

City of
Fitchburg



Department of
Public Works

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DPW Weekly Update January 6 – January 12, 2020

This past week at the Board of Park Commissioners meeting, Darlene Bergeron was recognized on her retirement as the President and league organizer for the Fitchburg Youth Soccer Association. Many years ago Darlene started volunteering for FYS when her own kids were playing soccer at a young age. Her kids have long since grew up, and since then several of her grandkids started playing soccer. For at least the past 25 years Darlene has served as president and helped shape a program which has supported thousands of children. Even following her retirement from the FYS Board, Darlene continues to coach and be involved in the FYS program. Darlene exemplifies our very best, she is the volunteer parent, coach, and director. Without volunteers like Darlene we would not have so many great recreational opportunities right here at home.

Darlene was presented with a citation from the State Senate by Senator Dean Tran, a citation from the House of Representatives by Representative Stephan Hay, a citation from the City by Mayor Stephen DiNatale, and a plaque from the Board of Park Commissioners by Chairman James McGrath. The Department of Public Works and the Recreation Division would like to extend our appreciation to Darlene Bergeron for her exemplary service.



CONSTITUENT SERVICES

DPW continued to respond to service requests in a timely manner through the [SeeClickFix](#) program. In the past two weeks DPW received 25 new requests and closed 19 requests. The total outstanding requests backlog is now 337, an increase of 6 from the previous reporting period. Please note that due to continued snow/ice operations, the number of potholes and other requests completed will continue to lag. A majority of outstanding requests are for potholes, storm drains, and tree/brush trimming.

<u>Reporting Period</u> 12/23/19 - 1/5/20		<u>Previous Period</u>	<u>Change</u>
Previous Request Backlog	331		
New Requests	25	37	-12
Completed Requests	19	19	0
Total Request Backlog	337	331	6
Potholes	92	89	3
Storm Drains	66	64	2
Tree & Brush Pruning	51	49	2
Traffic, Signals, Signs	20	21	-1
Berm Repairs	12	12	0
All other categories	96	96	0
New Requests	25	37	-12
Acknowledged	4	2	2
Completed & Closed	6	18	-12
Open	19	19	0

ROADWAYS

Snow Operations

	Saturday 1/4	Sunday 1/5	Monday 1/6	Tuesday 1/7	Wednesday 1/8	Thursday 1/9	Friday 1/10
Rain Depth (in)	T	0.0	0.6	0.0	0.0	0.0	0.0
Snow Depth (in)	0.2	0.0	0.0	0.0	0.0	0.0	0.0

Courtesy: <https://www.cocorahs.org/ViewData/StationPrecipSummary.aspx>

- Salted and Sanded streets due to snow squall on Saturday/Sunday (1/4 – 1/5).
- Hauled snow from parking garages, senior center, and police station.
- Rest of week was nice and warm, crews started sweeping streets.
- Sand was hauled from Airport Pit to DPW yard. Additional salt was ordered and delivered into the salt shed.
- Trucks and plows continued to be maintained and fixed. Crews took advantage of the nice weather to wash and grease the trucks, plows, and sanders.

Sidewalks

DPW Street crews took advantage of the nice weather to complete the rebuilding of the two catch basins at the intersection of Oak Hill Road/Franklin Road intersection. The areas around the basins were paved with hotmix and the project site will be closed up again until spring.

Reingold Elementary Principal Albert Mercado, along with MassDOT, MRPC and DPW Engineering performed a Safe Routes to School needs assessment for the school on January 7. The group walked along Franklin Road from Oak Hill Road to Reingold to identify signage and crosswalks improvements. The City received a small grant that will dovetail with the Oak Hill Road intersection project to provide better crosswalks and signage.



Figure 1 - Safe Routes to School at Reingold Elementary

DPW Engineering, in coordination with the Disability Commission, submitted a CDBG grant application for sidewalk and ADA improvements in front of the Fitchburg Public Library and on Rollstone Road in the Park Hill/Memorial Middle School area.

DPW Engineering, in coordination with MOC, submitted a CDBG grant application for sidewalk and ADA improvements on South Street in front of the Head Start program at Hosmer School.

Two staff members from DPW Engineering attended the Complete Streets 201: Designing Streets for People course offered by the UMass Transportation Center. The course covered design guidelines for including pedestrians, cyclists, and transit in roadway design.

DPW Engineering continued to perform QA/QC review of sidewalk data collected by StreetScan.

Potholes

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

- Airport Road,
- Bemis Road,
- Canton Street,
- Clarendon Street,
- Clinton Street,
- Congress Street,
- Daniels Street,
- Electric Ave,
- Elm Street,
- Fairmount Street,
- Falulah Street,
- Heywood Street,
- High Street,
- Holman Ave,
- Wendell Street.
- Hurd Street,
- Lunenburg Street,
- Main Street,
- Marshall Street,
- Middle Street,
- Mt Elam Road,
- Mt Vernon Street,
- North Street,
- Sheridan Street,
- St Joseph Ave,
- Summer Street,
- Temple Street,
- Upland Street,
- Water Street.

PARKS & RECREATION

Last week the Board of Park Commissioners held their monthly meeting.

- The Board, along with Senator Tran, Representative Hay, Mayor DiNatale, and Board Chairman McGrath presented citations and plaques to Darlene Bergeron to commemorate her 25 years of volunteer work for the City's children as a coach and organizer of the soccer leagues.



Figure 2 - Board of Park Commissioners presenting award to Darlene Bergeron

- The Board voted to support the submission of a CDBG grant application to fund repairs to the Park Hill walking trail from the baseball fields to Causeway Street and for the addition of ADA ramps to the sidewalks to make the crosswalk ADA compliant.
- The Fitchburg Trails Vision committee presented the Trails Vision document.

Park crews removed Christmas decorations from Main Street and the common.

Park crews helped to clear snow from sidewalks.

Biddy League Elem. Division games began on Thursday, 1/9/2020.

Recreation Director met with Reimagine North of Main, NewVue and others on Wed. 1/8/2020 to discuss potential art contest/winter light festival at Riverfront Park in February.

Recreation Director met with Mary Delaney to discuss storage and office layout for recreation office at the new City Hall.

Submitted revised information regarding Coggs Hall Park and the summer concert series to Visit North Central MA.

Fitchburg State welcomes Fitchburg residents of all ages to walk or jog on the 1/11th of a mile track, which is suspended above the gymnasium on the second floor. Minors must be accompanied by an adult. Starting on October 1, 2019, the program is open Mondays through Fridays from 6:00 AM to 12:00 PM, Saturdays from 10:00 AM to 3:00 PM and Sundays from 3:00 PM to 10:00 PM. The walking club ends on April 1, 2020. Registration is required and is now available in the City of Fitchburg Recreation Department.

CEMETERIES

Cemeteries crews aided in the ice and snow storm clean up by plowing the cemetery properties, sidewalks and roadways.

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.....	0
Catch basin repair	0
Trimmed Trees	0
Trimmed shrubs.....	0
Meeting with Families.....	4
Payments - invoiced/processed.....	4
Family Genealogy	2

ENGINEERING



Figure 3- Warning Signs at McTaggart Dam

DPW Engineering worked with DPW Streets to address a resident complaint that there were no warning signs at McTaggart's Pond Dam alerting the public that it is an "Unsafe" dam. DPW Streets manufactured and installed six warning signs.

DPW Engineering drafted and submitted a quarterly update to the Massachusetts Executive Office of Energy and Environmental Affairs regarding its grant for McTaggart's Pond Dam located on Sanborn Street in Fitchburg. The dam, which was inherited by the City due to non-payment of taxes by the former owner in the mid 1990's,

has fallen into disrepair and is classified by the Massachusetts Department of Conservation and Recreation (DCR) Office of Dam Safety (ODS) as "Unsafe". The City received a grant in the amount of \$375,000 to conduct an Alternatives Analysis to determine the various options for repair or removal of the dam and to perform engineering design and permitting of the selected option. The engineering company performing the Alternatives Analysis, has completed their initial field work and has submitted a draft report to DPW for review and comment. DPW Engineering expects to have a final version of the report soon, and will begin presenting results to the Mayor and City Council.

DPW Engineering drafted and submitted a quarterly update to the Massachusetts Executive Office of Energy and Environmental Affairs regarding its Municipal Vulnerability Preparedness (MVP) program Planning Grant. This grant program provides support for cities and towns in Massachusetts to begin the process of planning for climate change resiliency and implementing priority projects. Fitchburg was awarded \$102,000, the highest amount awarded in the state during this round of funding. The City is currently working on setting up a venue for the community planning workshops to be conducted as part of the grant program.

DPW Engineering participated in a conference call with ViewPoint Cloud to discuss implementation of the new version of the City's permit management software.

DPW Engineering conducted reviews of Planning Board Special Permit applications for the following projects:

- 0 Richardson Road (Candlewood Park) – Applicant is proposing to modify a Definitive Subdivision Approval and Special Permit issued by the Planning Board in 1996 to allow the use of a "Parcel B" in the Candlewood Park subdivision at 0 Richardson, that was designated to remain as Open Space, for a single-family dwelling.
- 223 Lunenburg Street – Applicant is proposing to operate a marijuana retail dispensary establishment at 223 Lunenburg St.

DPW Engineering submitted a grant application to the Massachusetts Department of Environmental Protection (MassDEP) Water Utility Resilience Program (WURP) to receive free technical assistance in developing and enhancing Geographic Information System (GIS) maps of the City's drinking water distribution system. The assistance will be provided by a private consulting firm that, subject to appropriation, will be under contract with MassDEP to perform the work. The goal of this effort is to ensure that the City has accurate maps of its water system in order to enhance asset management, improve system operations and resiliency, and plan for and respond to emergencies. Specifically, GIS mapping provides the tools to better organize assets and events, including the ability to perform data analysis that can assist with routine maintenance, level of service information, replacement costs, and risk analysis.

Permits and Inspections

DPW issued and inspected 13 permits, including:

- Driveway Permit - #15 Nashua Street
- New Address for various buildings at the Fitchburg Airport.

	Engineering Services		
	<u>Type</u>	<u>Number</u>	<u>Fees</u>
PERMITS	Dumpster Permits	1	\$-
	Trench Permits	6	\$450.00
	Excavation Permits	4	\$300.00
	Driveway Permits	0	
	Sign Permits	0	
	Sewer Permits	2	\$4,000.00
INSPECTIONS	Driveway Inspections	0	n/a
	Trench Inspections	7	n/a
	Site Inspections	6	n/a
	Dig-Safe requests	0	n/a
	Sewer/Drain Inspections	2	n/a
	Street Light Inspection	0	n/a
	New Address Assignments	2	n/a
	Parcel Updates	0	n/a
	Planning Reviews	2	n/a
	Totals	31	\$4,750.00

WATER SUPPLY

The Water Supply Division produced 29.6 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 Division continued working on procurement of contracts to replace roofs on various pump stations. Due to state procurement rules, these pump stations are considered 'buildings' and have to be bid out in the same manner a school, city hall, or other municipal buildings. This adds significantly to the cost of the project since the general contractor has to be certified by the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM). Deputy Commissioner of Water is working closely with City's Procurement Officer to navigate these regulations in an effort to assure the City is getting the best value.

Wyman Pond gate was closed down to 5 inches, it had been opened more last week to compensate for the rainfall/snowmelt that occurred and 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.

Water Treatment

Reservoir Levels as of 1/10/20			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	Full	Full	Meetinghouse
Scott	Full	Full	Mare Meadow
Lovell	Full	Full	Bickford
Water Filtration Plant Flows/Production from 1/2/20 through 1/9/20			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	5,983,000	27,721,000	33,704,000
Backwash to waste (Gal)	822,000	3,232,000	4,054,000
Finish Water - Treated & Distributed (Gal)	5,161,000	24,489,000	29,650,000
Capacity	(6 MGD) 14%	(12 MGD) 33%	(18 MGD) 27%
Efficiency	86%	88%	88%

Fire Hydrants

Total Hydrants	Out of Operation	Hydrants Replaced	Hydrants Repaired	Painted	Flushed	Winterized
1,632	2	0	1	0	0	20

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

Water Permits and Inspections	
Type	Number
Emergency DigSafe Mark-outs	2
DigSafe Mark-outs	5
Inspections of Work on Water System	6
Record Plan Updates	8
Curb Stops Turned off/on	33
Located/cleaned gate/curb boxes	26
Final Readings/Real Estate Closings	12
New Meter Installations	10
Backflow Preventers Tested	12
Residential Appointments Made	5
Totals	119

WASTE WATER

The WWTF processed 70.5 million gallons of sewage. In total, 36.9 tons of organics and 31.8 tons of solids were removed and prevented from entering the Nashua River.

<u>Week of 12/29/2019 - 1/4/2020</u>		
Sewage Flow	70.49	Million Gallons
Septage	153,405	Gallons
Rainfall	1.75	Inches
Secondary Bypass	0.0	Million Gallons
BOD _{in} (lbs)	77,549	Pounds
BOD _{out} (lbs)	3,718	Pounds
BOD Removal (%)	95%	
TSS _{in} (lbs)	71,036	Pounds
TSS _{out} (lbs)	7,306	Pounds
TSS Removal (%)	90%	

- Secondary System Upgrade project continued with the lining of the 2nd stage clarifier and construction of the access platforms.
- UNITIL continued with the gas line replacement project by directional drilling under the Nashua River to insert a new pipe to service the East Waste Water Treatment Plant. This project was necessary due to the erosion of the river bank uncovering the existing gas line and exposing it. This project required new easements over airport property.



Figure 4 - Gas Line Work



Figure 5 - 2nd Stage Clarifier Platform

Sewer System

- Used CCTV camera to inspect a common sewer on Olin Drive where a back-up happened over the weekend, discovered a lot of roots. It is unclear if this line is private or city-owned, so the City maintains the line.
- Reset a manhole frame and cover dislodged by a plow on Rinnock Road.
- Visited Franklin, MA DPW to investigate their software for Asset Management called Sedarun. The City is required to have a work order management system and is currently investigating different options.
- Service call at 42 Phillips Street. Homeowner issue.
- Cleaned out two problem areas with vactor truck at Gloria Ave and Lyman Ave. A few rags removed.
- Weekly pump station checks – no issues.
- Used CCTV camera to inspect a drain line on Oak Hill Road that is tied into the sanitary sewer. Line looks to be an old wick drain. Will plug when groundwater lowers. Estimate 5 gallons of groundwater a minute entering the sanitary sewer system.
- Used CCTV camera to inspect 2,400 feet of sewer in Rollstone Street area. Moderate grease removal, but overall pipe is in decent shape.
- Replaced reel on the vactor truck, re-installed debris body ball. Installed a vice on bumper.
- Performed maintenance on camera van and cleaned it out.
- Assisted water department with vactor truck at 560 John Fitch Highway for a water service repair.
- Replaced batteries and desiccant on 9 flow meters.

ADMINISTRATION

- Winter operations:
 - Processed the invoices for payment that were turned in by plow contractors.
 - Calculated the costs associated with winter operations to date. This week we had a winter weather event on Sunday that required salting by DPW crews.
 - Corresponded with insurance agents to secure certificates of insurance for plow contractors who have expired or expiring insurance policies.
 - Met with several contractors interested in plowing for the City. We are currently not accepting new applications for this plowing season. Information on prospective contractors has been added to the listing for next season.
- Chapter 90:
 - This week we received notification from the state and MassDOT that we received \$111,926 in supplemental Chapter 90 funding. Total Chapter 90 apportionment for FY20 is \$1,231,185.
- Finished calculating the Q3 billing totals for the wastewater industrial billing customers (papermill billings).
- Reviewed all DPW Department accounts for accuracy and monitored budgets.

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	59	\$ 40,296	*Note 1	\$ 5,425		
Cemeteries						
Parks						
Recreation	5	\$ 2,103				
Water Supply	32	\$ 43,098				
Waste Water	35	\$ 131,598	*Note 2	\$ 18,500		
Total	131	\$ 217,094		\$ 23,925	\$ -	\$ -
*1 - Engineering Permits & Performance Bonds		10				
*2 - Septage at East Plant (Gallons)		217,647				