

City of
Fitchburg



Department of
Public Works

**301 Broad Street
Fitchburg, MA 01420
Phone: 978-829-1900**

DPW Weekly Update April 20 - April 26, 2020

Dear Mayor, Councilors, and Colleagues;

On April 14th, DPW closed out the winter season by releasing the final Snow & Ice budget request. Fiscal Year 2020 winter operations totaled \$ 837,500 – a 15% decrease compared to the 10-year average winter operations cost of \$ 983,826. These savings were realized even though we faced increasing costs due to higher rates paid to contractors and as we transitioned to using 100% salt on half of the city streets. The use of salt will also decrease the associated time and costs of street-sweeping, cleaning out catch basins, and cleaning the drainage/sewer system. We started out the season with an empty new salt shed but closed out the season with about 720 tons (\$40,000) of salt in storage ready for next year.

	Budget	Actual	Remaining	
DPW Labor OT	\$ 170,000.00	\$ 115,500.00	\$ 54,500.00	Labor budget carried forward to FY21
Expenses				
Equipment Rental	\$ 210,000.00	\$ 301,000.00	\$ (91,000.00)	
Plows & Blades	\$ 170,000.00	\$ 161,000.00	\$ 9,000.00	
Salt	\$ 250,000.00	\$ 300,000.00	\$ (50,000.00)	
Total Expenses	\$ 630,000.00	\$ 762,000.00	\$ (132,000.00)	Final Budget Request
Remaining Salt in Shed		\$ (40,000.00)		
Total Snow Operations		\$ 837,500.00	85% of 10-year average of \$983,826	

While the winter was mild in temperature, we still received 96% of the typical amount of snow fall. Additionally, the warmer weather meant more ice events with rain/ice falling during periods when the air/pavement temperatures were falling below 30°F. Icing events require DPW crews to treat the roadways even though there is no snow to plow. The storm totals for fiscal year 2020 winter season are:

- Snow events: 17
- Total Snow: 69.1 inches (96% of average 72-inches)
- Ice events: 8
- Total Icing Precipitation: 4.25 inches

Sincerely,

Nicolas H. Bosonetto, PE
Commissioner of Public Works/City Engineer

STREETS DIVISION

Gary Withington - Superintendent

DPW continued to respond to service requests in a timely manner through the [SeeClickFix](#) program. In the past two weeks DPW received 54 new requests and closed 31 requests. The total outstanding requests backlog is now 237, an increase of 23 from the previous reporting period. We will continue to work on the backlog request in preparation for the spring season.

<u>Reporting Period</u> 4/13/20 - 4/26/20		<u>Previous Period</u>	<u>Change</u>
Previous Request Backlog	214		
New Requests	54	52	2
Completed Requests	31	31	0
Total Request Backlog	237	214	+23
Potholes	92	76	16
Storm Drains	65	62	3
Tree & Brush Pruning	8	6	2
Traffic, Signals, Signs	5	5	0
Berm Repairs	10	9	1
All other categories	57	56	1
New Requests	54	52	2
Acknowledged	1	2	-1
Completed & Closed	4	4	0
Open	50	48	2

The weather last week continued to warm up with snow fall on Saturday and Sunday.

	Saturday 4/18	Sunday 4/19	Monday 4/20	Tuesday 4/21	Wednesday 4/22	Thursday 4/23	Friday 4/24
Rain (in)	0.4	1.0	0.0	0.0	0.49	0.0	0.1
Snow (in)	2.5	1.5	0.0	0.0	0.0	0.0	0.0
Hi/Lo Temp (F)	30/37	30/57	36/48	34/48	28/39	30/50	37/45

Sources: <https://www.cocorahs.org/ViewData/ListDailyPrecipReports.aspx> (STA MA-WR-22)
<https://www.timeanddate.com/weather/@4936825/historic>

Street Sweeping

Ward 4	COMPLETED
Ward 5	COMPLETED
Ward 6	April 22 - May 8
Ward 1	May 11 - May 29
Ward 2	June 1 - June 12
Ward 3	June 14 - June 29

Traffic

Closed streets around Taft Street fire scene.
Replaced no parking signs on Airport Road.
Continued to install new no parking signs at Longsjo School.

Potholes

Pothole patching efforts continued during the week using cold-patch at various locations, including the following:

- Bemis Road,
- Benson Street,
- Boulder Drive,
- Canton Street,
- Colony Road,
- Falulah Street,
- Main Street,
- Richardson Road,
- Westminster Hill Road,

PARKS DIVISION AND RECREATION DEPARTMENT

Nate LaRose – Recreation Director

Crews filled and graded the Goodrich Park sports field.

Park Crews continued cleaning up trash from parks and Main Street.

All City playgrounds, dog parks, and public bathrooms in parks are closed to the public until the COVID-19 state of emergency is lifted.

Per order of the Health Director, basketball courts are closed and rims have been boarded over.

Parks, fields, courts, and tracks continue to be open but the public is advised to avoid large gatherings. Please exercise social distancing and avoid touching common surfaces during your visit to the parks. The City’s many outdoor recreation opportunities are specially important during this time as they provide an opportunity to relax, exercise, and connect with nature.

All recreation programs and events continue to be cancelled until further notice. We recognize these closures and cancellations can be disappointing and a hardship, however these decisions are being made in the best interest of the community. The Recreation Department will continue to monitor the situation with guidance from the Mayor’s Office and the Board of Health.

CEMETERIES DIVISION

Jaquelyn Poirier - Superintendent

Cemetery crews continued to clean up the grounds and surrounding areas.

- Cleaned up stump grindings and loamed areas;
- Prepared mulch beds;
- Continued thatching Forest Hill;
- Picked up downed limbs.

In addition to routine maintenance and administration tasks, the following were completed:

Full Interments	2
Inurnments.....	0
Up righted monuments.....	0
Uncovered/cleaned flat monuments	0
Foundation marking for monuments.....	2
Catch basin repair	0
Trimmed Trees	0
Trimmed shrubs.....	0
Meeting with Families.....	3
Payments - invoiced/processed.....	0
Family Genealogy	3

ENGINEERING DIVISION

Nicholas Erickson - Civil Engineer

Administrative

- Held conference call with the Core Team for the City’s Municipal Vulnerability Preparedness (MVP) Planning Grant from the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA). The purpose for the call was to discuss the priority action items identified during both the Community Resilience Building Workshop hosted on March 10, 2020 and both public listening sessions, which were held on February 25, 2020 and April 23, 2020. This list of action items will be incorporated into the final summary report and will set the City up for future grant funding under this program to begin addressing them.
- Assisted Mark Piermarini with plans for 44 Berry Street Extension.
- Assisted Whitman and Bingham with plans for 164 & 174 Highland Ave
- Assisted Wilcox and Barton Environmental with plans for 280 Main St
- Assisted HKS with plans for lease on Cobbler Drive/Blueberry Lane
- Assisted Kent Oldfield from NEEG with layout plans for Belmont Street
- Reviewed Proposed Utility site plan for 691 Mt Elam Rd new sewer connection due to failed septic
- Reviewed Proposed Utility site plan for 340 Mt Vernon St new sewer connection due to failed septic
- Drafted and sent a letter to the property owners of 45 Charlton Street notifying them that the drain pipe discharging from the property to the roadway is not permitted per Section 157-23 of the City Code and must be removed. Sent a copy of the letter to the City Solicitor.

Construction

- Met with Colliers International & Bond on site to discuss curbing and drainage out in front of the new City Hall.

- Performed construction oversight for pavement restoration on Water Street following work to separate two combination manholes. These types of structures allow transference of flows between the drain and sanitary sewer systems, and are being eliminated by the Wastewater Division as time and resources allow.
- Performed construction oversight for road reconstruction on Berkley, Lenox, Garfield, and Richmond Streets. Over the past several weeks the City's contractor has performed various drain and sewer upgrades ahead of the road reconstruction work. This past week the contractor pulverized the existing pavement, applied calcium to firm up the subgrade, and graded and compacted the roadway. Paving will begin next week, weather permitting.



Figure 1 - Pulverization of Garfield St



Figure 2 - Calcium application

Permits & Inspections

- Performed inspections for Water Street trench restoration: temporary patches (Tuesday) and permanent curb to curb restoration (Thursday).
- Inspected 2 calcium applications on Berkley, Lenox, Garfield and Richmond Streets, which are being reconstructed. Inspected re-grading work prior to second application of calcium.
- Performed site visit to inspect the Valley Street Extension Project. No progress had been made.

Engineering Services				
		<u>Type</u>	<u>Number</u>	<u>Fees</u>
PERMITS		Street Occupation Permits	0	\$0
		Trench Permits	0	\$0
		Excavation/Street Opening Permits	0	\$0
		Driveway/Curb Cut Permits	0	n/a
		Sign Permits	0	n/a
		Sewer Permits	0	\$0
INSPECTIONS		Driveway Inspections	0	n/a
		Trench Inspections	0	n/a
		Site Inspections	8	n/a
		Dig-Safe requests	2	n/a
		Sewer/Drain Inspections	0	n/a
		Street Light Inspection	0	n/a
Totals			10	\$0

WATER SUPPLY DIVISION

John Deline - Deputy Commissioner of Water Supply

The Water Supply Division produced 28.8 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled.

- The Reservoir Caretaker removed fallen trees on the access road to the Meetinghouse Dike and at Regional Plant.
- The Reservoir Caretaker started flushing stumps/removing logs from the Meetinghouse transmission line. Also began cutting brush on the Mare Meadow transmission line between the pump station building and South Street.

Water Treatment

Reservoir Levels as of 4/23/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/ Ashby	Full	- 0.74 feet	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford
Water Filtration Plant Flows/Production from 4/17/20 through 4/23/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	6,171,000	25,904,000	32,075,000
Backwash to waste (Gal)	1,010,000	2,224,000	3,234,000
Finish Water - Treated & Distributed (Gal)	5,161,000	23,680,000	28,841,000
Capacity	(6 MGD) 15%	(12 MGD) 31%	(18 MGD) 25%
Efficiency	84%	91%	90%

- Due to the COVID-19 crisis, only required/regular maintenance is being completed in the plants as well as any emergency repairs. Treatment personnel have been permanently (for the duration of the crisis) sequestered to each treatment plant and no intermingling or transferring of treatment operators between plants will occur. Outside contractors will only be utilized for emergency repairs or for maintenance that is necessary to keep the treatment plants in good operating condition.
- The spring removal of sludge from the backwash residuals settling lagoons began this week. One load per day is being pumped from the lagoons (at total of 15-20 loads needs to be removed from each of the lagoons).
- Began experiencing issues with the door at the loading dock at the Falulah plant. During periods of high winds the door alarm is being set off. The door will be temporarily secured until it can be repaired permanently (the locking points need to be rebuilt to eliminate the "looseness").
- The company that completes the yearly inspections/maintenance on fire extinguishers in Water Division facilities is unavailable until after May 1st. they will get in contact with the Water Division at that time to schedule the annual inspections.

Water Distribution

- During the course of the week, FWD crews checked/maintained all water trenches repaired with cold patch (final restoration will be completed in the spring when the weather improves and local asphalt plants reopen).
- FWD personnel continued updating the blow off list (locating, cleaning boxes, take new ties, remove from list if not there anymore, etc.).
- Responded and investigated a no water call at 325 John Fitch Hwy (Taco Bell) - determined that someone shut a ball valve off in the kitchen area.

- Investigated discolored water at 109 Hurd Street, a water sample was collected and tested, personnel checked gates on Hurd Street to make sure they were all in the open position and one was found by #109 believed to be broken in the closed position creating a dead end. This valve will be replaced next week.
- Reviewed View Permits for 101 and 119 McIntyre Road - city water does not extend to this area.
- Contractor (Tandem) repaired a water service leak on the owner's side at 206 Walton Street.
- Completed weekly inspections and maintenance/cleaning of Water Division vehicles and equipment.

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Maintenance Completed	Painted	Flushed
1,632	2	0	2	144	15	0

- FWD personnel completed lubing/greasing hydrants on the on the Low System and have crews have begun working on hydrants on the High System.
- Investigated a hydrant at the end of Redman Place which has a cement block wall leaning on it that was discovered during hydrant maintenance. Personnel were able to rotate the hydrant so all hose nozzles can be used. The DPW Commissioner notified the Building Department about the wall. The Fire Department was also notified.



Figure 3 - Hydrant blockage

- FWD personnel repaired/rebuilt a hydrant at 139 Lunenburg Street and return to service. Notified FFD by phone.
- FWD personnel repaired a hydrant at 203 Lincoln Street, new housing gasket was installed.

Administration and Meters/Billing

- Total of 14 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 17 invoices totaling \$14,974.92 were processed for FY20 warrant WG20044.
- 1 purchase requisition and 1 change order were entered into Munis for approval by Purchasing.
- Completed payroll for w/e 5/1/20. Total payroll \$52,706.13, including \$3,349.33 in overtime.
- The Fitchburg Water Division participated in the conference call that is being held weekly (this is the sixth week) with MA DEP, Massachusetts Water Works Association, and several hundred public water suppliers across the state. The Commissioner of MA DEP, Martin Suuberg, presented a status update in regard to COVID-19 and its effects/impacts on public drinking water suppliers. Mr. Suuberg also provided answers to questions submitted by public water suppliers over the past week.
- A conference call/virtual meeting was held for the WaterSmart software implementation that is part of the city-wide water meter upgrade project.
- Completed the March abatement report and sent to the Auditor.
- Sent procurement request to Mary Delaney for the soon to be expired contract for printing/ mailing of water/sewer bills.
- Completed the April commitment.
- Participated in the Hazard Mitigation and Municipal Vulnerability Preparedness virtual meeting held by Weston & Sampson.
- Continued working on items related to the Jewell Hill land protection project.

In addition to routine maintenance and administrative tasks, the following services were completed:

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	1
DigSafe Mark-outs	8
Inspections of Work on Water System	1
Record Plan Updates	6
Special Permit Applications Reviewed	0
New Water Service Applications	0
View Permits reviewed	2
Curb Stops Turned off/on	3
Located/cleaned gate/curb boxes	8
Final Readings/Real Estate Closings	6
New Meter Installations	3
Backflow Preventers Tested	0
Cross Connection Surveys	0
Residential Appointments Made	0
Totals	38

WASTE WATER DIVISION

Jeff Murawski – Deputy Commissioner of Wastewater

The WWTF processed 85.9 million gallons of sewage during the second week of April. In total, 28.3 tons of organics and 84.3 tons of solids were removed and prevented from entering the Nashua River.

<u>Week of 4/12/2020 – 4/18/2020</u>		
Sewage Flow	85.87	Million Gallons
Rainfall	2.22	Inches
Secondary Bypass	4.85	Million Gallons
BOD _{in} (lbs)	60,562	Pounds
BOD _{out} (lbs)	3,992	Pounds
BOD Removal (%)	92.64%	
TSS _{in} (lbs)	174,463	Pounds
TSS _{out} (lbs)	5,850	Pounds
TSS Removal (%)	94.05%	

- Deputy Commissioner managing Division remotely (as of Mar. 17th).
- Daily (or more frequent, as needed) conducting video calls with Wastewater Management Team.
- Held multiple communications throughout the week, with Fitchburg Health Department and Human Resources, concerning COVID-19 status of affected Wastewater Division employees.
- Participated in coordinating conference call with Fitchburg Airport, for scheduling of aerial photo/video capture of the Easterly and Westerly Wastewater Treatment Facilities. We are trying to beat the reopening of the Airport, after runways construction work is completed. Drone flights have been scheduled (weather conditions pending) for Tuesday – April 28th.
- On Wednesday – 4/22nd, held a “GoToMeeting” video interview call with a qualified candidate for the “Sewer System General Foreman” position.
- Wed. – Apr. 15th: collaborating with Purchasing & outside counsel (West Group Law, PLLC), the West Plant’s “Request For Expressions of Interest” had (on Friday – 4/24th) Addendum No. 1 issued, addressing informational materials to be made available to prospective respondents, and schedule.
- Wed. – Apr. 22nd: participated in group “ZOOM” call held by MassDEP Commissioner Martin Suuberg, held for Massachusetts Wastewater Professionals, regarding COVID-19 pandemic.
- Friday, Apr. 24th: sent EPA and MassDEP regulators a Fitchburg Wastewater “COVID-19 Status Update”.

Sewer System

- Completed combination manhole checks throughout City due to a large rain event the previous week (1.6 inches). A total of nine (9) CMHs flow transfers were discovered, five (5) of which transferred from the sewer invert to the drain invert.
- Reset a rocking cover at #67 Townsend Street.
- Went to sewer service calls at #96 Bel Air Drive and #100 Elm Street. Both service calls were found to be private property issues.
- Replaced a cracked cover at #64 Hope Street.
- One employee started his on-line hoisting renewal, and he still has a few hours of online work in order to complete the renewal.
- Checked our sewer “problem areas” throughout the City. No major issues were discovered; a few bricks were removed from an invert on Townsend Street.
- Finished paving top course on a pavement patch on St. Bernard’s Street where a manhole cover was replaced.
- Placed emulsion and sand seal, on 3 patches at various locations throughout the City, to seal the pavement joints.
- Conducted some preventative maintenance on the Sewer Equipment fleet/inventory: changed the oil and air filters (on vehicles) on the plate compactor, F-700 dump truck, Ford Taurus, and generator; cement mixer drain plug was found to be defective, and will need to be replaced.
- Moved two non-functioning vehicles from parking areas around DPW and moved to metal scrap pile.
- Inspected two combination manhole separations on Water Street. This work was conducted on the Monday (Patriots’ Day holiday), using 2 crews, to minimize traffic and business disruptions. All combination manholes on Water Street are now separated.
- Sent “recommendation to award” to Purchasing Department for the “On-Call Construction Contract”.
- Continued with specification front end for Boulder Drive Sewer Project. Division 00 (contract terms) and bid form are completed. Division 01 will be completed this week.

<p><u>DPW ADMINISTRATION</u></p>

<p>Courtney Lamoureux – Business Manager</p>
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- Financial:
 - Reviewed all DPW Department accounts for accuracy and monitored budgets.
 - Received draft budgets from the Mayor’s office and reviewed proposed changes. Submitted comments and proposed revised budgets to the Mayor’s office and finance team.
- Administrative:
 - Submitted DPW Department absences due to COVID-19 reasons to the human resources department.
 - All DPW divisions processed the bi-weekly payrolls.

Invoicing, Warrants, and Payrolls						
	Invoices		Deposits		Billings	Payroll
<u>Division</u>	<u>Number</u>	<u>Total \$</u>	<u>Number</u>	<u>Total \$</u>		
Streets/Admin/Engineering	52	\$ 10,390	*Note 1			\$ 64,113
Cemeteries	18	\$ 7,232				\$ 10,881
Parks						\$ 6,563
Recreation						\$ 3,354
Water Supply	17	\$ 14,975				\$ 52,706
Waste Water	28	\$ 101,028	*Note 2	\$ 31,410		\$ 81,252
			*Note 3			
Total	115	\$ 133,626		\$ 31,410	\$ -	\$218,869
*1 - Chapter 90 Reimbursement - Cracksealing						
*2 - Septage at East Plant (Gallons)		369,529				
*3 - Industrial Billing Payments						