## DEPARTMENT OF PUBLIC WORKS

The Arlington Department of Public Works (DPW) is comprised of eight divisions: Administration, Engineering, Highway, Water/Sewer, Properties, Cemeteries, Natural Resources, and Motor Equipment Repair. With a staff of 130 full-time personnel, it is the goal of the Department to provide citizens, boards, commissions, and other Town departments with superior Public Works services and support.

## Administration

The Administration Division provides the following services: financial (including budget preparation and administration), invoice payment, invoice billings, grant management, water/sewer reading and billing, personnel and payroll management, customer service, contract administration, oversight of contracted solid waste and hazardous waste collection services, supervision of contracted custodial services, and oversight of contracted streetlight maintenance on public ways and parking lots.

## Solid Waste Collection

Waste Management provides contracted curbside and dumpster collection of solid waste and bulky items from residential and business locations. Through this contract the DPW collects solid waste at over 19,000 residences and 150 commercial accounts. Solid wastes are also collected from the following municipal locations: Town Hall and eight other municipal buildings, Community Safety, three fire stations, two libraries, nine public schools, over twenty municipal parks, and approximately sixty public trash barrels. The bulky item collection program collects large items like couches, tables, and sinks curbside around Town.

The Town successfully negotiated a three-year Solid Waste Collection contract extension in 2009.

The new provisions included the conversion to "single-stream" recycling (see description below) and a one-year freeze on trash collection cost increases.

The Town also provides contracted dumpster trash collection (usually weekly) at schools, ther municipal buildings, non-profit organizations, apartment complexes, and condominium complexes.

#### Recycling

Waste Management also collects recyclable items curbside on a bi-weekly schedule. The Department issues an annual guide with all the information needed for residents and businesses to make our recycling efforts successful.

In 2009 the Town successfully negotiated a switch to "single-stream" recycling. Under single stream, the residents no longer need to do any separation of recyclables. All of the materials mentioned above can be co-mingled in a single container and placed out for collection. A solid waste hauler transports our recyclables to a plant in Everett that completes the separation into the different materials for reuse. Many homeowners are discovering the convenience of placing all of their recyclables, unsorted in a single "trash" barrel with a recycling sticker.

Twice a year the Department, in conjunction with the Recycling Committee, holds a recycling event at the DPW facility on Grove Street. The first year of this program was 2003, when the Department gave out recycling bins as part of America Recycles Week in November. Since then the event has grown into a twice-yearly event which collects clothing, shoes and sneakers, used toys, books, DVD's and CD's, bicycles, and scrap metal. Additionally, a company is available to shred documents. The Board of Health is also at the event and collects medical waste such as syringes and prescription drugs. At each event the DPW collects TV's and CRT's and distributes recycling toters.

Recycling, Solid Waste, and Hazardous Waste Statistics (in tons unless specified)				
Materials	2008	2009		
Solid Waste	15,996	15,359		
Paper/chipboard	3,292	2.936.01		
Commingled (glass/plastic/metal)	1,259	1,228.71		
Yard Waste	3,606	3,216		
Abitibi (paper recycling)	139.38	127.40		
Got Books (book recycling)	18.01	18.47		
Total (Tons)	24,310	22,886		
Recycling Rate	34.2	32.9		
TV/CRT's	2,747 (units)	2,174 (units)		
Appliances	741 (units)	677 (units)		
Florescent bulbs (mercury based)	19,150 (linear feet)	20,656 (linear feet)		
CFL's	1,008 (units)	1,162 (units)		

#### Yard Waste Collection

Waste Management also collects yard waste curbside on a bi-weekly schedule from mid-April to mid-October, and weekly from mid-October to early-December. Leaves and grass clippings can be placed curbside in barrels with a Yard Waste identification sticker or in compostable 30-gal paper bags. Branches up to 1" in diameter can be placed curbside if cut into 3 foot lengths and tied into 30 lbs maximum bundles. Additional recycling information can be found online at arlingtonma.gov/recycle.

## Household Hazardous Waste Collection

2009 marked the twelfth year of Arlington's membership in the regional household hazardous waste collection facility at 60 Hartwell Avenue in Lexington. Eight monthly collection days were held from April through November. The program continues to collect large quantities of hazardous materials including pesticides, chemicals, used motor oil, antifreeze, and household cleaning products. In 2009 the Town properly disposed of 512 carloads of hazardous materials.

## **Engineering Division**

The Engineering Division continues to provide a wide variety of support services to other DPW divisions, various Town departments, commissions, contractors, public utilities, and to the general public. The Engineering Division works closely with the Highway, Water, and Sewer Division upgrading and improving the infrastructure of the Town by providing surveys, engineering design, construction plans, field layouts, and field inspection services. The Engineering Division also provides technical design and specification for municipal infrastructure improvements, oversees contracted maintenance of the Town's traffic signals, oversees consultant studies, reviews and makes recommendations on the impacts of planned private construction projects, reviews and provides regulation on proposed private way projects and improvements, and provides professional analysis.

# Accomplishments

Completed Water Main replacement projects at the following locations:

- Clyde Terrace
- Mountain Ave.: Washington St. to Overlook Road.
- Washington Street: Summer Street to Clyde Terrace, Wigwam Circle
- · Gay St.

Resurfaced the following roadways:

- · Park Ave.: Park Circle to Mass Ave.
- Appleton St.: Park Ave to Wachusett Ave.
- Bartlett Ave.: Wildwood Ave to Mass Ave.
- Spring St.: Highland Ave. to Jason St.

- Old Spring Street
- Wall Street
- · Arlmont Street: Highland Ave. to Spring St.
- · Highland Ave.: Arlmont St. to Spring St.
- · Ridge Street: Cutter Hill Road to Crosby St.
- · Mead Street, Lower Section
- Clyde Terrace
- Wigwam Circle
- · Gay St.
- Mountain Ave.: Washington St to Overlook Road

Reconstructed the following sidewalks:

- · Appleton St.: Rhinecliff St. to Valentine Road
- · Bartlett Ave.: Wildwood Ave. to Mass Ave.
- Spring Street: Intersection with Highland Ave to Wall St.
- Installed approximately 40 new ADA Compliant curb cuts and Wheel Chair ramps at roadway intersections.
- Began construction of sewer improvements within the Year 2 designated area of the Town's 12-year Improvements Program.
- Area bounded by Ronald Road and Longmeadow St. to the east, Lowell Street to the south, the Winchester line to the north, and the Lexington line to the west.
- Began investigation and design of the Year 3 designated area.

Provided continued review oversight of proposed Board of Survey Plans, including:

- · Elder Terrace: one new lot proposed.
- · Lee Terrace: one new lot proposed.
- Washington Street (side street at 50 Washington): 2 new lots proposed.
- Provided oversight and awarded a contract for a new Automatic Water Meter Reading System. Implementation of the system begins in 2010.
- Provided oversight of new private way construction (Lillian Way).

Additional Engineering Accomplishments include:

- Designed and awarded contract for the reconstruction of the Mill Brook culverts in Mill Lane and Brattle Street.
- Provided design oversight for proposed improvements to Forest Street. Designed the project to Federal Standards in order to pursue Federal Recovery Act funds.
- Reviewed twenty-five projects for compliance with the Town's Storm-Water Mitigation Bylaw.
- Provided Construction estimates for residents of several Private Way neighborhoods looking to make improvements under the Town's Betterment Program.

- Participated in the Metro-Northwest Consortium in the development of cooperative, regional procurement of municipal roadway and sidewalk construction projects and successfully completed our 2009 projects under the resulting regional bids.
- Completed an inventory of all sewer pump stations in order to develop a systematic maintenance and upgrade program.

# **Highway Division**

The Highway Division of the Public Works Department maintains 102 miles of roads, 175 miles of sidewalks, 175 miles of curbing, eight parking lots, along with numerous guardrails, stairs, walls, and fences. The division also performs street sweeping services and maintains traffic lines, signs and drainage systems (culverts, pipes, manholes, catch basins and drain channels).

## Street Sweeping

The Town is typically swept three times annually (spring, summer, and fall).

- Spring sweeping of all paved streets completed.
- Summer sweeping was not conducted in 2009 as street cleanliness was adequate.
   The manpower for this task was diverted to bolster the sidewalk repair efforts. Summer sweep is evaluated annually to determine its need over other priorities.
- Fall sweeping was cut short by early snowfalls 12 routes (of 32) not completed due to early snows.
- Sweeping on main streets done weekly (twenty-eight times).

#### Snow and Ice Control

- There were sixteen snow and ice events from 12/2/08 through 3/3/09.
- · Private contractors used for ten events.
- 68 inches total snow fall for season.
- · 550 tons sand/salt mix used.
- 8,106 tons road salt used.
- 14 plow damage complaints received and repaired.

## Performance Measurements

- Painted 89,577 In-ft of centerline, fog line, and crosswalks.
- Painted 3,780 In-/ft parking space lines.
- Installed 2,291 In-ft of 12 inch thermo plastic crosswalk.
- Milled 2,117 In-ft old thermo plastic down to pavement.
- Repaired or replaced 66 catch basins.

- Cleaned over 1,346 catch basins.
- Pothole patching: over 1,104.tons of hot asphalt mix placed and compacted.
- Removed and installed 2,352 In-ft concrete sidewalk.
- Removed and installed 1,217 In-ft asphalt sidewalk.
- · Installed 140 In-ft granite curbing.
- Installed 475 In-ft asphalt berm.
- · Replaced 826 traffic or street signs.
- Responded to 12 TAC requests including "Safe Routes to School" program.
- Removed Debris from the Mill Brook (along Colonial Village).
- Removed and stored 40+ non-compliant newspaper boxes and repositioned the remaining ones.

# Special Projects in 2009

- Provided setup, tear down for Patriots
   Parade, Town Day, Feast of the East, Hardy
   School Walk for Life, Soap Box Derby, and 3
   Elections.
- Re-graded Reservoir Parking Lot to alleviate drainage problems.
- Installed 33 Bike Racks along the sidewalks of Mass. Ave.
- Installed 18 LED Street Lights and poles in Broadway Plaza.
- Moved junk furniture and equipment from Town Hall basement and the Senior Center.
- Removed the McGurl Memorial Stone and plaque from the bike path to McGurl Square.
- Built materials storage sheds at the Mt. Pleasant Cemetery.
- Excavated for, and placed electrical conduit at the Mt. Pleasant Cemetery.
- Removed rear wall of the Salt Shed and jacked back into place.

## **Water/Sewer Division**

The Water and Sewer Division continues to maintain 135 miles of water mains, 127 miles of sewer mains, 9 Sewer Lift Stations, and numerous hydrants, valves, and service connections/shut offs. Additionally, the department reads usage meters and prepares bi-annual bills on 12,483 accounts.

## Performance Measurements

- · Replaced 102 water services.
- · Repaired 37 water main breaks.
- Worked with the fire department to perform annual fire hydrant inspections.
- · Repaired or replaced 47 hydrants.
- · Replaced 36 water service lines.
- Replaced 85 sewer Service lines.

- · Responded to 56 sewer back-up calls.
- · Replaced 17 water-gate valves.
- · Responded to 74 sewer odor complaints.
- · Repaired four sewer system breaks.
- Replaced 427 meters.
- Started phase #2 of the three-year Townflushing program.
- Worked with highway department on annual basin cleaning project.
- Read approximately 24,966 meters and produced water and sewer bills.
- Operated and maintained the Town's nine lift stations.
- Performed 355 mark outs for National-Grid, Nstar, and Verizon excavations.
- Performed ninety-eight water shut offs for maintenance/repairs.
- Responded to 117 calls for street and property leaks.
- Performed 43 seasonal water shut-offs and turn-ons.
- Completed 290 Customer request work orders.
- Conducted testing on 766 water quality samples.
- Inspected and in some cases assisted with 152 contracted sewer service repairs.
- Successfully, provided emergency response crew 24/7.
- Created 28 new billing accounts.

## **Motor Equipment Repair Division**

The Motor Equipment Repair Division continues to maintain 105 over-the-road vehicles including three front end loaders, five backhoes, two tractors, nine heavy-duty dump trucks, nine small dump trucks, twenty-two pickup trucks, six utility body trucks, ten snow fighters, nine school buses, three street sweepers, two sewer flushing trucks, one rubbish packer, one compressor truck, one generator truck, two welding trucks, six sedans, three vans, one heavy-duty crane, one rack body, one small, multi-use tractor, one flat bed, and one wrecker-tow truck.

Community Safety continues to maintain forty-six road vehicles: twenty-six cruisers, two motorcycles, twelve Fire trucks, five cars, and one van.

The average age of Town construction vehicles is 9.4 years. Three vehicles are over 20 years old. The efficiency and productivity of work demands an annual replacement program for the oldest vehicles.

## Vehicles Purchased In 2009

- One Ton- Utility Body Truck, Ford-350 Highway (\$39,656).
- One Ton- Utility Body Truck, Ford-350 Water (\$39,656).

- OneTon Dump Truck, Chevy Silverado Cemetery (\$30,144).
- Stump Grinder on Trailer Natural Resources (\$39,995).
- Small Loader (skid steer), Bobcat 4100 Highway (\$21,227).

# **Properties Division**

The Properties Division provides the Town of Arlington with quality custodial services, maintenance, and improvements to its public buildings and facilities. The Division is responsible for the maintenance of forty individual public buildings listed in the table below.

#### List of Public Buildings (40) serviced by Building Maintenance **Central Services** Arlington High School Town Hall Athletic Field Snack Shack Town Hall Annex Ottoson Middle School **Public Works** Stratton Elementary School DPW (Grove Street Complex) Peirce Elementary School Assembly Hall Dallin Elementary School Director/Engineering/Inspection Brackett Elementary School **Snow Fighting Garage** Bishop Elementary School Maintenance Garage Hardy Elementary School Large Salt Shed Thompson Elementary School Small Salt Shed Non-Public Schools Dog Pound Gibbs (Private Use) Cemetery Chapel Crosby (Dearborn Academy) Cemetery Garage Parmenter (Private Use) Reservoir Pump house **Public Safety** Miscellaneous Community Safety Building Robbins House Central Fire Station (HQ) Robbins Cottage Park Circle Fire Station Jarvis House (Legal Dept.) Highland Fire Station Jefferson Cutter House Recreation Mount Gilboa Bath House 27 Maple Street (Senior Center) Recreation Ice Rink 23 Maple Street (House) Spy Pond Fieldhouse Libraries Robbins Library Fox Library

## Performance Measurements

- · Town Hall Replaced roof over meeting hall.
- DPW Repaired both salt sheds at the DPW vard on Grove Street.
- Reached Traveler's Insurance report compliance on six recommended Town owned building boilers.
- DPW Maintained/repaired as necessary municipal parking lot ticket dispensers.
- Bishop School Completed gutter heat tape installation.
- Fire Dept. Assisted in removal of street fire alarm boxes.
- DPW Assisted with the installation of 12 foot street lights & poles at Broadway Plaza.
- Robbins Library Replaced 300 amp main breaker and gutter heat tape project.

- Cemetery Replaced roof down-spouts and roof on the maintenance garage.
- Robbins House Assisted with major sewage pipe break.
- Thorndike Field Replaced 400 amp main electrical box breaker.
- All Schools Maintained and repaired fire security systems.
- Arlington High School (AHS) Completed classroom renovation project for the Day Care Center.
- AHS Completed office build project for Special Education Department.
- AHS (F Bldg) Replaced domestic gas hot water boiler.
- AHS (A Bldg) Installed new fire alarm panel.
- AHS Replaced floor tile in heavily used pedestrian areas.
- AHS Reconfigured and re-keyed all exterior doors.
- AHS Rebuilt cafeteria courtyard deck.
- · AHS Completed various roof repairs.
- AHS Installed rooftop lighting.
- Hardy School Painted the black rubber roof membrane white.
- Bracket School Reconfigured the roof drain gutter system.
- Stratton School Completed four classroom renovation projects for Special Education Department.
- · Dallin School Completed classroom built-

mout projects for Special Education Department.

#### **Natural Resources Division**

The Natural Resources Division consists of the Forestry and Parks sections and is responsible for the proper management, care, and maintenance of Arlington's more than 18,000 public trees.

### Forestry

The Tree Division removed 241 diseased, storm damaged, or root damaged trees, planted 132 new trees, and responded to 384 calls for pruning and trimming.

During the year the Division maintains the Minuteman Trail that runs from the Cambridge line to the Lexington line. The division is responsible for the execution of the holiday lights program. The Division cleans and maintains traffic islands around Town. On Massachusetts Avenue the Division takes care of the American flags and the banners. Staff also maintains the extensive grounds between the Town Hall and the Robbins Memorial Library.

## Park Maintenance

The division maintains twenty-eight parks, numerous playgrounds, athletic field infrastructure, open spaces, and public lands including: the Reservoir forested trails and beach facility, North Union Spray Pool, the Town Hall Gardens, the Donald R. Marquis/Minuteman Trail, Broadway Plaza, the Robbins House gardens and traffic islands.



#### Trees & Park Maintenance Performance Metrics

- Planted 132 trees (2" caliper average size)
- Removed 241 diseased, storm damaged or root damaged trees.
- Trimmed and/or pruned 384 trees.
- Maintained twenty-eight parks with riding mowers, push mowers and weed-whackers.
- Cut and rake twenty-six traffic islands.
- 75 100 trash barrels emptied daily.
- Sanded or chips added to playgrounds (twenty-five) as needed.
- Marked and dragged baseball diamonds (seventeen) for games.
- Wet markings of athletic fields (twenty) are done in the spring and fall. Must be repeated weekly.
- Playground equipment is maintained and repaired as needed.
- Special Town events such as Town Day including set-up, cleaned up/take-down, plus disposal of public trash.
- Removed graffiti in all Town areas (160 hours) and bike path (87 hours).
- Completed Infield improvements at Buck Field, and both Summer Street fields.
- Performed winter snow/ice control on Town sidewalks and parking lots.
- Commenced clearing of bus-stops and sidewalk ramps in Commercial Centers and around schools directly after each snow storm.

## **Cemeteries Division**

The Cemetery Division maintains the Mt. Pleasant Cemetery and the Old Burying Grounds. Starting in 2008, lawn mowing, raking and tree trimming are done by contracted services. Maintenance of gravestones, tombs, walls, fences, roadways, trees, and the Chapel continues to be provided by the remaining five staff members.

Mount Pleasant Cemetery is expected to run out of spaces for new gravesites within the next five or ten years. Planning for future interments is a major priority. The Cemetery Expansion Committee was formed by Town Meeting in 2006 and has been actively pursuing expansion land, including a memorial park for the placing of cremains in Cooke's Hollow.

# Performance Measurements

- Provided 270 internments (190 full burials and 80 cremain burials).
- · Conducted one dis-interment.
- Performed cemetery fee services, raising \$431,450 in gross revenues.
- Sold 61 new grave sites.
- Completed replacement of \$60,000 of nonornamental fences.

Mt. Pleasant Cemetery Revenues in 2009	Amount	Revenues Invoiced
New Grave Site Sales	52	\$107,500
New Urn Grave Sales	9	\$3,700
Perpetual Care Sales	56	\$29,000
Grave Site Buy-backs	1	\$(2,000)
Earth Burials	190	\$190,000
Cremain Burials	60	\$18,000
Non-Resident Burials	89	\$44,500
Overtime, Holiday Surcharges	29	\$28,500
Mock Burial	1	\$400
Foundation Charge	62	\$9,300
Disinterments	1	\$2,000
Chapel Use, Misc.	5	\$550
Total Gross Revenues		\$431,450

## Acknowledgments

The following Public Works Employees retired in 2009: Parks Craftsman Thomas Cooney; Heavy Equipment Operator James Denn; Working Foreman-Mason Stephen Facenda; and Highway Equipment Operator Robert Noviello. We wish them many happy years of well-earned retirement.

Highway Heavy Equipment Operator David Crusco, was promoted to Working Foreman-Highway in 2009.

In conclusion we would like to extend a heartfelt thanks to our dedicated Public Works staff. They keep our waters flowing, sewers running, tash collected, parks attractive, and our raods plowed and in good repair. Their efforts are an important part of the high quality of life that we enjoy in our community.

