

City of  
Fitchburg



Department of  
Public Works

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

DPW Weekly Update August 25 - September 1, 2019

Dear Mayor, Councilors, and Colleagues:

This week Deputy Commissioner Jeff Murawski filed the semi-annual progress report with USEPA and MassDEP in accordance with the Consent Decree. The progress report detailed all of the hard work the Wastewater Division and the Sewer Systems team have completed in the past six months. Good progress has been made in the areas of asset management, GIS, maintenance, engineering, operations and management of the combined system separation project. In particular, as of July 31<sup>st</sup>:

- 130.6 miles of sewer lines have been inspected (91.19% of total 143).
- 1,724 sewer manholes have been inspected (51.9% of total 3,578).
- 30,250 feet of interceptor sewers were inspected with CCTV, laser and sonar.
- 18,500 feet were smoke tested and 152 manholes inspected.
- 3,538 sewer manholes located (98.88% of total 3,578).
- 2,344 drain manholes located (unknown total number).
- 3,820 catch basins located (unknown total number).
- 45 buried manholes were raised to grade during this 6-month period.

The total length of combined sewer system has decreased by 42% since 2013 - from 71,097 linear feet to 41,242 linear feet. The goal is to have complete separation of the sewer and stormwater drain systems by 12/31/2030 at which point there would be no discharge of sewage into the environment.

As always please feel to contact us with any comments, questions, concerns or suggestions regarding the enclosed report.

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. The overall number of outstanding requests are up 6% from previous 2-week period, while new requests decreased by 20%. As the older requests continue to be completed and closed out, the average days to complete a new request is less than 15 days.

	<u>This period</u> <u>8/19/19 -</u> <u>9/01/19</u>	<u>Previous Period</u> <u>8/11/19 -</u> <u>8/25/19</u>	<u>Change</u>
Total Request Backlog	338	318	+20 (+6%)
New Requests	65	81	-16 (-20%)
- Completed	11	22	-11 (-50%)
- Open	54	60	-6 (-10%)
- Acknowledged	57	53	+4 (+7.5 %)
Average days to complete	13.5	19.8	-6.3 (-32%)

## ROADWAYS

DPW staff continued to improve and maintain the city's roadways and sidewalks through various on-going activities and projects.

### Traffic

Warning signs on Fisher Road were inspected. New curve ahead and equestrian crossing signs are being order for installation.

### Micro-Surfacing

Indus Inc., under the supervision of the Engineering Division, will be performing micro-surfacing next week. Expect traffic delays on the following roadways:

- Tuesday September 3<sup>rd</sup>
  - Upham Street from John Fitch Hwy to
  - Broad Street from River Street to Circle Street
  - Rindge Road from #1655 to T/L
- Wednesday September 4<sup>th</sup>
  - MacIntosh from
  - Cortland from
  - Rindge Road - 2<sup>nd</sup> layer
- Thursday September 5<sup>th</sup>
  - MacIntosh - 2<sup>nd</sup> layer
  - Cortland - 2<sup>nd</sup> layer
  - Upham - 2<sup>nd</sup> layer
  - Broad Street - 2<sup>nd</sup> layer

### Crack Sealing

Pavement contractors returned this week to continue crack sealing throughout the city. Our contractor has completed approximately 65% of the work so far and will continue to work throughout the city in the coming week.

Preventative Maintenance			
<b>Crack Sealing</b>			
Contractor: Superior Sealcoating, Inc			
	<u>Cost</u>	<u>Material</u> (gallons)	
Budget	\$75,000	8,000	
This week	\$13,000	1,500	
Total To Date	\$45,000	5,200	
Percent Complete	60%	65%	

### Corrective Maintenance

Pothole patching efforts continued this week with approximately 480 potholes<sup>1</sup> filled at various locations, including the following:

- Oak Hill Road,
- Grove Street,
- Spruce Street,
- Jeannette Street,
- High Rock Road,
- Causeway Street,
- Federal Street,
- St Camille Street

Sinkholes were repaired on High Street and Townsend Street.

### Sidewalks & Crosswalks

Engineering Division started design for ADA ramps and crosswalks at the following locations:

1. 350 John Fitch Hwy (DCU to Market Basket)
2. 855 John Fitch Hwy (apartment buildings to Coolidge Park)
3. 762 Water Street (WPKZ to La Reyna Bakery)

Inspected sidewalk defects on Myrtle Street. Old tree stumps need to be removed and sidewalks rebuilt at 76, 116, and 122 Myrtle Street.

Crosswalks and stop lines were painted the length of Lunenburg Street and side roads.

---

<sup>1</sup> Based on average pothole size of 3.5 inches depth and 1.5 foot wide by 1.5 foot long (volume of 0.66 cubic feet or 0.02 cubic yards)



Figure 1 - Crosswalks on Lunenburg St

### **Berms and Aprons**

Asphalt berms were installed at the following locations:

- Boylston Street
- High Rock Road
- Pearl Hill Road (platform - to be completed)
- Fifth Mass Pike (platform - to be completed)
- Cathy Street (platform - to be completed)

### **STORM WATER**

DPW completed the drain line installation on Seneca Street to alleviate water run-off onto the street.

Drain line was jetted out and cleaned at 546 Electric Avenue.

Catch basins were repaired on Upham Street and Arlington Street.

### **PARKS & RECREATION**

DPW crews continued to work on the new trail on Rollstone Hill alongside volunteers from the [Student Conservation Association](#) (SCA) crews. This was the last week volunteers from the SCA were in Fitchburg this year.

The north common was mowed and weeded. Main Street was cleaned of trash and debris.



Figure 2 - DPW Crews weeding the Common

Trees were trimmed at the corner of Water Street and Carey Street to increase visibility of electronic welcome message sign.

DPW crews completed the installation of new LED lights for Riverfront Park.

The J. Robert Crowley Swimming Complex and the Parkhill Park Splash Park closed for the season on August 25, 2019. The spray pad at Crocker Playground will remain open until the Parks Department schedules closure due to weather. The Crocker spray pad is not maned and is available from 8am - 7:30pm.

Concerts on the Common was cancelled on 8/25/2019 due to heavy rains prior to the event. During the rescheduling process the Goat Roapers withdrew from the series. The final Concert, "A Night of Zeppelin" is in the rescheduling process. The following Concerts have been rescheduled:

- Wednesday, Sept. 11 - Abraxas
- Wednesday, Sept. 18 - The Petty Project

The final Friday Night Movie Series screening was on Friday August 30, 2019. The Movie was "Space Jam" attendance was low and saw not more than 20 residents throughout the evening.

The Recreation Director met with representatives of the Pawlak Playground to discuss next steps in location and fundraising on Thursday August 29, 2019.

## CEMETERIES

The cemetery crews continued to maintain the grounds by mowing, trimming, cleaning graves and monuments, picking up litter and painting. In addition to routine maintenance and administration tasks, the following were completed:

Interments .....	2
Up righted monuments.....	3
Uncovered/cleaned flat monuments .....	10
Foundation marking for monuments.....	6
Catch basin repair .....	1
Filled sink holes.....	0
Trimmed Trees .....	9
Trimmed shrubs.....	0
Meeting with Families.....	8
Payments - invoiced/processed.....	7
Family Genealogy .....	2

The drainage project at Forest Hill Cemetery was completed this week.

## WASTE WATER

### Collection System

Sewer Division crews aided the School Department in locating and fixing a sewer issue at Crocker Elementary School. While technically the issue was on school property, DPW crews assisted in locating and vacuuming out a sewer manhole and coordinating with the School Department's contractor to clean out roots causing a back-up at the school. DPW raised the manhole grate to facilitate future maintenance of the system by the School Department.



Figure 3 - DPW crews at Crocker School

**WATER SUPPLY**

**Water Treatment**

Reservoir Levels as of 8-29-19			
Northern Reservoirs	Elevation below spillway		Southern Reservoirs
Fitchburg/Ashby	-1.30 feet	-0.44 feet	Meetinghouse
Scott	Full	-2.40 feet	Mare Meadow
Lovell	-2.49 feet	Full	Bickford
Water Filtration Plant Flows/Production for 8/22-8/29/19			
	Falulah Plant	Regional Plant	Totals
Raw Water Inlet (Gal)	9,239,000	28,505,000	37,744,000
Backwash to waste (Gal)	851,000	3,301,000	4,152,000
Finish Water - Treated & Distributed (Gal)	8,388,000	25,204,000	33,592,000

Transfer between reservoirs is currently under way. Mare Meadow is being pumped into Meetinghouse reservoir. Fitchburg Reservoir water is being transferred to Lovell Reservoir. Reservoir and spillways areas are being maintained and patrolled.

**Fire Hydrants**

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

- All fire hydrants except for two are operational in the city. The hydrant at Cushing Street by River Front Park is shut off because the water main is damaged.
- FWD crews repaired a hydrant at 56 West Street.
- FWD crews rebuilt hydrant at 570 Oak Hill Road.

**Water Distribution**

- Crews replaced 20 feet of 2-inch main on Beech Street Lane in preparation for Beech Street project.
- The Water Division received delivery of a new 2019 John Deere 410 backhoe loader. This piece of equipment will replace/supplement the Water Division’s 2007 JCB and 2002 Caterpillar loader backhoes whose reliability are beginning to diminish. This piece of equipment will ensure that Water Division personnel have a reliable piece of equipment when dealing with water system repairs.



## Meters

- Investigated zero/repeat readings and tampers discovered during monthly billing. New Neptune meters/MIUs (meter interface units aka electronic registers) are being installed whenever access is gained to a house/building (for any purpose, not just for investigation of zero usage).
- Inspected/sealed new meter installations by private contractors and installed MIUs (plumbers installed the meters and FWD personnel inspect the installation and install the MIU).
- Personnel completed the monthly reading of all water meters (11,000+) city-wide this week - two personnel two days.
- Tested the newly installed backflow preventer at the Lacava Pump Station, test data/sheet was forwarded to MA DEP as had been requested.
- Changed/installed a new 6-inch water meter at Fitchburg High School.

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

<b>Water Permits and Inspections</b>	
<u>Type</u>	<u>Number</u>
Emergency DigSafe Markouts	2
DigSafe Markouts	20
Inspections	3
Record Plan Updates	7
Curb Stops Services	3
Located/cleaned gate/curb boxes	3
Final Readings	18
Real Estate Closings	16
Meter Installs	14
Backflow Preventers Tested	4
Residential Appointments Made	0
Totals	74

## **ENGINEERING**

Engineering Division advanced the Beech Street project by holding an interdepartmental meeting with FFD, FPD, Health and Building Departments, and the Mayor and City Councilors. Concerns regarding encroachments, public safety and parking were discussed. A follow up site walk will be held to finalize design elements. A public hearing will be held in the neighborhood to discuss issues with concerned residents.

In preparation for the project, UNITIL Gas upgraded the gas main from LaFlamme Place to Pratt Street. Utility pole relocation is also on-going.

**Asset Management**

- StreetScan has completed its data collection of the city’s streets and is now collecting the sidewalk data. The street data will be processed and analyzed to determine the pavement condition using a Pavement Condition Index (PCI).
- DPW GIS intern is currently collecting data points for existing burial plots in Forest Hill Cemetery.

**Street Lighting**

- Inspected 12 street lights.

<b>Engineering Services</b>			
	<u>Type</u>	<u>Number</u>	<u>Fees</u>
<b>PERMITS</b>	Dumpster Permits		
	Excavation Permits		
	Driveway Permits		
	Sign Permits		
	Sewer Permits		
<b>INSPECTIONS</b>	Driveway Inspections	2	n/a
	Trench Inspections	3	n/a
	Site Inspections	14	n/a
	Dig-Safe requests	15	n/a
	Sewer/Drain Inspections	6	n/a
	Parcel Updates	15	n/a
	New Address Assignments	4	n/a
	Planning Reviews	4	n/a
	<b>Totals</b>	<b>63</b>	

**ADMINISTRATION**

A total of 141 invoices totaling \$192,009 were processed this week. Total payroll for the 8/24 to 9/6 period was processed for a total of \$244,657.

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	73	\$ 150,116	*Note 1	\$ 1,950		\$ 66,290
Cemeteries						\$ 12,133
Parks						\$ 7,212
Recreation	15	\$ 5,455				\$ 20,871
Water Supply	31	\$ 20,999				\$ 57,852
Waste Water	22	\$ 15,439	*Note 2	\$20,850		\$ 80,299
<b>Total</b>	<b>141</b>	<b>\$ 192,009</b>	<b>-</b>	<b>\$22,800</b>	<b>\$ -</b>	<b>\$244,657</b>
*1 - Engineering Permits		6				
*2 - Septage at East Plant (Gallons)		245,294				

- Submitted the Chapter 90 reimbursement request to MassDOT for Main St/Mt Elam Road paving. Request totals \$460,510.
- Attended meeting with the City's new insurance carrier.
- Sent out request for quotes for rental sand screening plant. Quotes are due to us by September 4th.
- Processed payroll for DPW/ Admin/Engineering. Linda Brousseau processed payroll for wastewater.
- Reviewed lots of invoices for both Admin/Engineering/Streets and Wastewater, coded and sent to Jennifer Brennan at the Senior Center to input for payment.
- Phones were very busy again this week as the water/sewer bills recently went out to customers. Most calls were complaints of higher than normal billings- there was a sewer rate increase and the billing period was drier than it had been in a very long time and more water was being used by individuals. There were also a lot of inquiries regarding sewer abatements for swimming pool fillings.