



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

DPW Weekly Update April 6 - April 12, 2020

Dear Mayor, Councilors, and Colleagues;

This past Friday marked the first full month under the COVID-19 state of emergency. As of today three out of 100 DPW employees have tested positive for COVID-19, but thankfully none have required hospitalization. DPW continues to provide essential services to the City while taking care to protect our staff from infection at work. DPW is currently operating at Level 3 of the Continuity of Operations Plan (COOP):

- Staffing levels across DPW's six divisions were at 61% during last week:
 - 7% Vacancies, 5% Time Off, 12% Off-Shift, and 15% COVID-19 related.
- Deputy Commissioner of Wastewater worked with Human Resources Director, City Auditor and the Union to develop and implement a staffing plan that allows plant operators to continuously work at the plant on a one-week on/two-weeks off schedule. This allows for full sequestration of staff at the plant.
- DPW Department and Division Heads are required to continue to report to work.
- DPW Administrative and Engineering Divisions staff continue working on alternating shifts to avoid being in the office at the same time. Staff working from home using City assigned laptops with VPN capabilities to access city network, software, and files.
- DPW Streets, Parks, and Sewer Divisions crews continued on a rotating shift schedule to minimize contact between staff.
 - Routine/elective maintenance activities are curtailed to focus on critical needs.
 - All crews are on-call during their off-shift.
 - All crews limited to one person per vehicle. Disinfectant wipes provided so common touch surfaces in vehicles can be cleaned.
- Health Director Stephen Curry and Nurse Molly Reid continued to supervise testing, interviewing, and dictating procedures for DPW personnel that are symptomatic or have had contacts with suspected/confirmed COVID-19 cases.

DPW staff will continue to monitor the situation and adjust procedures as necessary.

Sincerely,

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

STREETS DIVISION

DPW continued to respond to service requests in a timely manner through the [SeeClickFix](#) program. In the past two weeks DPW received 45 new requests and closed 20 requests. The total outstanding requests backlog is now 193, an increase of 25 from the previous reporting period. We will continue to work on the backlog request in preparation for the spring season.

<u>Reporting Period</u> <u>3/30/20 - 4/12/20</u>		<u>Previous</u> <u>Period</u>	<u>Change</u>
Previous Request Backlog		168	
New Requests	45	36	9
Completed Requests	20	52	-32
Total Request Backlog	193	168	+25
Potholes	59	45	14
Storm Drains	59	55	4
Tree & Brush Pruning	7	5	2
Traffic, Signals, Signs	5	4	1
Berm Repairs	7	7	0
All other categories	56	52	4
New Requests		45	36
Acknowledged	1	0	1
Completed & Closed	0	1	-1
Open	45	35	10

The weather last week continued to warm up with heavy rains experienced on Thursday.

	Saturday 4/4	Sunday 4/5	Monday 4/6	Tuesday 4/7	Wednesday 4/8	Thursday 4/9	Friday 4/10
Rain (in)	0.0	0.0	0.0	0.1	0.0	0.69	0.1
Hi/Lo Temp (F)	37/50	41/55	41/57	39/59	41/52	37/46	34/45

Sources:

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

Street Sweeping

Currently sweeping sidewalks and streets in Ward.

Picked up trash on Main Street, Depot Street, Blossom Street, Wanoscoc Road, Parkhill Park, Canton Street and Fisher Road.

Potholes

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

- Arn How Farm Road,
- Burbank Street,
- Lunenburg Street,
- Main Street,
- Oak Hill Road,
- Pratt Road.
- Summer Street,
- Water Street,

Mechanic Shop

Mechanic Shop continued to repair street sweepers. Sweepers have many wearing pieces including the brooms, belts, and dirt shoes that require frequent replacement. Sweepers also have many moving parts that need frequent maintenance.

- Sweeper 1 – cleaned water lines, filter, replaced front brake line and repaired conveyor belt chain.
- Sweeper 2 – replaced pins, bushings and bearings for right gutter broom and replaced main broom.
- Sweeper 3 – replaced gutter brooms and main broom, replaced fuel filter and cleaned contact relays.
- Sidewalk Sweeper – replaced broom and flat tire. Replaced water pump and hoses.

PARKS DIVISION AND RECREATION DEPARTMENT

Park crews started leveling of Goodrich Park 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 were closed and rims 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. Many of our residents live in apartments and do not have yards, so our parks provide their only means to get out and enjoy some fresh air and exercise.

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

Cemetery crews continued to clean up the grounds and surrounding areas. In addition to routine maintenance and administration tasks, the following were completed:

Full Interments	1
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.....	2
Payments - invoiced/processed.....	6
Family Genealogy	2

ENGINEERING DIVISION

Administrative

- Reviewed a preliminary site plan for the development for two adjacent lots, one with frontage on Pearl Street and one with frontage on Clark Street, per request from a potential developer (Steve Seney). He is interested in a constructing two-family home on each lot. Prepared review memorandum and sent to the Commissioner for review.
- Prepared a construction cost estimate to identify the dollar value for sidewalk improvements and roadway milling and paving along First Street and Middle Street that will potentially be incorporated into the Twin Cities Rail Trail project by MassDOT.
- Posted notice to the City's website for the second public listening session for the City's Municipal Vulnerability Preparedness (MVP) Planning Grant. The purpose for the listening session is to solicit input from the public about the City's key strengths and vulnerabilities related to climate change. Feedback received will be incorporated into the final summary report which is submitted for review and approval to the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), who oversee the grant program.

Construction

- The City's paving contractor, PJ Albert, began road reconstruction on the Berkley Street, Garfield Street, Lenox Street, and Richmond Street neighborhood, which is located off of North Street. Over the next several weeks, these streets will be pulverized and repaved with 3.5 inches of new asphalt. This weeks' work consisted of the following:
 - Replacement of two sewer manholes that were in poor condition.
 - Installation of three new catch basins
 - Lowering/plating over of 11 water gate valve boxes and 14 manhole frames/covers



Figure 1 - Installation of CBs at Lenox St

- DPW Engineering met with MassDOT District 3 during the winter months to discuss Lunenburg Street. There are several combined sewer/stormwater manholes on the portion of the street from Garland Street to Boutelle Street that the city would like to separate per the consent decree. For this reason it was agreed that MassDOT would repave Lunenburg Street from the townline up to Garland Street. Milling of the roadway commenced last week with paving scheduled for this week weather permitting.



Figure 2 – Lunenburg Street milling in preparation for paving

- DPW Engineering continued to inspect work being performed by developer at the extension of Valley Street. Utility work is completed and paving is to commence this week.



Figure 3 - Valley Street Extension

Street Lights

- Continued updating SLV streetlight software with MAC addresses for the SIM cards used in our smart photocells. Anytime a photocell is replaced, the mac address must be updated in our streetlight software in order for devices to communicate properly.

Dig Safe

- Performed plan search and marked out Dig Safe for 166 Boulder Drive between Buildings 2 and 3.

Permits & Inspections

- Conducted daily site inspections for the installation of a new gas main on First Street by Utilil/Neuco.
- Conducted records review for 14-16 Pearl Street based on permit inquiry. The property owner has recently remodeled the building and is looking to install a 2-inch water service. Informed the project proponent that the street was repaved in 2017 and is currently under moratorium, which limits excavation to emergency work only until 2022. Offered to make an exception if the property owner was to agree to repave the wearing course of that section of roadway from Blossom Street to Day Street.
- Conducted an inspection of the groundwater monitoring wells at the Forest Hill Cemetery. These wells were installed to help determine groundwater elevations in an unused section

of the cemetery that could be used for expansion. DPW recently installed some subsurface drains in this area in an attempt to lower the groundwater elevations below grave depths. Took water level measurements in each of the wells and updated tracking spreadsheet. It appears the new drains are somewhat effective at lowering groundwater elevations.

- Performed a site inspection to investigate a complaint from a resident of a drainage pipe discharging to the roadway between 45 and 51 Charlton Street. This type of discharge is prohibited per § 157-23 of the City Code, "No person shall suffer or permit any water or other liquid substance to run or be discharged from any building or real estate owned by him or her or under his or her control into or across any street or sidewalk." A letter will be sent to the property owner asking him/her to remove this discharge.
- Conducted site visit to 60 Nestor Ave. to investigate complaints of trees/branches being dumped into a stream. Per § 157-23 of the City Code this is not allowed. Prepared a draft of a letter to the homeowner for review and signature by the Commissioner, which will be sent to the homeowner.
- Conducted inspection of a retaining wall at 39 Beech Street per request from the Building Department. The contractor, Lucas Wall, is rebuilding a retaining wall along the property owner's back yard and there was some question as to whether the wall was tall enough to trigger the need for a building permit. After digging in front of the wall to the bottom of footing, it appeared that the wall was just under that required for a permit. The contractor appeared to be using Beech Street Lane as a staging area, and advised him that he needed to file a street occupation permit.
- Conducted inspection of an emergency sewer repair at 10 Seneca St.

Engineering Services			
	Type	Number	Fees
PERMITS	Street Occupation Permits	1	\$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	13	n/a
	Dig-Safe requests	1	n/a
	Sewer/Drain Inspections	1	n/a
	Street Light Inspection	0	n/a
	Totals		\$0

WATER SUPPLY DIVISION

The Water Supply Division produced 28.5 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled.

Water Treatment

Reservoir Levels as of 4/9/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/ Ashby	Full	- 1.06 feet	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford

Water Filtration Plant Flows/Production from 4/3/20 through 4/9/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	5,985,000	25,708,000	31,693,000
Backwash to waste (Gal)	980,000	2,253,000	3,233,000
Finish Water - Treated & Distributed (Gal)	5,005,000	23,455,000	28,460,000
Capacity	(6 MGD) 14%	(12 MGD) 31%	(18 MGD) 25%
Efficiency	84%	91%	90%

- Due to the COVID-19 state of emergency, only required/regular maintenance is being completed in the plants as well as any emergency repairs. Treatment personnel have been permanently secluded to each treatment plant and no intermingling or transferring of treatment operators between plants will occur for the duration of the emergency. Outside contractors will only be utilized for emergency repairs or for maintenance that is necessary to keep the treatment plants in good operating condition.
- Laviolette Controls installed a new intrusion alarm at the Oakhill Pump Station. The existing alarm system had failed and could not be repaired (parts were not available).
- Repaired plow damage (loamed and seeded) at the Regional Plant. Continued working on spring cleanups.

Water Distribution

- The Reservoir Caretaker took the Ventrac slope mower out of "winter storage" and greased it, checked tire pressure, topped off all fluids, and completed a general inspection to prepare for the first mowing of the season.
- The Reservoir Caretaker cut brush on the upstream/water side of Lovell Dam. Given the slope and rough terrain, this was not an easy project but was needed to keep the brush in check (and hopefully promote the growth of grasses).
- Cleaned out a drainage channel at the Scott Tank.



Figure 4 - Reservoir before and after mowing

- 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 completed lubing/greasing hydrants on the Oak Hill and Scott Systems. Personnel have now started on the Low System.
- FWD personnel continued updating the blow off list (locating, cleaning boxes, take new ties, remove from list if not there anymore, etc.).
- Milton CAT technician removed/replaced the fuel injector pump on the CAT backhoe that had started leaking.
- Investigated a report of water running in front of 45 Charlton Street. It was found not to be related to the public drinking water system but rather a drainage pipe at the edge of the road between house numbers 45 and 51.
- Investigated several discolored water complaints in the Lunenburg Street, East Street and Cedar Street area, all streets are in close proximity to one another. The cause is still unknown but is believed to be due to unauthorized use of a fire hydrant.
- Investigated water in the roadway in front of 24 Klondike Avenue. Water is leaking from the owner's side of the water service line. It appears Utilit installed an anchor for a new utility pole and hit the water service. Utilit was contacted and will repair the service on Monday.
- The new Panasonic ToughPads were received back from the IT department. Water system plans were loaded on them and are now being used in the field by distribution personnel.
- FWD personnel hauled spoils pile to the pit.
- Completed weekly inspections and maintenance/cleaning of Water Division vehicles and equipment.

- FWD personnel cleaned/disinfected steering wheels, shifters door handles and knobs in all Water Division vehicles.
- Completed housekeeping/disinfection of common surfaces at 1200 Rindge Road throughout the course of the week.
- Completed monthly inspections of fire extinguishers at Water Division buildings/facilities.

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Hydrant Maintenance	Flushed	Winterized
1,632	2	1	0	127	1	0

- FWD personnel excavated and installed a new hydrant at 240 Fisher Road. This hydrant was damaged by unauthorized use by a contractor working at the site. FFD notified that hydrant was back in service. A claim was submitted (as well as a \$1,000 fine for unauthorized hydrant use in accordance with City Code) to the contractor's insurance company for all materials/labor associated with the replacement of the hydrant.
- Investigated several discolored water complaints in the Lunenburg Street, East Street and Cedar Street area, all streets are in close proximity to one another. The cause is still unknown but is believed to be due to unauthorized use of a fire hydrant.

Administration and Meters/Billing

- Total of 5 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 27 invoices totaling \$134,897.56 were processed for FY20 warrant WG20042.
- 4 purchase requisitions and 2 change order entered into Munis for approval by Purchasing.
- Completed payroll for w/e 4/17/20. Total payroll was \$52,767.18, including \$2,814.00 in overtime.
- FWD personnel completed “missed” reads list for monthly reading of water meters city-wide.
- Obtained drive by final readings for real estate closings.
- Attended the monthly Water/Wastewater Commission meeting - it was held virtually with the assistance of FATV (thank you FATV!). The minutes for the March meeting were approved and posted on the City website.
- The Fitchburg Water Division participated in the conference call that is being held weekly (this is the fourth 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.
- Obtained quotes for new security camera system for the Falulah facility. Also working on quote for new security camera system for the Regional Water Treatment Plant.
- Finalizing contract signing/approvals for the hydro-generator at the Narrows Road plant. A pre-construction meeting will be held virtually either next week or the week after.

- Held a progress meeting conference call for the city-wide meter upgrade project. Outstanding issues (not many and mostly minor) to date were identified that will be addressed once the program restarts.
- Held a conference call with Weston & Sampson to review status of current projects and identify steps required to keep them moving forward in any manner possible given the COVID-19 crisis.
- Worked on gaining final approvals for the conservation restrictions for the Jewell Hill preservation project.
- Obtained quotes for a survey (by MA Registered Land Surveyors) of a +/-60 acre property in Hubbardston within the watershed to Mare Meadow that the owner is interested in donating to the City through the Massachusetts conservation land tax credit program (<https://www.mass.gov/service-details/commonwealth-conservation-land-tax-credit-cltc>). This parcel is landlocked (making it undevelopable) but does abut Fitchburg watershed land.

In addition to routine maintenance and administrative tasks, the following services were completed by Water Division staff:

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	0
DigSafe Mark-outs	12
Inspections of Work on Water System	2
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	13
Final Readings/Real Estate Closings	6
New Meter Installations	1
Backflow Preventers Tested	0
Cross Connection Surveys	0
Residential Appointments Made	0
Totals	45

WASTE WATER DIVISION

The WWTF processed 96.62 million gallons of sewage during the first week of April. In total, 68.38 tons of organics and 118.36 tons of solids were removed and prevented from entering the Nashua River. Due to heavy rainfall during the first week of April, the treatment plant saw a 70% increase in flows but due to the completion of the SSU project only a minimal 150,000 gallons bypassed the secondary system.

<u>Week of 3/29/2020 – 4/4/2020</u>		
Sewage Flow	96.62	Million Gallons
Rainfall	2.17	Inches
Secondary Bypass	0.15	Million Gallons
BOD _{in} (lbs)	140,558	Pounds
BOD _{out} (lbs)	3,796	Pounds
BOD Removal (%)	97.16%	
TSS _{in} (lbs)	243,183	Pounds
TSS _{out} (lbs)	6,460	Pounds
TSS Removal (%)	95.92%	

- Wed. – Apr. 8th: participated in group “ZOOM” call held by MassDEP Commissioner Martin Suuberg, held for Massachusetts Wastewater Professionals, regarding COVID-19 pandemic.
 - DEP followed up on previous inquiry regarding “financial remedies”, and pointed to MEMA, and documentation associated with MEMA costs reimbursement for incurred costs.
 - On a similar note, DEP also communicated that they would seek to find if there are plans for “financial remedies” associated with rates revenues losses to wastewater utilities associated with Coronavirus.
 - DEP is still looking into health data, regarding wastewater transmission of Coronavirus to Wastewater Plant workers.
 - Concerning staffing guidance (when wastewater utilities become impacted by COVID-19), DEP stated that they would not issue “guidance”, and defer to local Boards of Health in terms of ruling what staff members can and can’t work. DEP stated that if wastewater utilities anticipate or are experiencing COVID-19 staffing issues that may affect ability to meet NPDES Permit, to document the issue, and to communicate with the MassDEP Regional Office.
 - DEP reiterated that they are trying to be as “flexible” as possible (with respect to permit violations), and that they are trying to be a “reasonable as possible” with permitted wastewater authorities.
 - Concerning state legislation regarding “waiving interest” on late payments of sewer use billing, a wording discrepancy between “may waive...” and “must waive...” was acknowledged, and DEP would seek clarification on the language.
 - 4th MassDEP “ZOOM” meeting call with wastewater professionals has been scheduled for Wednesday, April 15th, 2020.

- Participated in ZOOM Water/Wastewater Commission meeting on Wednesday - April 8th.

Sewer System

- Conducted CSO checks twice due to rain events: 3 CSO activations were discovered to have occurred at CSO-45, 32, and 39.
- Replace desiccant in all sewer flow meters, and one battery in meter no.: M21.
- Brought tire for cement mixer down to Viola's tire for replacement.
- Prepped around the manhole at #20 Olive Drive for pavement. Cleaned up remainder of lawn.
- Visited Lowe's to pick up a new office AC, and Pipe Plus to restock supplies.
- Put cap on desiccant at meter at Clarendon St. at St. Andrew St.
- Concrete bolted in the cover at CSO Regulator-007 at Riverfront Park, and at the manhole at First Street at Water Street.
- Received complaint of rocking cover in front of #230 Summer Street: inspected manhole, and added butyl to stop rocking.
- Checked pump stations and picked up a new lock box for key at Sawyer Passway pump station.
- Cleaned up and sanitized vehicles, swept and removed debris and unused tools in front of shop.
- Took Chevy 1500 for annual inspection.
- Brought 6 sewer covers down to Route 2A paving project for replacement.
- PJ Albert replaced 2 sewer manholes on Berkley Street in preparation for road paving.

DPW ADMINISTRATION

- Winter operations:
 - Reconciled snow & ice accounts to make sure all costs are posted for the winter season. All costs should be posted into MUNIS on 4/24/20 which will allow us to close snow & ice accounts for the year.
- Financial:
 - Reviewed all DPW Department accounts for accuracy and monitored budgets.
 - Started a financial impact review of water and sewer billings to see what the potential impacts will be in waiving interest on late payments because of the COVID-19 outbreak for payments due for the period March - June 2020. We are not only looking at the impact of the lost interest but also the lost revenue in the periods of March thru June to see what effect it will have on the enterprise utilities.
 - Completed calculating the City portion of costs to date for the Rollstone Hill Trail project. The grant has a mandatory City match that we need to make sure we are going to meet.
- Administrative:
 - Submitted DPW Department absences due to COVID-19 reasons to the human resources department.
 - Continued reviewing applications for the DPW Head Clerk position.
 - All DPW divisions completed their 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	27	\$ 34,137	*Note 1	\$ 1,000		\$ 76,849
Cemeteries	8	\$ 1,103				\$ 10,775
Parks	5	\$ 794				\$ 7,351
Recreation						\$ 3,354
Water Supply	27	\$ 134,898				\$ 52,767
Waste Water	30	\$ 134,791	*Note 2	\$ 32,720		\$ 74,785
			*Note 3			
Total	97	\$ 305,722		\$ 33,720	\$ -	\$225,881
*1 - Engineering Permits & Performance Bonds						
*2 - Septage at East Plant (Gallons)						
*3 - Industrial Billing Payments						