienced, trained, certified and licensed personnel. The primary objectives of this Division was to ensure clean, safe, quality drinking water and to provide sewer services that met or exceeded all regulatory requirements.

The Division has worked closely with the Massachusetts Water Resource Authority (MWRA) since its inception in 1984. There were 60 communities, including Quincy, that bought some or all of their water and sewer services from the MWRA. Quincy's water was drawn from the Quabbin Reservoir in Western Massachusetts where it was tested and treated and sent through an extensive network of water mains to Quincy. We then used our own network of water mains to bring the water to individual homes and businesses in Quincy.

Water and Sewer operated an *Enterprise Fund* pursuant to M.G.L. c. 44 § 53F1/2 which enabled the City to manage the Water and Sewer operations as if it were a business separate from the City. An enterprise fund gives communities the flexibility to account separately for all financial activities associated with a broad range of municipal services. All the costs of Water and Sewer operations were covered by the water and sewer rate payers. The City did not use tax revenues to subsidize the costs of providing water or sewer services. Conversely, Water and Sewer did not use revenues from rate payers to pay for items that were not related to providing water and sewer services. The intent was to have an efficient, cost effective water and sewer operation with clearly identified costs and revenues.



Installation of equalization pipe in Russell Park



Sewer line maintenance on Circuit Road

The Water/Sewer billing office was located at the Department's Administrative office building at 55 Sea Street. Staff members were available to answer customer questions and/or concerns regarding billing and/or usage issues. The office issued water bills totaling \$ 17,490,947 and sewer bills totaling \$25,321,053.

Division personnel partnered with the City's Information and Technology Department to design and develop a Workforce Management System. This system, scheduled for implementation in fiscal year 2014, will enable us to track the amount and type of work requests that come into the Division and create a work order for same.

Sewer Services:

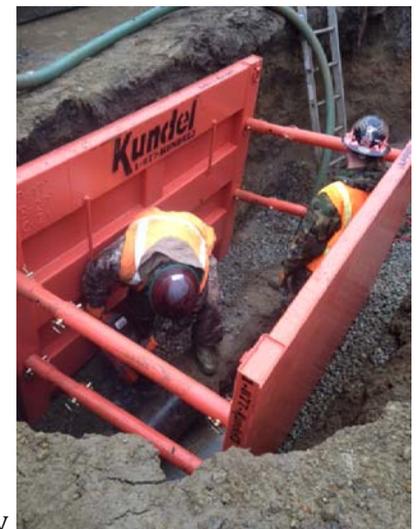
- Maintained 204 miles of sewer mains. The MWRA was paid \$18,276,621 for sewer services and the City sent 4,745,000,000 gallons (13.4 mgd) of wastewater to the MWRA for processing.
- Responded to 1,073 emergency sewer backup calls from residents.
- Performed cleaning and clearing of 1,500 sewer mains and addressed sewer line issues at 311 main line blockages.
- Responded to 22 odor issue calls, 13 pump station alarms and performed general maintenance on our infrastructure and pump stations to ensure continuous, uninterrupted operation.
- Maintained and inspected the sewer collection system which included the 6 Wastewater Pump Stations located at Fort Square, Quincy Point, Evelyn Place, Carlisle Street, Squantum Gardens and The Strand.
- Planned a \$3.5 million upgrade to the Fort Square Pump Station. Construction for the City's largest station is scheduled for the spring of 2014.
- Evaluated need for repair or replacement of the sewer force main from Quincy Center to Quincy Point.
- Planned for the installation of energy efficient variable frequency drive motors and enhancements to the control systems at our larger wastewater stations located at Fort Square and Quincy Point. This will allow us to monitor and control the pump stations remotely.

All of the City's wastewater was collected and sent to the MWRA for processing and treatment. In addition, any rainwater, sea water and groundwater that entered our sewer system through leaky or cracked pipes were also sent to the MWRA. This additional wastewater is called Inflow and Infiltration (I&I.)

It is estimated that 1.46 billion gallons of I&I passes through our system annually costing rate payers \$8 million dollars per year in additional charges from the MWRA. We are charged for that volume by the MWRA even though it is not all wastewater. This dramatically illustrates the necessity of continuing to invest in our I&I reduction program.



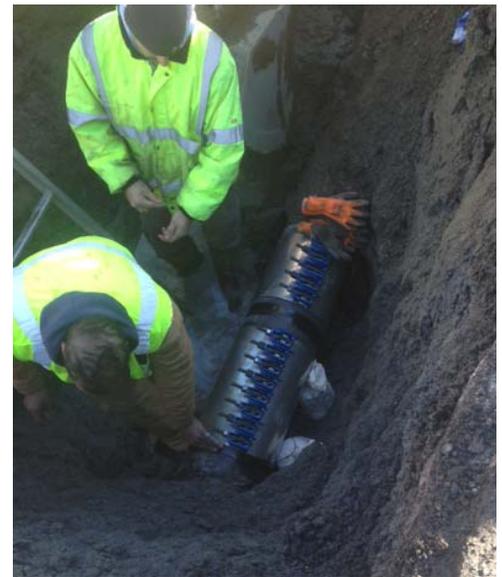
Sewer collapse on Cottage Avenue



Rawson Road water main repair

In this fiscal cycle, the Division:

- Invested \$1.7 million into our Infiltration and Inflow reduction program. Of this 1.7 million, only 55% will have to be paid back to the MWRA through a low interest loan. The remaining 45% was a grant from the MWRA that does not need to be paid back. This important work was performed at locations along East Squantum Street and throughout the Houghs Neck and Adams Shore communities of the City. The removal of I&I from the system was projected to save our water and sewer customers a significant amount of money by stabilizing our sewer costs.
- Designed Sewer Improvements to Rice Road. The cost of the project is \$1,213,490 and construction was scheduled for Spring 2014.
- Drafted, received approval and implemented a new sewer ordinance. The ordinance permitted the sewer division to assess charges to users that have unauthorized sewer connections or that discharged prohibited substances such as fats, oil, and grease into the sewer system. Elimination of prohibited discharges into the system will help contain sewer costs for all customers.
- Planned and prepared for a new truck wash station. Many Divisions will benefit from the completion of the truck wash which will keep the Department in compliance with vehicle washing.



Repairing a water main break on Newport Avenue.

Water Distribution:

- Provided clean, safe, quality drinking water for the daily essential needs of our residential and commercial customers in conformity with stringent State and Federal distribution guidelines such as the Safe Drinking Water Act originally passed by Congress in 1974.
- Maintained 230 miles of water mains and managed the distribution of an average flow of 8.96 mgd. Drinking water was distributed through a network of these water mains to 23,500 commercial and residential customers in Quincy. Water customers used 3,271,860,000 gallons of water and the MWRA was paid \$14,269,000 for that water consumption.
- Worked with the MWRA to provide water for fire suppression needs.
- Maintained, repaired, and replaced the distribution infrastructure required to bring clean



Emergency repair to sewer line break along Furnace Brook Parkway

water to customers. The infrastructure included water main pipes, gate valves, service lines, pumping stations, and water storage tanks.

- Replaced 7,150 feet of water mains on Adams Street, Belmont Street and Albatross Road at a cost of \$1,494,357.50.
- Located and tested 882 gate valves.
- Repaired 35 water main breaks.
- Repaired 87 water main and service leaks.
- Responded to more than 600 calls from our customers for water service.
- Repaired or replaced 124 fire hydrants.
- Painted 238 of the City's 2,549 fire hydrants.
- Painted the interior and exterior of the one million gallon water storage tank on Quarry Street.
- Successfully completed our annual flushing program in which 1,500 fire hydrants were tested and flushed.
- Improved our system with the installation of a Supervisory Control and Data Acquisition (SCADA) Control system. This monitoring system allowed our operators to remotely monitor and control the level of water in our water tanks and the flow of water through our water pumps.
- Drafted, received approval and implemented a new water ordinance that enabled us to better manage our water distribution system, reduce unpaid water loss, and ensure that our charges for additional services reflected the actual costs incurred by the Division to provide the service. Charges for unauthorized water use, meter tampering, and manual meter reads were put into effect.
- Developed and implemented a new remote metering system for 22,000 water customers. This new system:
 1. Utilized 9 strategically placed receiver/transmitters that collected usage data from electronic readers attached to new water meters in homes and businesses. These repeaters sent the information to a computer system that processed the data and sent it to our billing system.
 2. Replaced over 22,000 water meters and electronic readers on the outside of homes and businesses. Many of the replaced meters were over 25 years old and were



A fuel/oil water separator was installed in the Rear Yard.



Residential electronic water meter transmitter

approaching the end of their useful lifetime. This new metering system negates the need for estimated billing.

3. Allowed the billing office to remotely monitor consumption levels across the City assisting with conservation and billing and identifying and repairing leaks before they became significant problems.
4. Improved billing accuracy, reduced billing issues, and improved customer satisfaction.
5. Enabled us to re-assign three water meter readers to other positions, thereby making our operations more efficient.



Vacuum excavation on Quincy Shore Drive



Repaired a water main on East Squantum Street.

- Responded to 5,361 work orders to repair water meters, conduct premises inspections for leaks, test accuracy of water meters, perform final leads, or do valve replacements in customer homes.
- Managed over 3,000 calls from customers in the Dispatch office for water main breaks, leaks, frozen pipes, low water pressure and water quality.
- Ensured water quality at all times. This was a critical function of the water distribution team.
- Tested 1,206 back flow prevention devices and 906 cross connection surveys were conducted by certified and licensed personnel. These inspections and tests helped to ensure that our water main system remains protected from external contaminants.

- Collected 1,238 water samples from locations across the City. These samples were sent to the MWRA weekly for analysis to ensure that our water quality remains at the high levels that we have come to expect and that our customers deserve.



Typical storm drain

Drain/Storm Water Management

Storm water management was an important function of the Division. The storm water collection system consisted of 150 miles of underground drain pipes and 9,329 catch basins. This complex drainage system required continuous maintenance and improvements. City drain crews responded to street flooding, broken catch basins, and clogged drain lines on a regular basis.

Drain Crews

- Cleaned, repaired or replaced 706 catch basins.
- Scheduled the cleaning, repairing or replacing of 2,500 catch basins next fiscal year.
- Maintained and operated the City's 43 tide gates to prevent the rising tide from entering the system and causing flooding. Tide gates are monitored during storm conditions to provide flood protection to the residents. Four of the gates are large electro-mechanical gates that require regular inspection and maintenance.
- Maintained hundreds of outfalls that allow storm water to drain into brooks, waterways, and marshes and eventually into the ocean. Cleaned debris and branches from Furnace Brook, Town River, and Blacks Creek.
- Deployed and monitored 50 portable pumps at various locations around the City to minimize flooding on streets and in neighborhoods during large storm events. Sandbags were filled and made available for residents when significant storm surges or severe storms were forecasted.
- Responded to 1,857 requests for Dig Safe mark outs. State law requires any person performing excavations on public or private property to call Dig Safe. The purpose of the Dig Safe Law is to prevent damage to underground utilities. Dig Safe, Inc. ("Dig Safe") is a communication network that notifies utility companies about planned excavation projects.
- Revised the Protocol for the operation of the Tide Gates at Blacks Creek. In addition, worked with consulting engineers to upgrade and provide operational controls for the gates and to implement a comprehensive plan that will manage tidal flow into and out of the estuary while minimizing potential flooding concerns.



Stone was compacted to prepare for back fill at Russell Park.

HIGHWAY DIVISION

Operations Manager Joseph Newton, General Foreman Edward Leary and 43 highly skilled, experienced, trained, certified and licensed personnel of the Highway Division were responsible for the maintenance and repair of the City's 244 miles of paved roads, 3.4 miles of unpaved roads and 270 miles of sidewalks. Duties included road, sidewalk, pot hole and trench repairs, street sweeping, motor equipment repair, fuel dock management, graffiti removal, litter clean-up, rear yard management, snow and ice management and labor support to other City Departments as needed.

Roadway Repair

Repairs to Massachusetts Avenue, Hanna Street, Beechwood Street, Follet Street, Samoset Avenue, Douse Road, Sea Street, Conant Road, and Governors Road generally consisted of full depth reclamation or cold planing of roadway pavement and placing new bituminous concrete pavement. Additionally, sidewalks and driveway aprons were repaired, new curbing was installed and/or reset, utility castings were adjusted and grass borders were replaced.



New asphalt on Sea Street through the Capital Improvement Program

Sidewalk/Pot Hole/Trench Repairs

- The Division developed and implemented, with assistance from the Engineering Division, a comprehensive plan to repair the most damaged (priority 1 rated) sidewalks reported to the Division. This initiative was funded by Mayor Koch and supported by the City Council. All requests for repair were documented and inspected by a Division Engineer and given a rating of a 1, 2 or 3. A #1 rating was assigned to those sidewalks where a public safety issue was present and that location was given a top priority. A #2 rating was assigned to sidewalks that needed repair but the condition did not rise to the level of an immediate public safety concern. A #3 rating was assigned to a sidewalk that was not aesthetically pleasing but was not an immediate public safety concern.
- A sidewalk list was posted on the Division's website and residents were informed of the process by mail. The work was accomplished through the combined efforts of Highway employees and private contractors. Sidewalk repairs proceeded from Ward Two sequentially through to Ward One. Five hundred (500) sidewalks including all of the top rated priority sidewalks were repaired.



New sidewalks and handicap ramps in Squantum

- The Division completed pot hole and trench repairs throughout the year at locations across the City. Citizens were urged to call 617-376-1914 to report potholes and road defects.

Street Sweeping

- In addition to daily street sweeping of main thoroughfares, business districts and trash routes, the Division continued with its spring and fall comprehensive street sweeping operations. Schedules were printed in the Quincy Sun and Patriot Ledger Newspapers, City of Quincy Website, Cable Access Television and the bi-annual Department InfoLetter. “Street Sweeping in Area today” information boards were also placed in affected neighborhoods.



A new sidewalk finished on Ricciuti Drive.

Motor Equipment Repair

- 2012 Employee of the Year, Motor Equipment Repair Foreman Lawrence Levasseur and six Motor Equipment Repair personnel were responsible for fleet repair and maintenance. They played a key role in keeping Department vehicles and equipment safe and operational year-round. Duties also included auto body work, painting and preventive maintenance.

Fuel Dock Management

- The Fuel Dock was maintained and fully operational 24 hours a day, 7 days a week. A software based computer system was utilized to control and monitor operations through a key access panel and security cameras. All City Departments and the Quincy Housing Authority utilized the Fuel Dock. The Quincy Public Schools and the Housing Authority reimbursed the City for their usage. The Fuel Dock dispensed 228,866 gallons of unleaded gasoline and 94,423 gallons of diesel fuel at a total value of \$1,037,605.30. The Department billed the Quincy Public Schools and the Housing Authority \$235,558.16 for their usage.



The Fuel Dock was operational 24 hours a day, year-round.

Graffiti removal

- Removed graffiti year round from all public areas. In addition, commercial properties had graffiti removed by the City by signing a waiver. Graffiti was removed by using a pressure washer and baking soda mix. In places where the graffiti could not be removed because of the size of the affected area, the graffiti was painted over. All graffiti and tagging were photographed and categorized by the Police Department.

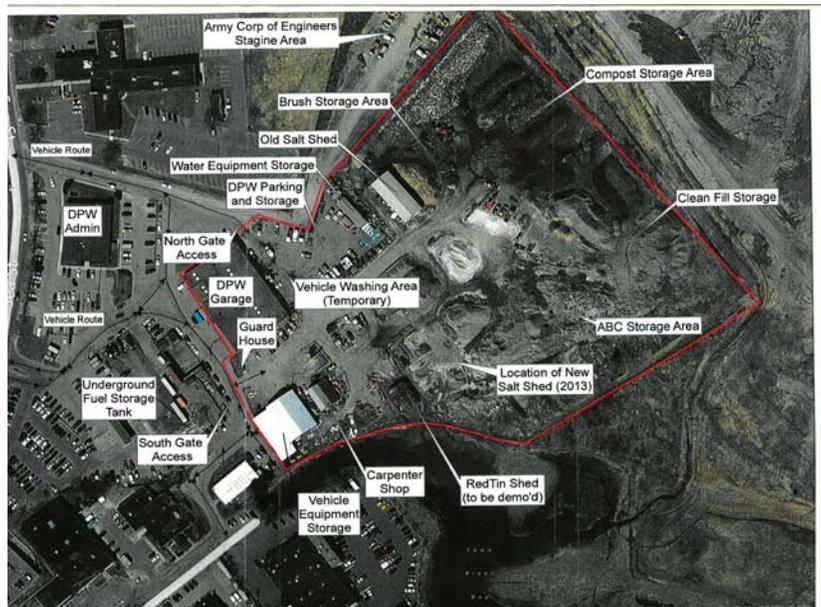
Litter Clean-up

- Picked up litter and debris from the public rights of ways and collected trash from public trash receptacles.
- Weeded and cleaned public islands, sidewalks and grass borders. Weeded and replaced stones underneath tree grates within the business districts and Hancock Street.
- Participated in “Cleaner, Greener Day.”
- Cleaned the city after events such as parades, road races and the August Moon Festival.
- Assisted other Departments when necessary to help relocate items, boxes, and furniture.

Rear Yard

The rear yard’s 22.19 acres at 55 Sea Street were used for the storage of equipment, materials and yardwaste. It was open to Quincy residents year-round for the disposal of yard waste, recycling and electronic materials.

The Division created an Operations and Maintenance Plan for the integration of environmental stewardship into everyday activities at the rear yard. The Plan provided each employee with the necessary guidance to ensure that operations were carried out in an environmentally responsible manner with assigned roles and responsibilities.



Aerial view of the Public Works complex at 55 Sea Street.

Snow and Ice Management

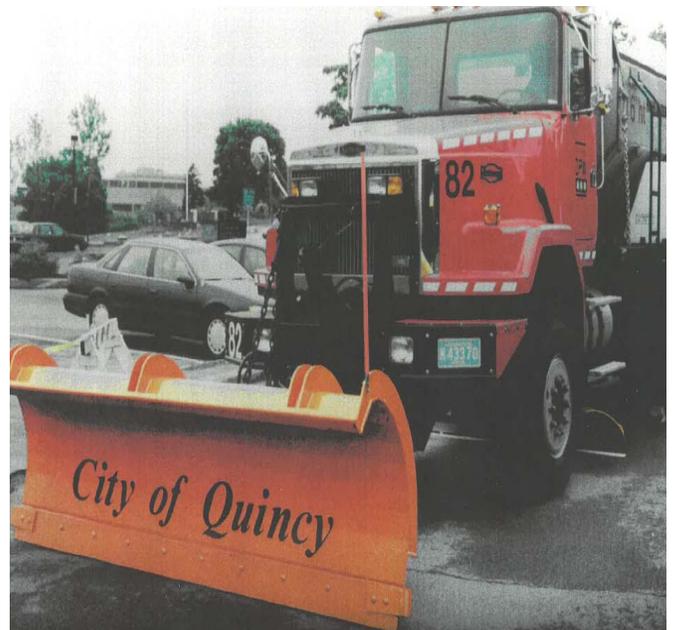
- Winter Parking Rules
 1. To find out about Snow Emergencies a resident could:
 - a. Call 617-770-7669 for a recording.
 - b. Tune into cable television channels 8 or 11.
 - c. Go to the City’s web page at www.quincyma.gov.

2. To receive alerts directly to a personal e-mail or cell phone a resident could sign up at www.quincyma.gov/CityLink/
3. Once a Snow Emergency was declared a resident could get further help by calling the Snow Hotline at 617-376-1927.
4. No parking was allowed on either side of Emergency Arteries during a Snow Emergency.



Several of the fleet's spreaders stand ready.

5. Residents on non-emergency side streets were allowed to park on the even side of the street.
 6. Overnight parking on the street was prohibited without a residential parking permit which was available at the Quincy Police Department (617) 479-1212. Residential parking permits were void during Snow Emergencies.
 7. Violators of Quincy parking rules and vehicles that hampered snow removal operations were towed at owner's expense.
- Snow and ice was removed from roadways while keeping the main roads open and essential traffic moving safely.
 - Sidewalks were cleared that had been identified by the Quincy Public Schools as walking routes for students. Also, school parking lots, City Hall and the Quincy Police Station were cleared of snow.
 - Goal was to provide safe routes of travel at all times.
 - Division employees and equipment, City employees from other Departments and private contractors were used to provide this service.
 - Preparations for each storm included: calibrating equipment, training drivers, designating plow routes, having materials ready for pre-treating and treating the roads and organizing Police, tow operators and supervisors.



1994 Auto Car All-Wheel-Drive 20-Ton Snow Fighter

- February was the fifth (5th) snowiest month on record with most of the snow coming from blizzard Nemo which dumped 27.5 inches of snow in Quincy on February 8 and 9, 2013. Blizzard Nemo was one of the great winter storms of New England. Winter snowfall exceeded 80 inches which was far above the average of 48 inches.

- The Division worked successive days and nights many times to keep roads and heavily traveled sidewalks free from snow and ice. Two large snow removal contractors supported the snow plowing and removal efforts bolstering the Highway Division with an additional 100 pieces of snow removal equipment.

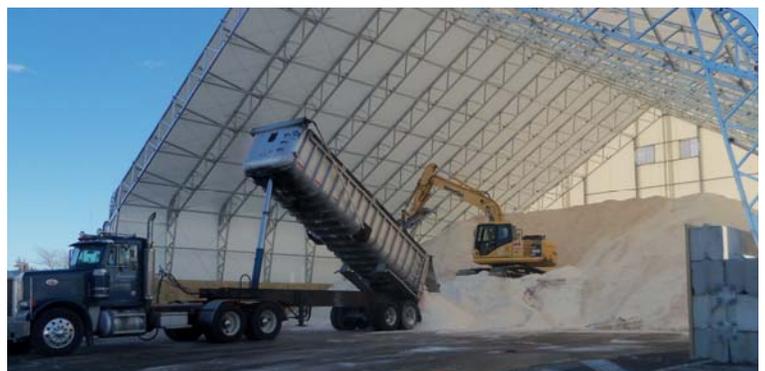
- Adopted a *salt only* strategy. Salt melts snow and ice. Salt brining and pre-treating of roads prevented the bond of frozen precipitation to the road surface. Anti-icing strategies dramatically cut the cost of maintaining safe roads.

- In that sand is ineffective in snow/ice removal efforts, it was not applied to our roads. Sand does, however, block drains and involves expensive street sweeping and catch basin cleaning operations and significant disposal of material costs. Our salt-only strategy avoided unnecessary strain on storm drain catch basins, made it easier, faster, and more effective to clean-up in the spring, and resulted in safer travel for motorcyclists and bicyclists as well as being more environmental friendly.

- Planned for a new 100' x 100' salt shed that increases our capacity to store larger amounts of salt. We will be able to buy and load in bulk and re-supply between storms when demand is low and the size of the shed allow our loader operators to load the salt on our spreader trucks more efficiently. The benefit of a large capacity salt shed is the ability to fight several back to back storms without having to resupply.



Salt brine applicator



Planned salt shed became a reality in fiscal year 2014.

WASTE MANAGEMENT DIVISION

Solid Waste Disposal



Quincy's trash is burned at a waste-to-energy plant in Rochester, Massachusetts to make electricity.

The Division was supervised by Project Manager John Sullivan. The contract with Covanta Semass provided for the proper disposal of municipal waste produced from 32,000 households, all municipal facilities, schools and public housing. Solid waste was collected and weighed at the Covanta Semass Transfer Station in Braintree and transported to a waste-to-energy facility in Rochester, MA. There it was burned as fuel for turbines to produce electricity. The electricity was then sold to the electric grid.

The cost per-ton for disposal was \$96.15. The total cost for disposal was \$2,820,079. The total tonnage was 29,330 tons which represents an increase of 155 tons (.005%) over fiscal year 2012.

In that the contract with Covanta Semass ended on June 30, 2013, the Division reviewed proposals from waste collection competitors. Ultimately, the Division negotiated a new contract with Covanta Semass and with the Division's recommendation Mayor Koch signed a 10-year contract with Covanta Semass of Rochester, MA beginning July 1, 2013. The cost for disposal per ton will be \$68.00 producing a savings of \$844,500 in the first year.

Television Disposal

The Division paid \$36,220 in additional fees for the disposal of 5,994 televisions and computer monitors (CRTs) and 250 CFCs (refrigerators and air conditioners). Changes in television broadcast from analogue to digital, the advent of high definition and flat screen televisions at increasingly affordable prices, fueled a sharp and prolonged rise in CRT disposal that did not diminish.

The new collection contract with Sunrise will allow for the disposal of CRTs collected curbside at no additional cost to the City.



Televisions and monitors ready for disposal

Curbside Collection

- June 30, 2013, ended the contract with Capitol Waste Services, Inc. of East Boston, MA for waste collection. Under the contract single family units, condominiums, and multiple families of eight units or less were eligible for the weekly curbside collection of household trash, recycling, appliances and yard waste. Also included in the curbside collection process were schools, municipal buildings public housing and public barrels.
- This service cost \$3.55 million plus the cost of disposal for televisions, monitors and appliances
- The Division reviewed proposals from waste collection competitors and with the Division's recommendation, Mayor Koch signed a 10 year contract with Sunrise Scavenger of Hyde Park, MA. The new contract will save the City several million dollars over the existing contract with the following additional benefits.

1. Total cost for first two years will be fixed at the same cost as the last year of the existing contract.
2. Fixed annual increases in the contract that are not tied to inflation.
3. No fuel surcharge.
4. Six additional weeks of yard waste curbside collection for a total of 24 weeks at no additional cost .
5. Disposal of all televisions collected curbside at no cost to City.
6. First 150 roll-off dumpsters hauled annually at no charge.
7. Quincy will be serviced by five new eco-friendly hybrid trucks.



Sunrise's new fleet will feature five eco-friendly hybrid collection vehicles.



Recycling totes at North Quincy High School

- The 24th year of a comprehensive recycling program in Quincy also saw the end of the contract with Recycle America of Avon, MA, a subsidiary of Waste Management. While most cities and towns across the nation were paying \$50 per-ton for the disposal/processing of their recyclable materials, the City of Quincy paid \$0.
- Upon the recommendation of the Division, Mayor Koch signed a new 10-year contract

with Recycle America in which the City may earn revenue but can opt to never pay for the processing of recycling materials. The 10-year agreement is designed to coincide with the expiration of the contracts for waste collection and waste disposal allowing for greater flexibility and more creative options.

- Curbside yard waste collection service was offered for 18 weeks running from mid-April until the end of November. Material is collected weekly in the spring and fall and bi-weekly during the summer costing approximately \$150,970 per year. Approximately 10,000 cubic yards of yard waste were collected and processed in the rear yard.
- The City collected over 3,000 Christmas trees curbside over a one week period in January. The cost for one week of curbside collection of Christmas trees was \$8,000.
- No additional charge to residents for curbside collection and disposal of washers, dryers, refrigerators, water heaters, stoves, computer monitors, televisions and air conditioners. The cost to collect these items was \$98,000. The city earned over \$6,000 in revenue from selling the scrap metal.
- Collection of solid waste including recyclables from 6,000 condominium units cost \$157,925. The City was one of only a handful of municipalities that collect and dispose of trash for condominium owners at no additional cost to owners.
- The Division paid \$25,183 for the placement of 30-yard roll-off containers in the rear yard and at the Richard Koch Recreation Complex. The individual cost was \$188 per-haul per-container. The containers are used to deposit waste collected around the city from street sweeping, litter control, and waste collection in the parks and cemeteries. Disposal costs are contained in the Division’s annual tonnage.
- The Division maintained 140 public waste receptacles in 30 high-pedestrian traffic locations surrounding schools, businesses, and recreation areas apart from the jurisdiction of the Parks Department.
- The Division solicited Stop&Shop Companies for \$50,000 to purchase 10 BigBelly solar compactors. Mayor Koch and Stop&Shop Companies



Curbside collection of yard waste



Mayor Koch and Stop & Shop New England President Joe Kelley announced their partnership to bring 10 BigBelly solar compactors to Quincy Center .

agreed to use the compactor units along the westerly side of Hancock Street in Quincy Center.

- These units:
 1. Compacted trash into a 3:1 ratio, thereby, reducing the number of times a unit must be emptied.
 2. Sent a “fullness alert” e-mail to the trash collector and the Project Manager on a daily basis, thereby decreasing the number of unnecessary trips around the city. This enabled the City to control labor costs and reduced the City’s carbon footprint.

- Partnered with Clean Harbors of Braintree, Massachusetts for household hazardous waste collection days in October 2012 and May 2013. Free to residents, these events provided a point of collection for household hazardous material. The October event cost \$12,156, serviced 261 vehicles and collected 4,350 pounds of household hazardous material. The May event cost \$12,460, serviced 313 cars and collected 5,905 lbs. of household hazardous material.



Household Hazardous Waste Drop-off Day

- Residents were urged to dispose of recycling material, yard waste, and scrap metal year round at the facility in the rear yard of 55 Sea Street. Hours of operation were Monday through Friday 7:30 AM to 3:00 PM and Saturdays, mid-April through mid-December, 7:30 AM to 3:00 PM.

- Partnered with the Quincy Public Schools and contracted with Bay State Textile to place a textile recycling container in every school yard in the City. The Department of Environmental Protection has estimated that each and every American disposes of approximately 68 lbs. of clothing a year into the trash. In Quincy, diverting 3,128 tons of clothing saves over \$300,000 in disposal fees. In addition, Bay State textile paid the district’s Parent Teacher Organizations over \$8,000 to be used at the school.



Textile collection boxes outside Quincy High School

ENGINEERING DIVISION

The Engineering Division led by City Engineer Shawn Hardy, P.E. and his staff of six highly skilled, experienced, trained, certified and licensed personnel:

- Provided oversight for the improvement, maintenance and delivery of the most essential City services such as roads and utilities.
- Oversaw all Public Works infrastructure projects and coordinated those projects with the Building Department, Zoning Board of Appeals, Planning Department, Conservation Commission and other municipal departments and governmental agencies.
- Attended bi-weekly construction meetings sponsored by Massachusetts Department of Transportation to discuss the progress of the Fore River Bridge Replacement project.
- Responded to numerous requests for services from individuals and agencies to provide assistance with property line determinations, flood complaints, accident cases and other matters.
- Maintained a public service counter to answer questions, address complaints and provide technical support services.
- Provided project review to City Departments including the City Council, Building Department, Zoning Board of Appeals, Planning Department and Conservation Commission.
- Designed and prepared roadway construction contracts, coordinated with various consulting engineers and performed numerous other support activities.
- Provided technical support to all city Departments and residents including:
 1. Investigation and preparation of 10 accident claim reports and providing testimony at various court hearings for the Law Department.
 2. Prepared 40 building grade reports for proposed new construction, reviewed drainage and site plans for numerous Building Permit applications and reviewed many Demolition Permits, Building Permits and Occupancy Permits for Inspectional Services Department.
 3. Reviewed and commented on more than 90 Zoning Board of Appeals applications, 15 Planning Board applications and 20 Conservation Commission applications.
 4. Assisted the Quincy Police Department with confirmation of approximately 10 field distance reports for court cases and provided testimony in court as needed in support of these reports.



A Division Engineer discusses a FEMA map with a resident.

5. Responded to requests from City Councilors regarding roadway, sidewalk and drainage concerns and attended community meetings with Councilors to update residents on the status of various projects throughout the year.

6. Maintained and updated City Assessors' plans and records for all property transfers, subdivisions, building additions, new construction and demolition within the City.



Historic Quincy City Hall

7. Reviewed and processed 454 street opening and curb-cut permit applications which generated \$75,225 in revenue to the City. In addition, each location was inspected post-construction to ensure that proper construction standards were met.

8. Provided land surveying services to various Departments to determine property line and jurisdiction for various requests including tree removal, fence damage and other repairs and other support and technical expertise relating to drainage, grading and construction standards.

9. Prepared contract plans and documents for roadway and sidewalk repairs, water main, sewer and drainage improvements within the City and provided oversight and inspection of all sidewalk, roadway, sewer, drainage and water main construction.

Geographic Information System (GIS)

The Division continued to update GIS layers by adding and modifying Water Distribution, Drainage, Sanitary Sewer Systems, Zoning, Flood Plain, and Ward/Precincts on the GIS mapping that is available to the public via the City's website. The GIS proved to be a very useful tool in conjunction with Pavement Management, Street Sweeping and Snow Plowing Operations. It also served as an analysis tool to the FEMA Flood Map updates, Sex Offender Ordinance, Wind Turbine Ordinance as well as Chapter 40B Compliance. The GIS program was also updated to reflect new construction and development.

Public Works construction projects:

- 2013 Rice Road Sewer Improvements

Contractor: S.B. Construction Inc.

Contract Amount: \$1,213,490

Design has been completed, construction scheduled to begin Spring 2014

- Trench Repair Fiscal 2013

Approximately 40 trenches in various locations were repaired.

Contractor: Derbes Construction, LLC

Contract Amount: \$305,290

- Road and sidewalk Improvements 2012

Streets and sidewalks were repaired on Massachusetts Avenue, Hanna Street, Beechwood Street, Follet Street, Samoset Avenue, Douse Road, Sea Street, Conant Road, and Governors Road.

Contractor: Derbes Construction, LLC

Contract Amount: \$1,521,652.74



Fire hydrants ready for installation

- 2012 – 2013 Sidewalk Replacement

Contractor: Century Paving Corp.

Contract Amount: \$287,481.25

Replacement of 325 Asphalt and Concrete sidewalks (various locations)

- Contractor: Tasco Construction, Inc

Contract Amount: \$250,700.00

Replacement of 175 Asphalt and Concrete sidewalks (various locations)

- 2012 - 2013 Water Main Improvements

Replaced 7,150 feet of water main on Adams Street, Belmont Street and Albatross Road

Contractor: C. Naughton Corp.

Contract Amount: \$1,494,357.50

- Edgewater Drive Seawall Repair

Designed and Permitted approximately 3,000 linear feet of seawall along Edgewater Drive in Hough's Neck.

Construction scheduled for Fall 2013

- Proposed Seawall and Stairway Rehabilitation

Designed and Permitted approximately 500 linear feet of seawall along Dorchester Street in Squantum in addition to the rehabilitation of 26 beach stairs at various locations. Construction scheduled for Fall 2013

- Community Rating System (CRS)

Maintained flood plain management activities as required by Federal Emergency Management (FEMA). These activities qualify Quincy residents for a 10 percent reduction on flood insurance premiums from the National Flood Insurance Program (NFIP). Currently Quincy is one of the highest rated local communities.



Edgewater Drive Seawall restoration work in Houghs Neck

TRAFFIC AND PARKING DIVISION

Traffic Engineer John Gillon, Operations Manager Fred Sousa, General Foreman Steven Kubit, Sr. Traffic Engineering Aide Fran Doherty and 14 highly skilled, experienced, trained, certified, and licensed personnel of the Traffic and Parking Division were responsible for the City of Quincy's transportation network, City owned street lights and for the design, installation, and operation of all public parking facilities.



Traffic control box

The Traffic and Parking Division:

- Reviewed all major development proposals to ensure that any traffic impacts are mitigated before additional traffic volumes are added to the City's existing roadwork network.
- Evaluated pedestrian, bicycle and MBTA bus operations.
- Painted the City's main roadway pavement markings including edge lines, skip lines, lane lines and center lines totaling 162 miles of four inch lines.
- Painted the City's 504 crosswalks having a total footage of 473,788 feet.
- Maintained all city signage in accordance with the United States Department of Transportation Federal Highway Administration's Manual on Uniform Traffic Control Devices.
- Assisted in the planning and implementation to replace 4000 street name signs that must have six inch lettering instead of four inch lettering. Ninety-one street signs were made and installed in 2013. Four hundred signs are planned for installation in 2014.
- Replaced 98 Stop Signs from the 24 inch Stop sign to the new standard size of 30 inch.
- Completed 436 Work Orders. Eight signs were removed, nine Informational Signs installed, 250 Regulatory Signs installed or replaced, 48 Warning Signs installed and 184 poles installed.
- Provided recommendations for traffic initiatives and traffic and parking related Ordinances.
- Provided assistance to the following organizers of Road Races, Special events and Parades throughout the year by blocking off roads and posting temporary signs as needed:

Half Marathon

August Moon Festival

Edgewater Drive

Asian Festival, NQHS

Christmas Parade

Fireworks

Local, state and national
Elections

Flag Day Parade

Jamie Cochrane Road
Race

Lions Road Race

- Was on-call 24 hours a day, 7 days a week to assist the Police and Fire Departments in emergency situations to ensure the safety of the general public.
- Responded to signal malfunctions, blocking off roadways and or picking up or replacing damaged City equipment due to motor vehicle accidents, flooding or fires.
- Lettered Police, Fire and Department vehicles.
- Repaired, maintained and/or replaced:

Historical Streetlights:

Acorn style – 350 fixtures

Pendant style – 152 fixtures

- Assisted in the plan to purchase 6000 streetlights from National Grid.
- Maintained full traffic control signals at 80 intersections.
- Maintained pedestrian crossing signals only at 12 intersections.
- Maintained “20 MPH” School Zone flashers only at 12 locations.
- Provided essential support services such as determining proper design of street lighting and lighting of public areas including ball fields and parking facilities.
- Evaluated new equipment such as light emitting diode technology and solar panels that reduce energy costs to the City.
- Provided oversight to the Ross and Hancock Parking areas as well as parking enforcement with the City's four Parking Control Officers. The Hancock Lot has 493 parking spaces. The Ross garage has 728 spaces. Revenue for both parking areas totaled \$726,964.91. The Division issued approximately 20,000 parking citations.
- The Operations Manager attended parking ticket appeals at City Hall every Thursday between the hours of 9 AM and 11 AM.



LED Street Lighting Retrofit

The City utilized a \$370,025 grant from the Department of Energy Resources to retrofit over 300 City-owned decorative metal halide streetlights with cost saving LEDs. The energy-saving measure reduced energy consumption within the targeted street lights by 44%, saving more than 206,245 kWh of electricity annually. This reduction equates to an annual cost savings of \$26,450 for the City and a projected annual reduction in green house gasses of 170,771 lbs of carbon dioxide. In addition, the City earned over \$28,000 in incentive rebates from National Grid. These savings did not include savings associated with reduced maintenance and replacement costs.



LED technology uses less electricity, lasts longer and requires less maintenance than conventional lighting.

COMMUNITY OUTREACH

The Department continued its commitment to strengthen relations with its constituency through improved communication, information, and education by:

- Delivering forty thousand (40,000) InfoLetters twice yearly to every household in Quincy, social and community centers, the City's libraries, City Departments, coffee shops and to businesses providing:
 1. The latest news and information on Department projects and special events.
 2. Seasonal street sweeping and trash collection schedules.
 3. Employee spotlight.
 4. Tips on recycling and trash collection.
- Utilized Quincy Access Television by:
 1. Appearing on 4 seasonally oriented broadcasts entitled *Update DPW*.
 2. Daily, multiple broadcasts on cable bulletin boards on channels 8 and 11.
 3. Timely updates announcing holiday collection schedules, snow emergencies, street closings and construction are broadcast as needed.
- Placement of articles and advertisements in the Quincy Sun and Patriot Ledger newspapers.
 1. News on Department special projects and events.
 2. Public Service Announcements designed to educate residents on proper waste and recycling rules and regulations, preparations for street sweeping and yardwaste collection.



The InfoLetter was the most viewed Departmental publication in the City.



State-of-the-art facilities at QATV

- Attendance, participation and assistance to community groups, businesses, City Departments and other governmental agencies including:

Veterans Organizations
 Chamber of Commerce
 Bicycle Commission
 Council on Aging
 Community Meetings
 Community Garden Clubs
 DEA Drug Drop-off Days -
 October 27, 2012
 and April 27, 2013
 Safe Routes to School
 Green Communities
 Neighborhood Garden Clubs
 City Council Meetings
 Friends of Butler Pond
 Friends of Sailor's Pond
 Fore River Bridge Project



Flags for Veterans won a Public Space Beautification award during National Public Works Week.



Public Works partnered with the Friends of Butler Pond to clean the pond.

National Public Works Week

Public Works infrastructure facilities and services are of vital importance to the health, safety and well-being of the citizens of Quincy. These necessary facilities and services could not be provided without the dedicated efforts of our employees. It is in the public interest for all of our citizens and our Quincy Public School students to learn of the Public Works needs and programs of our City. It is important as a community that we recognize the substantial contributions which our employees



Quincy Public School 3rd graders enjoyed the recycling robot at the Open House.

make each and every day to the quality of life for the people of Quincy.

We are grateful for the positive relationship that has been developed with the Quincy Public Schools. Schools making banners, students writing essays, parents, school officials and civic groups applying for Public Space Improvement Grants and the resulting improvements to public areas, are an integral part of this week-long observance.

For the second year in a row the Department celebrated National Public Works Week. The festivities began on May 18th with the Department sponsoring a very successful Household Hazardous Waste Drop-off Day which was attended by over 200 residents.



Free tune-ups were provided for all during the Bicycle Safety Rodeo.

Bicycle Rodeo

Partnering with the Massachusetts Department of Transportation and AAA, a Bicycle Rodeo was added to this year's National Public Works Week Celebration on May 18th. This fun family event demonstrated the Department's commitment to the burgeoning bicycling community and for bicycle safety. Hundreds of children and parents came to 55 Sea Street to learn about bike safety, get a free bicycle tune-up and participate in a bicycle obstacle/safety course for all age levels.



The K-9 Police demonstration caught the attention of all at the Bicycle Safety Rodeo.

The event also featured BMX stunt riders, Community Bicycle Police Officers, a K-9 demonstration, promotional tables for community groups including Safe Routes to Schools, lots of free give-a-ways and many raffles and prizes. In addition, two new

BMX bikes were raffled off through the generosity of House of Representatives Majority Leader Ronald Mariano. Hot dogs, chips, soda, Ginger Betty bicycle cookies and ice cream were enjoyed by all.



Students learned about the heavy equipment at the Public Works.

Open House

On May 22nd, with donations and grants from businesses and private citizens, the Department hosted the always popular Open House. Several hundred students, teachers and the public enjoyed dozens of interactive displays presented by our business partners and employees. At noon, the Department hosted an award and recognition ceremony attended by residents, community and political leaders and Department employees. Recognition awards

were given to Department employees for safety, outstanding performance and longevity.

During the ceremony, winners were announced and awards distributed for the 4th grade Essay Contest, 5th grade Banner Contest and the Public Space Beautification Awards. In the Open Space Beautification contest dozens of contestants were awarded thousands of dollars in grants to beautify public areas all across the City. Three winners were awarded an additional prize to assist in maintaining the areas.



Employees, residents and community leaders assembled under the tent for the Award Ceremony.

Respectfully submitted,

A handwritten signature in black ink that reads "Daniel G. Raymondi". The signature is written in a cursive, flowing style.

Daniel G. Raymondi
Commissioner of Public Works

