

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

DPW Weekly Update March 9 - March 15, 2020

Dear Mayor, Councilors, and Colleagues;

Last week saw a quick succession of events related to the COVID-19 virus. On Tuesday the Governor declared a state of emergency and by the weekend an emergency order was issued closing schools, restaurants, and gatherings. In close coordination with the Mayor's office, DPW continued to take precautions to protect our staff and the public from the spread of the COVID-19 virus through the following measures:

- The Fitchburg Recreation Department out of an abundance of caution has cancelled all events, programs, field use requests and Coggshall Park reservations through April 6, 2020.
 - If you have reserved the Coggshall Park Stonehouse or Gazebo a Recreation Department staff member will be in touch in the coming week to discuss rescheduling or reimbursements.
- DPW facilities are now closed to the public. These include the DPW headquarters, water treatment plants, and wastewater treatment plant. All tours and training seminars are cancelled. If you need to pay your bill, please visit the Pay-Online feature on the City's website or drop off payments at drop-off box in front of City Hall.
- If you need to acquire a trench, sewer connections, street occupation or excavation permits please call 978-829-1900.
- DPW Water Division will be suspending the meter replacement project until further notice.
- Final meter readings for property transfers will be completed remotely, but no meter change outs will be performed until further notice.
- DPW Facilities continue to be disinfected and common surfaces wiped down regularly.
- The inmates from the Shirley MCI are no longer assisting DPW crews in order to selfquarantine and protect the larger prison population.
- Please remember that frequent hand washing is the best way to prevent the spread of COVID-19.
- Please refrain from flushing disinfectant wipes down the toilet because they will clog your system.

Sincerely,

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

CONSTITUENT SERVICES

DPW continued to respond to service requests in a timely manner through the <u>SeeClickFix</u> program. In the past two weeks DPW received 31 new requests and closed 42 requests. The total outstanding requests backlog is now 154, a decrease of 11 from the previous reporting period. We will continue to work on the backlog request in preparation for the spring season.

Reporting Per	Previous	<u>Change</u>	
<u>2/24/20 - 3/8</u>	<u>Period</u>		
Previous Request Backlog	165		
New Requests	31	28	3
Completed Requests	42	14	28
Total Request Backlog	154	165	-11
Potholes	28	35	-7
Storm Drains	49	49	0
Tree & Brush Pruning	14	14	0
Traffic, Signals, Signs	5	5	0
Berm Repairs	5	6	-1
All other categories	53	56	-3
New Requests	31	28	3
Acknowledged	1	4	-3
Completed & Closed	11	1	10
Open	20	27	-7

STREETS

	Saturday 3/7	Sunday 3/8	Monday 3/9	Tuesday 3/10	Wednesday 3/11	Thursday 3/12	Friday 3/13
Rain (in)	0.01	0.0	0.0	0.1	0.0	0.22	0.23
Snow (in)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hi/Lo	28/41	28/52	45/68	48/66	37/54	30/46	36/57
Temp (F)							

Sources:

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

Streetsweeping

DPW continued to sweep the following mainlines:

- Bemis Road,
- Electric Avenue,
- John Fitch Highway,
- South Street,

- Summer Street,
- Wanoosnoc Road, and
- Water Street,

Sidewalks

DPW Streets crews took advantage of the nice weather this past week to set the curbing at the Oak Hill/Franklin Road intersection. Granite curbing was laid out and cemented into place. The base was then graded and compacted in preparation for the sidewalk pour.



Figure 1 - DPW cementing curb

Stormwater

DPW Streets continued cleaning out swales and culverts on swales on Alpine Road, Pearl Hill Road, High Rock Road, Kinsman Road, Arn How Farm Road and Billings Road.

Crews repaired driveway apron on 268 Blossom Street.

Potholes

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

- Arn How Farm Road,
- Ashburnham Street,
- Beech Street Ext.,
- Central Ave.
- Elizabeth Street,
- Exeter Street,
- Fair View Ave,
- Fifth Mass Turnpike,

- Franklin Road,
- John Fitch Highway,
- Klondike Street,
- Legros Street,
- Omena Place,
- Princeton Road,
- Rinnock Road, and
- Saw Mill Pond Road,.

Friday was Heidi Bogner's last day as DPW Head Clerk. While we are happy that Heidi is moving onwards to a great new job in Boston, we will definitely miss her sunny disposition and excellent record keeping skills. Heidi was instrumental in bringing our payrolls, invoices, files and records up-to date. She also spent many long days taking on extra work during the DPW administrative transition. Due to the COVID-19 our planned lunch outing ended up being a take-out lunch at the DPW conference room.



Figure 2 - Heidi's going-away lunch

PARKS AND RECREATION

With the arrival of spring-like weather, the DPW Parks crews started cleaning up parks:

- Picked up leaves at Goodrich Park
- Pruned trees in Goodrich Park
- Put up flags on Flag Park
- Removed graffiti at Upper howarth Playground
- Started to drain pool at Coolidge Park

The Fitchburg Recreation Department, out of an abundance of caution and following the example set by Governor Charlie Baker for State Executive Branch Employees, will be cancelling events and programs.

At this time these cancellations include the Biddy League PeeWee Weekend Tournament on Saturday, March 21, 2020 and the Annual Amazing Egg Race Family Fun Day on Saturday, April 4, 2020.

We recognize this can be disappointing, however this decision was made in the best interest of participants and the community. The Recreation Department with guidance from the Mayor's Office and the Board of Health will continue to monitor the situation as we move through the spring.

CEMETERIES

Cemetery crews removed stumps from Forest Hill Cemetery, fixed catch basin, and repaired the flag pole with assistance from the Fitchburg Fire Department.



Figure 3 - Oak Hill Cemetery

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

Full Interments	0
Inurnments	0
Up righted monuments	0
Uncovered/cleaned flat monuments	0
Foundation marking for monuments	1
Catch basin repair	4
Trimmed Trees	0
Trimmed shrubs	0
Meeting with Families	5
Payments - invoiced/processed	3
Family Genealogy	4

ENGINEERING

DPW Engineering, with the assistance of our consultant Weston & Sampson Engineers, prepared for and hosted a Community Resilience Building Workshop at the IdeaLab at Fitchburg State University. The purpose of the workshop was to help identify the City's vulnerabilities related to climate change and develop a list of potential solutions. Attendees included the Mayor, representatives from City Council, representatives from various City departments, and other key community stakeholders. It was conducted as part of the City's Municipal Vulnerability Preparedness (MVP) Planning Grant through the Executive Office of Energy and Environmental Affairs (EOEEA), and brings the City one step closer to becoming an MVP-certified community. Once the City becomes MVP-certified, it will be eligible to apply for additional grant funding to help address the vulnerabilities identified during the MVP Planning process.



Figure 4 - Mayor greets MVP attendees

- Drafted email for the Zoning Board of Appeals summarizing the findings of a site inspection of 1151 Main Street conducted by DPW Engineering & DPW Wastewater on October 22, 2019. The owner of the building plans to open a car detailing business and would like to dump wash water down the floor drains in the building. Prior to the site inspection, it was unknown if the floor drains were tied into the sanitary sewer system or the storm drain system. During our site inspection, we dye tested the floor drains and observed the dye in a downstream sewer manhole located at the intersection of Main and River Streets. This confirmed that the basin was indeed connected to the sanitary sewer system, not the storm drain system.
- Prepared an evaluation form for evaluation of proposals received for the Phase 2 of the Water Department's Supervisory Control and Data Acquisition (SCADA) Upgrade Project.
- Assisted the Water Department with assigning "dummy" addresses to several City-owner parcels for use by the new Water Smart water metering software.

Planning Reviews

- Attended the March 10, 2020 meeting to help answer any potential questions regarding DPW Engineering's comments on the following reviews:
 - o 128-144 Fairmount Street
 - o 226 Westminster Street
 - o 34 Kimball Place
 - o 50 Whalon Street
 - o 431 Westminster Street

Permits & Inspections

- Provided construction oversight and inspectional services for sidewalk construction at the intersection of Oak Hill Road and Franklin Road.
- Performed inspection at 54 Bemis Road to investigate a complaint that a contractor was paving a portion of the City's right-of-way.
- Performed inspection at Appleton Circle to investigate a complaint of water being pumped into the street.
- Issued trench permits for the following:
 - 44 Myrtle Ave. (JJT Sewer Repair)
 - 362 Wanoosnoc Rd. (Water Repair)

Engineering Services						
	<u>Type</u>	<u>Number</u>	<u>Fees</u>			
	Dumpster Permits	0	\$0			
.0	Trench Permits	2	\$150			
/IITS	Excavation Permits	0	\$0			
PERMITS	Driveway Permits	0	n/a			
Sign Permits		0	n/a			
	Sewer Permits	0	\$0			
	Driveway Inspections	0	n/a			
SNO	Trench Inspections	2	n/a			
INSPECTIONS	Site Inspections	2	n/a			
PEC	Dig-Safe requests	0	n/a			
INS	Sewer/Drain Inspections	0	n/a			
	Street Light Inspection	0	n/a			
Totals			\$150			

WATER SUPPLY

The Water Supply Division produced 29.1 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled daily.

Wyman Pond gate is open 3 inches to maintain the 2-foot drawdown for the winter months. The Reservoir Caretaker is monitoring the level on a daily basis and opening/closing the discharge gate as needed to maintain seasonal drawdown. Refilling of this reservoir will begin at the end of next week as the seasonal drawdown will end on April 1st.

Water Treatment

Reservoir Levels as of 3/12/20							
Northern Reservoirs Elevation below spillway Southern Reservoir							
Fitchburg/Ashby	Full	- 0.94 feet	Meetinghouse				
Scott	Full	Full	Mare Meadow				
Lovell	Full	Full	Bickford				
Water Filtration Plant Flows/Production from 3/5/20 through 3/12/20							
Falulah Plant Regional Plant Totals							
Raw Water Inlet (Gal)	6,127,000	26,242,000	32,369,000				
Backwash to waste (Gal)	973,000	2,329,000	3,302,000				
Finish Water - Treated & Distributed (Gal)	5,154,000	23,913,000	29,067,000				
Capacity	(6 MGD) 15%	(12 MGD) 31%	(18 MGD) 26%				
Efficiency	84%	91%	90%				

- Experienced the failure of a seal on a chlorine booster pump at the Regional Plant. The pump was replaced with a spare and a new pump will be purchased to have "on the shelf". The existing pump cannot be rebuilt as it is now obsolete and parts are not available.
- Completed quarterly testing of the chlorine detector at the Regional Plant no issues were noted and the equipment (alarm) worked correctly.

Water Distribution

- Wyman Pond level was checked throughout the week. Gate is open 3 inches.
- FWD crews located and cleaned out curb stop boxes throughout the week to prepare for possible service line shut downs for meter replacements. Service lines that have been determined to be, or potentially be, iron pipe are likely to require shut downs.
- Completed shut downs of water service lines throughout the week to allow the meter replacement contractor to replace meters which had iron services and/or wheel valves that the contractor determined might fail if operated.
- 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 excavated and replaced/renewed a water service at 244 Madison Street, contractor (Tocci) renewed the owner's side of the water service.
- FWD personnel excavated and repaired a curb stop box at 100 Westminster Hill Road.
- FWD personnel excavated and repaired a catch basin in the parking lot at 1200 Rindge Road.

- FWD personnel excavated a water service at the water main to install a new curb stop, water service was found to run along the side of the road. We are now looking at tapping the water main straight out from the property,
- Completed several shut-offs at vacant buildings in which water lines/plumbing had frozen and were discovered leaking by owners, etc.
- Continued checking/inspecting and painting hydrants as needed throughout the course of the week.
- FWD personnel assisted all week in the meter department covering a vacant position.
- FWD personnel picked up cold patch from Keating's.
- Completed monthly fire extinguisher inspections at the Falulah WTP.
- Completed weekly inspections and maintenance/cleaning of Water Division vehicles and equipment.
- Completed housekeeping duties at 1200 Rindge Road.

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Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed	Winterized
1,632	2	0	0	16	0	0

Administration and Meters/Billing

- Total of 8 real estate closings final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 24 invoices totaling \$25,217.14 were processed for FY20 warrant WG20038.
- 2 purchase requisitions and 1 change order were entered into Munis for approval by Purchasing.
- Payroll for w/e 3/20 processed. Total payroll was \$52,081.45, including total overtime of \$3,995.33.
- Scheduled backflow tests. Made changes to backflow database with new owner information. Personnel continued conducting monthly backflow device testing.
- Changed 263 meters in Munis to Neptune. This is time intensive as well as being time sensitive.
- Continued calling accounts that have been non-responsive to the meter change letter.
- Attended the March Water/Wastewater meeting. Posted the approved February meeting minutes to city website.
- Completed cross connection surveys at 539 Electric Avenue and 633-639 Main Street.
- One Water Division employee attended the 3-day Cross Connection Surveyor course at New England Water Works in Holliston, MA, Tuesday through Thursday.

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

Water Permits and Inspections				
Туре	Number			
Emergency DigSafe Mark-outs	5			
DigSafe Mark-outs	16			
Inspections of Work on Water System	1			
Record Plan Updates	8			
Special Permit Applications Reviewed	0			
New Water Service Applications	0			
View Permits reviewed	0			
Curb Stops Turned off/on	15			
Located/cleaned gate/curb boxes	41			
Final Readings/Real Estate Closings	7			
New Meter Installations	9			
Backflow Preventers Tested	32			
Cross Connection Surveys	2			
Residential Appointments Made	0			
Totals	136			

WASTE WATER

The WWTF processed 65.99 million gallons of sewage. In total, 51.38 tons of organics and 74.14 tons of solids were removed and prevented from entering the Nashua River.

Week of 3/1/2020 - 3/7/2020						
Sewage Flow	65.99	Million Gallons				
Rainfall	0.09	Inches				
Secondary Bypass	0.00	Million Gallons				
BOD _{in} (lbs)	105,340	Pounds				
BOD _{out} (lbs)	2,576	Pounds				
BOD Removal (%)	97.43%					
TSS _{in} (lbs)	152,151	Pounds				
TSS _{out} (lbs)	3,864	Pounds				
TSS Removal (%)	97.26%					

- Participated in "Municipal Vulnerability Preparedness" workshop, at FSU's 'ideaLab' facility on Main Street.
- Participated in Pre-Bid Meeting, for the "Construction On-Call Bid".
- Participated in interdepartmental review discussion meeting for the DRAFT Request For Expressions of Interest ('RFEI') documents, by West Group Law, for the West Plant repurposing procurement.
- Coordinated with Fitchburg Airport Manager & Wastewater's consultant, for the capture of aerial images/video of the City's East Wastewater Treatment Facility.
- Coordinated with City Hall Offices, and disseminated health and safety information for workers to Wastewater personnel concerning Coronavirus.

• "Press Release" issued out for City's "Rain Barrels Program, Year No. 3".

Sewer System

- Reset a manhole at the North St. Fire Station.
- Replaced a SMH on Depot Street, at Hannigan Ct.
- Replace failing pavement around a SMH, at #100 Depot St.
- Replaced a SMH frame and cover at Heywood St./Canton St. intersection. Frame was damaged.
- Raised (2) buried manholes on Azalea St. were paved over.
- Raised a buried manhole in Cul-de-sac island on Montesion Dr.
- Picked up excavation debris from sewer repair on Thurston St. at Parker St.
- Service call on Charles St.: was found to be a homeowner issue (service lateral was plugged). Removed blockage for homeowner with a manhole hook, as blockage was only a foot up the lateral pipe.
- Responded to a sanitary sewer overflow at #228 Plymouth St. Relieved a blockage of rags/wipes. About 30 gallons spilled into a catch basin.
- C.N. Wood replaced debris body cages on the Vactor to prevent blow-by of sewerage into fan.
- Paved all manhole frames and covers that we raised during the week.
- New F-550 dump delivered. Removed plow and got it's inspection sticker.
- Checked known priority problem areas: No significant issues were found.
- Jetted line #56 Plymouth St. (because it was observed that it was starting to back up).
- P.J. Albert installed two sewer manholes for Wastewater: (1) at John Fitch Highway near Putts Pond/North St.; and (2) at #168 Lunenburg Street. Both manholes were frequent SSOs locations, due to heavy root intrusion into the structures.
- Pre-bid meeting held for "DPW On-Call Construction Services" contract. Two prospective bidder contractors attended.
- Completed review of 100% City Hall Sewer Separation engineering plans.

DPW ADMINISTRATION

- Winter operations:
 - Continued to process invoices received to close out snow and ice costs for the season.
- Financial:
 - Received more requests from internal auditors for backup documentation for water department land purchases in FY19. Continued to look thru documentation to find documents that were requested.
 - Calculated total West Plant electricity KWH consumed and total sludge & grit residual costs for calendar year 2019 for the wastewater department. Information will be included in documentation being compiled by West Group Law.
 - Researched all money spent by DPW in the last 5 years on paving & road construction per a request from Community Development Department.
 - o Reviewed all DPW Department accounts for accuracy and monitored budgets.
- Administrative:

- o This week we said goodbye to the DPW Head Clerk Heidi Bogner, who will be missed tremendously. The head clerk position has been advertised and will close on 3/23/20.
- o Continued with office relocations at the Broad St office.

Invoicing, Warrants, and Payrolls								
	Inv	voi	ces	Dej	posits	Billings	Payroll	
<u>Division</u>	Number		Total \$	Number	Total \$			
Streets/Admin/Engineering	83	\$	108,525	*Note 1			\$ 72,711	
Cemeteries	6	\$	6,398				\$ 10,668	
Parks							\$ 5,839	
Recreation	2	\$	85				\$ 3,354	
Water Supply	24	\$	25,217				\$ 52,081	
Waste Water	38	\$	116,331	*Note 2	\$ 13,380		\$ 74,034	
				*Note 3				
Total	153	\$	256,556		\$ 13,380	\$ -	\$218,688	
*1 - Engineering Permits & Performance Bonds								
*2 - Septage at East Plant (Gallons)			157,412					
*3 - Industrial Billing Payments								