

City of
Fitchburg



Department of
Public Works

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

DPW Weekly Update March 23 - March 29, 2020

Dear Mayor, Councilors, and Colleagues;

Over the past couple of week, DPW divisions worked together to formulate a Continuation of Operations Plan (COOP) in response to the evolving COVID-19 state of emergency. The COOP provides a framework to ensure continued operation of mission essential functions (MEFs) and establishes a concept of operations, strategies, and order of succession for key personnel. The plan is tiered into three emergency levels to assure it is scalable as the COVID-19 emergency evolves.

Level 1 was triggered on March 10 when the Governor declared a state of emergency. Per the COOP, DPW initiated prevention measures to protect our employees and facilities. DPW ordered the isolation of all facilities, cleaning/ disinfection guidelines, cancellation of recreation events and closure of playgrounds.

Level 2 was triggered on March 23 when the Governor issued an order closing all non-essential businesses and advising people to stay at home. In response, DPW moved to curtail non-essential functions and managers/ administrative staff were issued laptops and started to work from home. Employees were given leave as necessary due to childcare, self-quarantine and underlying health issues. One example of Level 2 operations was the snow storm of 3/23 that dumped 7-inches on the city. In accordance with Level 1 policies, contractors were not called in and all plowing was done in-house. This decision was also influenced by the closure of schools, the stay-at-home order, and the very warm temperatures.

Level 3 contingency plans will be triggered if and when the COVID-19 emergency decimates staffing levels to a point where available resources need to be reallocated and dedicated to maintaining the essential functions of the water supply, wastewater, streets and cemetery divisions. Last week DPW staffing levels fell by 6.7% due to COVID-19 absences. A total of 31 person-days were lost to COVID-19 compared to 465 person-days baseline. We will continue to monitor the situation and adjust operations as necessary.

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 [SeeClickFix](#) program. In the past two weeks DPW received 27 new requests and closed 9 requests. The total outstanding requests backlog is now 184, an increase of 18 from the previous reporting period. We will continue to work on the backlog request in preparation for the spring season.

<u>Reporting Period</u> 3/16/20 - 3/29/20		<u>Previous Period</u>	<u>Change</u>
Previous Request Backlog	166		
New Requests	27	22	5
Completed Requests	9	21	-12
Total Request Backlog	184	166	18
Potholes	45	35	10
Storm Drains	53	49	4
Tree & Brush Pruning	16	14	2
Traffic, Signals, Signs	7	5	2
Berm Repairs	5	5	0
All other categories	58	58	0
New Requests	27	22	5
Acknowledged	1	0	1
Completed & Closed	0	1	-1
Open	27	21	6

STREETS

	Saturday 3/21	Sunday 3/22	Monday 3/23	Tuesday 3/24	Wednesday 3/25	Thursday 3/26	Friday 3/27
Rain (in)	0.	0.0	0.0	0.0	0.0	0.0	0.0
Snow (in)	0.0	0.0	7.2	0.0	0.0	2.5	0.0
Hi/Lo Temp (F)	30/48	21/37	27/34	32/43	32/39	30/54	45/57

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

Plowed roadways due to 7-inch snow storm on 3/23/2020.

Streetsweeping

DPW started sweeping of Ward 4.
Picked up trash on Main Street.

Traffic

Continued to install new no-parking signs around Longsjo School.
Replaced old no-parking signs on Salem Street.

Stormwater

Finished rebuilding catch basin on Plymouth at Madison Street.
Started rebuilding catch basin on Falulah Street.

Potholes

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

- 5th Mass Turnpike,
- Airport Road,
- Ashburnham Hill Road,
- Bemis Road,
- Benson Road,
- Electric Ave,
- Elm Street,
- Marshall Street,
- Oak Hill Road
- Pershing Street,
- Pleasant Street,
- Sarah Lane,
- Summer Street,
- Water Street,
- Williams Road,

Mechanic Shop

Mechanic Shop continued to repair snow plows, trucks and spreaders before putting them away for the season. Due to a mild winter and resulting snow budget surplus, deferred maintenance on equipment was addressed. New segmental blade systems were purchased for two of the large trucks. The segmental blades have several advantages including being quieter, longer life, better scraping capabilities, and the ability to replace only one segment instead of the whole blade.



Figure 1 - Rebuilt Plow Frame with Segmental Blade

PARKS AND RECREATION

All City playgrounds, dog parks, and public bathrooms in parks are closed to the public until the COVID-19 state of emergency is lifted. According to a recent study in the New England Journal of Medicine, the COVID-19 can survive on plastic surfaces up to 72 hours. Considering small children are prone to frequent face touching, do not understand social distancing, and the COVID-19 can be spread through contaminated surfaces, it is best at this time to keep children away from playground equipment. 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.

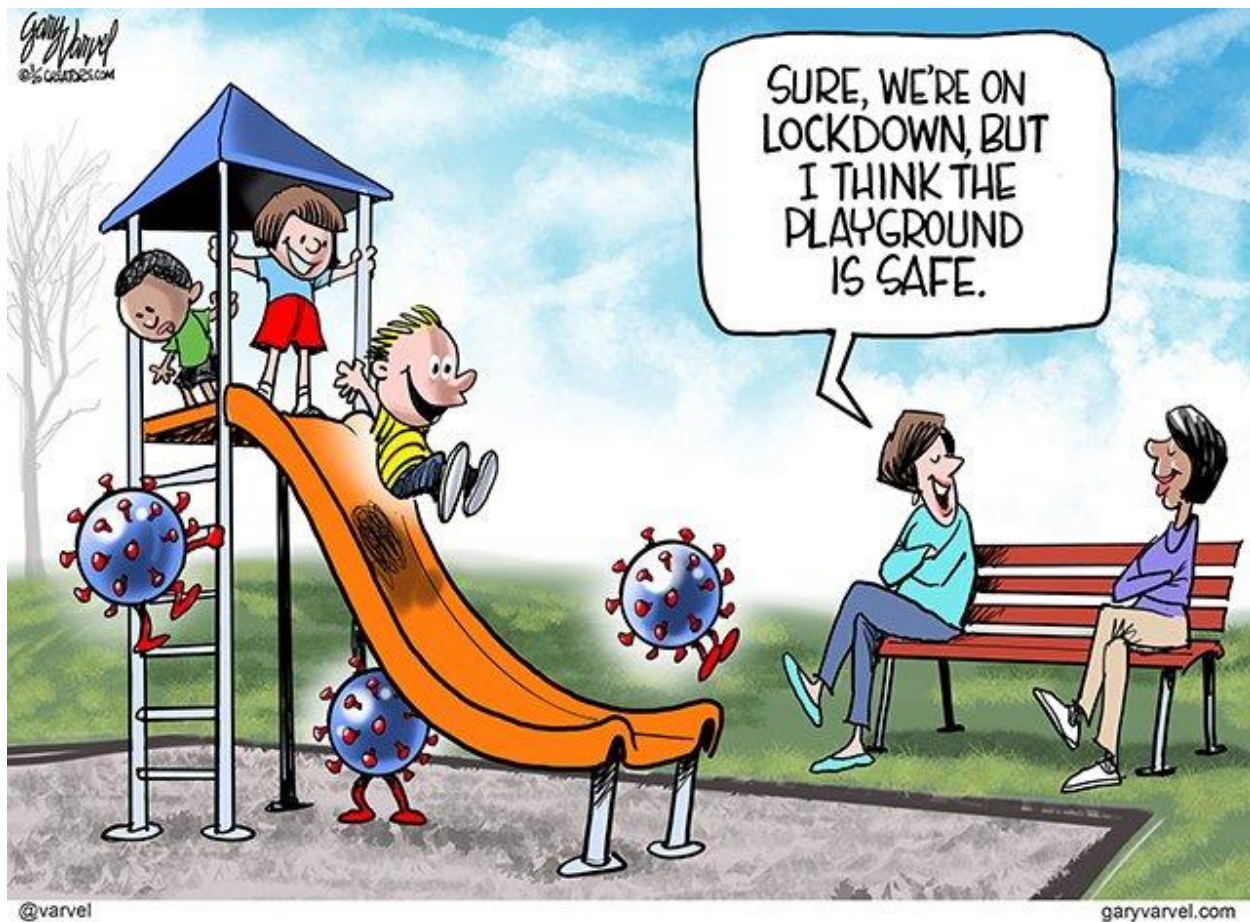


Figure 2 - Printed with permission from Gary Varvel

All recreation programs and events continue to be cancelled until further notice. These cancellations include the Annual Amazing Egg Race Family Fun Day on Saturday, April 4, 2020.

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.

Park Crews continued cleaning up parks and Main Street. Picked up downed limbs and trees at Coolidge Park, DiTomasso Bridge, and Ashburnham Hill Road.

CEMETERIES

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	0
Inurnments.....	1
Up righted monuments.....	0
Uncovered/cleaned flat monuments	0
Foundation marking for monuments.....	0
Catch basin repair	0
Trimmed Trees	0
Trimmed shrubs.....	0
Meeting with Families.....	0
Payments - invoiced/processed.....	3
Family Genealogy	11

ENGINEERING

- Submitted a quarterly progress update to the Executive Office of Energy & Environmental Affairs as required per the terms of the City's Municipal Vulnerability Preparedness Planning Grant. The City received \$102,000 through this grant program to being planning for the impacts of climate change.
- Held conference call with Weston & Sampson to discuss details for the second public listening session for the City's Municipal Vulnerability Preparedness Planning Grant through the Executive Office of Energy and Environmental Affairs. Per grant requirements, the City must hold two listening sessions to solicit input from the public to help identify the different vulnerabilities associated with climate change.
- Reviewed two proposals received for the DPW's RFP for the design of a replacement roof for the facility at 301 Broad Street. The roof is in poor condition, with leaks throughout the building.
- Contacted the Fire Department regarding a vehicle turn around at the end of Westminster Hill Road. It does not appear that what is laid out will accommodate emergency vehicles.
- Issued Notice to Proceed to Weston & Sampson to proceed with quarterly inspection of McTaggart's Pond Dam per MA DCR Office of Dam Safety Requirements.
- Submitted a quarterly progress report for McTaggart's Pond Dam to the Executive Office of Energy & Environmental Affairs as required per the terms of the City's grant through the Dam and Seawall Repair or Removal Program. The City received a grant of \$375,000 through this program, which was earmarked by Mayor DiNatale in a bond bill while he was a state representative. The grant money is expected to carry the City through the design and permitting phase of either repair or removal of the dam.
- Performed plan/records search for 32 Goodfellow Drive to investigate a complaint from a neighbor that the property owner plans to build a basketball court over an easement.

GIS/Asset Management

- Performed basic lot line edits to the TaxPar layer per request of the Assessor's office.
- Investigated permitting requirements for the TriTown Landing development proposed on the Fitchburg/Lunenburg town line.

Street Lights

- Performed inventory of street light photo cell stock.
- Updated street light repair spreadsheet.
- Started updating SLV streetlight software with smart photocell MAC addresses from the street light repair spreadsheet.
- Paid Daigle Electric invoice (\$826).

Dig Safes, Site Visits, Permits & Inspections

- Performed site visit to check the water levels in the monitoring wells at the Forest Hill Cemetery. The DPW has installed several subsurface drains over the past year in an attempt to lower groundwater elevations in a portion of the cemetery. If the efforts are successful, it will allow for expansion of the cemetery and an estimated 800 additional graves.
- Per request of the Conservation Commission, performed a site visit to Ashburnham Street to investigate a site being proposed for the construction of a new single family home. The Conservation Commission would like assistance performing a bond estimate for the contractor.
- Performed site visits to inspect new curbing, sidewalk, and sign post bases being installed by DPW crews at the intersection of Oak Hill Road and Franklin Road.
- Performed inspection of an emergency sewer lateral repair by Tandem Construction at 152 South Street.
- Issued trench and excavation permits for an emergency sewer lateral repair by Glenn E. Hines Excavation Contractor at 112 Walton Street. Performed inspection and took ties.
- Issued trench permit to Water Division for replacement of a hydrant on Franklin Rd. that was hit during the snowstorm last week.
- Performed daily site visits to Valley Street to check on construction progress. A private developer is currently extending the roadway and utilities and building several single family homes. The lots have been cleared and grubbed, and utilities have been extended. The road appeared to be rough graded only. The material on site does not appear suitable for a roadway base. DPW Engineering will continue to work with the developer.

- Performed site visit to First Street to investigate a report from Unitil that they encountered an unknown sewer lateral while installing a new gas main. The lateral appears to be coming from one of the buildings associated with the old St. Bernard’s Church on Middle Street and ties into the local sewer on First Street. Unitil will have to adjust their design to accommodate the lateral.
- Performed informal inspection of Wyman’s Pond Dam. Last summer a minor sink hole had formed on the downstream slope of the dam. It appeared to be a collapsed animal burrow, and the sink hole was backfilled, loamed, and seeded. DPW Engineering has been performing periodic check-ups to ensure the problem does not reoccur.
- Designed, laid out and supervised installation of traffic control for City Hall construction.
- Performed site visit to investigate a complaint of a street light dangling from a wire at the intersection of Harrison Ave. and Margerie St.
- Issued trench permit for 15-25 Lunenburg Street sidewalk repair (Tandem Construction).
- Performed driveway/curb cut inspection at 41 Atlantic Ave.
- Performed site visit to 1061 Westminster Street to determine the ownership of 3 trees and perform a dig safe.

Engineering Services			
	<u>Type</u>	<u>Number</u>	<u>Fees</u>
PERMITS	Dumpster Permits	0	\$0
	Trench Permits	3	\$150
	Excavation Permits	1	\$350
	Driveway Permits	0	n/a
	Sign Permits	0	n/a
	Sewer Permits	0	\$0
INSPECTIONS	Driveway Inspections	1	n/a
	Trench Inspections	5	n/a
	Site Inspections	15	n/a
	Dig-Safe requests	1	n/a
	Sewer/Drain Inspections	3	n/a
	Street Light Inspection	1	n/a
Totals			\$500

WATER SUPPLY

The Water Supply Division produced 28.0 million gallons of drinking water this past week. No transfer of water between reservoirs is taking place. Reservoirs continued to be inspected and patrolled.

Wyman Pond has been refilled (the outlet gate at the dam was closed last week). The seasonal drawdown is ending on April 1st and the reservoir needed to be refilled by this date in accordance with MA DEP regulations. Reporting of the level of Wyman Pond will end after this report and will begin again in the fall when next winter's seasonal drawdown commences on November 1st.

Water Treatment

Reservoir Levels as of 3/26/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	Full	-1.16 feet	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford
Water Filtration Plant Flows/Production from 3/20/20 through 3/26/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	5,376,000	25,768,000	31,144,000
Backwash to waste (Gal)	872,000	2,290,000	3,162,000
Finish Water - Treated & Distributed (Gal)	4,504,000	23,478,000	27,982,000
Capacity	(6 MGD) %	(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) assigned 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.

Water Distribution

- The Reservoir Caretaker began cleaning/ painting interior walls/piping at the Bickford/Mare Meadow pump stations. Before (left) and after (right) pictures are below.



- Plowed/sanded water treatment plants and remote stations on Tuesday.
- 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 repaired a leak on the city side of the water service at 115 Rinnock Road, trench was backfilled, compacted and will be loamed and seeded once the snow melts.
- FWD personnel responded to a hydrant hit in front of 605 Franklin Road, the hydrant was broken and flowing a large amount of water (according to charts, 45,000 gallons of water was lost). Personnel shut off the main line gate to isolate the leak (7 homes affected). Personnel excavated and replaced an 8x8x6 "T", 6" gate and installed a new hydrant. A claim was submitted to the insurance company for the vehicle operator to cover all costs incurred by the Water Division, including the loss water.



- FWD personnel repaired the hydrant on Lunenburg Street at Redman Place by installing a new break away/traffic kit. The hydrant was placed back in service and the Fitchburg Fire Department was notified.
- FWD personnel repaired a hydrant that was hit on Franklin Road at Hurd Street, by installing a new break away/traffic kit. The hydrant was placed back in service and the Fitchburg Fire Department was notified.
- FWD personnel assisted all week in the meter department covering a vacant position.
- FWD personnel picked up cold patch from Keating's.
- FWD personnel hauled fill from the city pit to Rindge Road for stock.
- Investigated a new water meter indicating a backwards flow at 95 Greenbriar Road (house is vacant), everything appeared normal except the indicator showed backwards flow, meter was changed.

- Investigated/troubleshoot starting/forward/reverse issue on the JCB backhoe, found a blown fuse caused by frayed wires in the control lever, wires were repair by a DPW mechanic. Machine appeared to operate correctly following the repair.
- 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.

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed	Winterized
1,632	2	1	2	0	3	0

Administration and Meters/Billing

- Total of 11 real estate closings – final readings completed along with preparation of final bills for attorneys/realtors. Future real estate closing final readings also scheduled.
- 32 invoices totaling \$39,055.26 were processed for FY20 warrant WG20040.
- 3 change orders for existing purchase requisitions were entered into Munis for approval by Purchasing.
- Completed payroll for w/e 4/3/20. Total payroll was \$69,491.95 including \$3,746.41 in overtime.
- Loaded 6,939 Badger accounts into the laptops for reading next week. It seems like the work around that was implemented has worked. Accounts were deleted from Badger’s Read Center program as the meters were changed to Neptune. We also went thru all past installs dating back to the October and deleted them from Read Center as well. This will, hopefully, simplify, reading of the Badger meters, which had become onerous due to the glitch between Munis and Read Center.
- Made changes to backflow database with new owner information. Though testing is not being done, properties are still being sold and the owner’s information needs to be changed in the backflow software program database.
- Completed Water/Wastewater minutes for the March 11 meeting.
- Assisted homeowner at 759 River Street with troubleshooting a high bill, after several phone calls it was determined the toilet in the first floor apartment was malfunctioning. Owner was going to have plumber repair or replace.
- The Fitchburg Water Division participated in the conference call that is being held weekly (this is the second 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.

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

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	3
DigSafe Mark-outs	29
Inspections of Work on Water System	1
Record Plan Updates	22
Special Permit Applications Reviewed	0
New Water Service Applications	0
View Permits reviewed	0
Curb Stops Turned off/on	3
Located/cleaned gate/curb boxes	7
Final Readings/Real Estate Closings	0
New Meter Installations	0
Backflow Preventers Tested	0
Cross Connection Surveys	0
Residential Appointments Made	0
Totals	65

WASTE WATER

The WWTF processed 56.91 million gallons of sewage. In total, 39.27 tons of organics and 69.14 tons of solids were removed and prevented from entering the Nashua River.

<u>Week of 3/15/2020 - 3/21/2020</u>		
Sewage Flow	56.91	Million Gallons
Rainfall	0.55	Inches
Secondary Bypass	0.00	Million Gallons
BOD _{in} (lbs)	80,701	Pounds
BOD _{out} (lbs)	2,168	Pounds
BOD Removal (%)	97.15%	
TSS _{in} (lbs)	142,145	Pounds
TSS _{out} (lbs)	3,866	Pounds
TSS Removal (%)	97.18%	

- **Wednesday, March 25th, 2020:** MassDEP’s Commissioner Martin Suuberg held a group “ZOOM” meeting call with wastewater professionals across the Commonwealth, including participation of USEPA Region 1 Office.
 - More than 300 callers participated in the call.

- Both MassDEP and USEPA are working remotely, and inspections are not being performed now.
 - “Enforcement” is not a priority at this time; and MassDEP wants to support utilities in this difficult time.
 - Recurring emphasis on call: “Contact your DEP regional contacts (Central Regional Office, Wastewater for Fitchburg) if utilities were to have issues or concerns (including staffing issues).”
 - MassDEP stated that they are trying to keep the CWSRF Program’s “Intended Use Plan” moving forward on schedule (affecting SRF funded projects).
 - 2nd MassDEP “ZOOM” meeting call with wastewater professionals has been scheduled for Wednesday, April 1st, 2020.
- **Thursday, March 26th, 2020:** USEPA’s Susan Parker Bodine, Asst. Administrator for Enforcement & Compliance Assurance issued a memorandum on the subject of *“COVID-19 Implications for EPA’s Enforcement and Compliance Assurance Program”*.
 - EPA will exercise enforcement discretion for incidents of non-compliance covered by this temporary policy.
 - Temporary policy addresses: Civil Violations; State Oversight; EPA Actions; Accidental Releases; and Criminal violations.
 - Regarding “Facility Operations”, the temporary policy states that “the EPA expects all regulated entities to continue to manage and operate their facilities in a manner that is safe and that protects the public and the environment.”
 - Facilities should contact the appropriate implementing authority if facility operations impacted by COVID-19 pandemic may create an acute risk or an imminent threat to human health or the environment.
- Isolated the Septage Receiving Station from staff areas, to provide “social distancing” from septage haulers for staff: pH testing station and report printout moved to the hallway by the loading docks. **UPDATE:** the changed SOP appears to be working out well.
- Fitchburg Wastewater has implemented isolation practice measures to prevent outsider (whether other City Departments employees, or non-employee third parties) from contact (within “social distancing” protocols) with East Plant staff members. Heightened sanitizing cleaning practices for common contact surfaces has been implanted. Reinforcement of personal hygiene cleaning practices (which is already “standard operating procedure” for the wastewater worker environment) has been reiterated to staff. Purchased more spray bottles for disinfectant (used for wiping down contact surfaces of the Plant Control Building’s Admin. Wing).
- On March 26th, it was announced that a contract service janitor working for the San Jose-Santa Clara Wastewater Treatment Facility (California) tested positive for COVID-19, leading to the self-quarantining of 17 plant workers (approximately 30% of the large treatment plant’s staff) to self-quarantine due to possible exposure to the infected janitorial worker. In light of the San Jose-Santa Clara COVID-19 incident, Fitchburg Wastewater is considering extreme protective measures to mitigate against a devastating loss of personnel (from the active duty and available personnel roster) needed to effectively run the treatment plant.

- WWTF Mechanical Staff assisted DPW Streets Division Mechanics, with diagnosing of the failed burner on the DPW Paving Hot Box.



Figure 3: Wastewater Maintenance Assisting DPW Mechanics (Hot-Box Truck).

- Participated in group call with representatives of Fitchburg State University, who are seeking to discharge 144,000 gallons per day (+) of contaminated soil pump-and-treat effluent discharge into the City sewer system.

Sewer System

- New F-550 dump was “badged” at D&G Auto Body, labeling the vehicle with City Department identification.
- Put cold patch in trenches on Clarendon, and also built cold patch ramps on St. Bernard Street to ease transition for plows.
- Assisted DPW with plowing.
- Replaced broken manhole cover at the Jackson Avenue at Upham Street intersection.
- Raised a buried manhole on Azalea Street.
- Raised a buried manhole on St. Anthony Street. Repaired grass that a plow damaged during snow storm since we were in the area.
- Paved 3 manholes that we raised, and made one spot repair on Clarendon Street.
- Put sand and emulsion joint seal on 4 manholes that we’ve raised in the past month.
- Service call at #272 Canton Street: was found to be a homeowner issue.
- Service call at #325 Boutelle Street: was found to be a homeowner issue.
- Conducted an inspection at #152 South Street for a sewer repair.
- PJ Albert separated 1 combination manhole on Normandy Street. Conducted a site walk with PJA, and assigned 3 additional manholes for separation on Water Street to begin next week.
- Conducted final design review on Boulder Drive/Wood Place sewer extension.
- Drafted responses to questions about DPW Construction On-Call Bid.

DPW ADMINISTRATION

- Winter operations:
 - Continued to contact plow contractors that have not yet billed the City for plowing this season and requested they bill us so we can close out snow & ice costs for the year. We have 3 contractors who have yet to bill us for work performed during the snow season.
 - Reconciled and updated snow & ice tracking files to ensure all costs are accounted for. Notified the City Auditor’s office that the \$20k adjustment for plowing the parking garages has not been processed yet this year.
- Financial:
 - Reviewed all DPW Department accounts for accuracy and monitored budgets.
 - Resumed financial review of the water department revenues and expenses.
 - Updated gas and diesel tracking for FY20 for the annual green communities reporting.
 - Provided financial update and invoice/check copies to the Civil Engineer to be included with the FY20 Q3 McTaggart’s grant quarterly update.
- Administrative:
 - All DPW Divisions processed bi-weekly payrolls which included retroactive payments for FAMASS members from the recently completed contract negotiations.
 - Submitted the required MA DEP paperwork for 1 land purchase and 3 conservation restrictions for the water department.
 - Submitted DPW Department absences due to COVID-19 reasons to the human resources department.
 - Started reviewing applications for the DPW Head Clerk position.
 - Sent PO to CN Wood for the purchase of a new sweeper financed through a free cash appropriation from the Mayor’s office and City Council.

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	54	\$ 25,524	*Note 1			\$ 83,545
Cemeteries	8	\$ 3,147				\$ 18,989
Parks						\$ 6,197
Recreation						\$ 7,599
Water Supply	32	\$ 39,055				\$ 69,492
Waste Water	26	\$ 50,328	*Note 2			\$ 90,893
			*Note 3			
Total	120	\$ 118,055		\$ -	\$ -	\$276,715
*1 - Engineering Permits & Performance Bonds						
*2 - Septage at East Plant (Gallons)						
*3 - Industrial Billing Payments						