

**To:** Mayor William Martin  
**From:** Don Ouellette, P.E.  
DPW Director

Update # 26

**Date of Report:** February 28, 2017

**Period Covered:** January 27, 2017 to February 28, 2017

**Re:** Items of Interest

Highway Issues:

1) **Chapter 90**

We have completed the program for this year. (No Change)

2) **Nash's Mill Bridge**

It appears that we have cleared all the hurdles around article 97. We seem to have come to agreement on the utilities and the placement of the sidewalk. CHA has submitted the 25% plans to Mass Highways for review. I expect this review to take a couple of months and sometimes this summer we will have the public hearing for this project. The current schedule for this project is to advertise the work in March 2018 with the construction starting the summer of 2018

3) **Fixed Network Meter Program**

We are developing the presentation for this project which we have requested funding for Fiscal year 2018. The intention would be to start this project on or about July 1, 2017 and it is expected to be a two-year project. This program would replace 70% of the existing water meters. It would also install transmitters on 100% of the houses that would relay the water readings to a receiver which would collect the data for water meter readings. We just recently ran a report and found that 1900 meters are older than 25 years. We also found that 2886 meters were older than 20 years old. 4000 meters are older than 15 years. The expected life of a water meter is 12 to 15 years old depending on the amount of flow that has gone through this meter. The fixed network system is a proven technology that will save the town a substantial amount of money.

4) **Capital Equipment List**

We have been awarded the MIAA grant to do a Comprehensive Vehicle Study. The grant is 100% paid for by MIIA. The grant will be used to determine what vehicles we should have and what vehicles we should get rid of. It should also help us establish a long-term vehicle capital plan that makes sense. A draft of the study should be submitted to the town by February 27. The engineering firm doing this study is Weston and Samson. A draft copy has been submitted to the town with the final report due in March.

5) **Wiley Russell Dam**

This will be on next year's Capital Plan. We had a sewer leak at the siphon located on Meridian Street. To repair this leak we had to clear-cut a 25 foot swath of vegetation down to the river. By doing that we uncovered a lot of old rubble left from the sluice way. We are now working with conservation with the intent of cleaning up that entire area to make it safer. This is all part of an infrastructure that has been abandoned for 50 years but not removed. The siphon itself was in good shape however the manhole/chamber needed a lot of repairs. These repairs were completed and we have the siphon back online. We've added this to a five year cycle to be cleaned and inspected. This whole area needs a long-term plan/vision. (No Change)

6) **Trees and beautifications**

I have applying for both grants that were applied for last year. The first grant for approximately \$30,000 was from the DCR. This is a matching grant and will allow us to plant approximately 100 to 110 trees this year. I have been informed that we are still in the running for this grant but the planting will not happen until the Fall of 2017. The other grant is a Forest Tree Grant which will provide the town 300 trees a year for three years. Our only contribution required is to plant trees. The larger grant also provides for a project manager to assist in the dig safes and the coordination between the residences. I have been informed that we are currently ranked 20<sup>th</sup> for this funding. They are waiting on the actual Federal Aid for this program but they are hopeful that they can fund at least the top 15 projects. We may find out more by the end of March. If neither grant materializes we will plan on planting 50 trees this spring. I will use the 10 trees being donated by Eversource and purchase 40 trees from the Berkshire Gas donation. If we receive either grant in time for a fall planting the Mayor has stated that he will fund the matching portion of the grant from a reserve fund.

We have qualified for tree city USA for the 15<sup>th</sup> year in a row. Good job done by Janine Greaves and Paul Raskevitz.

7) **Maple Brook Culvert Sewer Repairs.**

We have delayed some of this work because we are working with MassDOT and the railroad to develop a solution for a portion of Maple Brook that is under the railroad tracks near Allen Street. Our first meeting with MassDOT was productive however nothing has been committed by MassDOT. The issue is the culvert at that location has a loose Keystone which should be repaired. We cannot repair this without coordination between MassDOT, the railroad and the town of Greenfield. We consider that the top priority, however there are some minor contracts to repair the floor in a couple of locations and to line a couple of thousand feet of sewer main that is located within the box culvert. With some luck some of these contracts will be executed in April depending on the weather.

8) **Rocky Mountain Water Tank Fence Replacement**

We have bid this project out and awarded the contract to Brodeur-Campbell Fence Company for a fee of \$12,690. This work will be delayed until the spring of 2017. We still need to install two small concrete slabs to seal off two openings that will no longer be in use. If the spring like weather holds we may be able to get the contractor in during the month of March.

9) **Silver Street Project**

The DPW had a bid opening for this project on February 16, 2017. The apparent low bidder was Allstate Construction Corporation. The bid price was approximately \$812,000 and the expected start date is sometime in April 2017. The date and the construction schedule will be determined after we can do conduct a preconstruction meeting. The notice of award has been issued.

10) **West Street Project**

While inspecting the sewer and drain pipes on West Street we found that the drain pipe is un-repairable and that the water main was installed in 1917. This has been submitted as a CDBG project for next summer. This is listed as a design project for the engineering department.

11) **Automated Sign Machine**

Completed very successful.

12) **Reconstruction of Wisdom Way**

A meeting was held September 2 with members of the FRCOG, Mass. Highway, Fuss and O'Neill and the Town Engineer Chris Stoddard. The discussion was how to get Wisdom Way listed as a TIP project. The state had originally ranked this as a 37 which was close. After the site visit they were convinced that this had a more regional impact. It also has the potential for a bike way. We would reduce the travel lanes to 10 feet to make this happen. We have heard back from Mass Highway that this project is being recommended to be added to the TIP. It still needs official approval from FRCOG and they seem excited about supporting this project. The funding for this project is very similar to the Nash's Mill Project in that we are responsible for the design and the construction costs will be paid by the State. Expect the design costs to be somewhere in the neighborhood of \$375,000-\$400,000. The construction cost for this roadway will be somewhere around 3 ½ million dollars to \$4 million. If we are aggressive and get this design completed we could possibly see this road completed in three years instead of five. The design money is on the Capital Plan for this year. (No Change)

13) **Shelburne Road Washout**

Nick Reinhart and I are looking at ways to repair this washout on Shelburne Road. We now think that we can do this project in-house with a couple of vendors. Our intent right now is to develop a plan using pre-built blocks such as Redi Rock to construct a new 16 foot high retaining wall. The challenges to this project is first build a firm foundation at the bottom of the ravine most likely a concrete footing pinned into the existing ledge and then to tie back into the ledge. The small box culvert also needs to be replaced. We will need a crane and operator to place the blocks and box culvert. Also a tracked excavator to do about half of the excavation. An Engineering Firm to develop a footing plan and a pinning system for the wall. Our rough estimates for this work, is about \$500,000. This estimate is only for the bad washout that happened in 2001. There are two other culverts that need to be repaired but we feel we can do this in-house. The entire road will have to be reclaimed and paved and my rough estimate would be another \$300-\$400,000 to complete everything. This work is very similar to work that I have done in other communities. The road would be closed for two

months. Borings were completed and this project is on hold until we receive either a grant or local funding.

14) **School Street Sidewalks**

The sewer lining work has been completed. The sidewalk and resurfacing work is still plan for next year.

15) **Clean-up at the Bendix site**

There are several large piles of debris located at this site. We are just beginning to assess the amount of work that needs to be completed. As soon as a Scope of Work is developed an RFP will be advertised for the removal of this material. (No change)

16) **Fuel Cards**

We have set the date to change over to the fuel cards as March 1, 2017. Once the existing tank is drained will begin the process to remove those tanks. We have submitted all of the data required to issue each vehicle its own credit card and we have developed a list of authorized drivers who will have a pin number assigned to each individual. Each time one of our vehicles gets fueled it will record the odometer reading, the driver, vehicle, date and time, and the dollar amount of the transaction. The town will receive a 12 cent per gallon discount and all of the federal and state taxes will be removed.

17) **DPW Yard Improvements**

The DPW yard has several improvements being proposed for this year. All of these projects require funding which is now going through the capital process. We are looking to upgrade the emergency generator, replace the blue storage building with a clear spanned storage building, add a 2000 ft.<sup>2</sup> office building for the DPW engineer's and admin staff and replace the above ground fuel storage pumps. A neighborhood meeting was held at the DPW yard.

18) **Consent Order from DEP**

Mark Holley and I met with DEP on 20 December to discuss the Consent Order from the DEP concerning our I/I issues. They were very impressed with our level of effort. We discussed the I/I status report that is required by December 31, 2016. That report was sent to the DEP on 29 December 2016. Will

19) **I/I Work**

We have sent out 838 I/I letters and received 401 call backs. Alan has completed 368 initial inspections. 196 sites were in compliance and 172 were not. 80 have come into compliance We have reimbursed \$27,855 to date. 276 properties are now in compliance out of 838 or 33%. We will send out the second letter in June after we verify that we have funding. Two years ago we had a maximum flow of 15 million gal /day. A year later we had reduced that to 12 to 13 million gallons per day. Over the last 12 months we have not had a flow over 8.5 million gallons per day. Some of this can be explained by the fact that we have had a drought

however since October we've had a fair amount of precipitation and outflows definitely have been reduced. Also when we hit the high of 8 million gallons per day it quickly subsided. We still have more work to do but we are getting some encouraging results.

20) **Capital Plan for FY 2018**

We have submitted the DPW requests and it is on the WEB page titled "as 5 Year Capital Plan FY 2018". This plan still needs to go through the approval process. Two projects from last year plan appear to be on the Transportation Improvement Program (TIP) list which means that 6.5 million will be removed off the total capital cost for the town. (No Change)

21) **Headwork Improvements**

Replacement of the head works at the Wastewater Treatment Plant. This has been bid out and we have a lead time for the new equipment of 22 weeks. We expected delivery in early January 2017, however this was delayed due to a miscommunication and the delivery of the equipment will not happen until mid May. Once the equipment is delivered we will start preparing the area for installing this new equipment. We are also working with Tighe and Bond to help develop a specification for the concrete and electrical work required for this project.

22) **Replacement of the three wastewater pump stations.**

Replacement of three wastewater pump stations, we had hoped that we could eliminate one of the pump stations; however the proposed design for the new library impacts our ability to eliminate that pump station so it appears today that we will have to replace all three. Two of those stations are designed, the Eastside pump station and Leyden Woods Pump Station. We are currently working on the electrical specifications which got complicated because the pump station at Tyler place does not have its own electrical wiring. It is currently powered through the fire station. We are currently working with Eversource to locate a new pole and service for Tyler place pumping station. Once this is approved all three pumping stations will be put out to bid. With the plans to relocate the fire station and the library it's important for us to establish this pumping stations own electrical service. The construction still should happen early spring as soon as the frost and the snow are gone.

23) **Two mechanical upgrades are in the works for the water and sewer treatment facilities**

The first was a new motor and variable speed drives were installed at the WPCF. This was a grant awarded by Eversource for a total of \$7800 and was completed February 28, 2017. With the new variable frequency drive and motors we should save approximately 37,500 and KWHs of electricity. At the Millbrook water pumping stations we have upgraded the pH controls replacing a 1987 controller. The new controller is to control the amount of lime that is added to the water to adjust the water pH. The old system regulated the amount of lime added to the system by volume of water whereas the new system adjusts the volume of lime according to the pH. In simple terms if the pH is too low this new controller will add lime. This change was initiated because the DEP made a strong recommendation for us to upgrade the system. This work should be completed in March or April of this year.

24) **We have awarded the crushing contract.**

The crushing contract was awarded to Split Excavating for \$60,000 and the work is expected to begin in April. The material crushed is expected to be used as gravel for future projects.

25) **Future focus**

The three wastewater treatment plant pump stations need to be bid out during the month of March. The construction on Silver Street should begin in early April. As a whole the DPW will be shifting from a winter operation to a spring cleanup during the month of March. We are converting to the fuel card system and hope that we have our diesel and gasoline tanks empty before the end of the month. It is our intent in either April or May to remove those two tanks. Snow removal or winter operations remain a top priority.