

## 08/11/11 Capital Improvement Plan Committee

Capital Improvement Plan Committee Meeting  
August 11, 2011 4:00 p.m.  
Minutes

Present: Leo Filion (Chairman), Rick McMenimen, Judith Ryan, Michael LaBranche, Don Parnell, and Diane Hardy. Ed Wojnowski, Town Administrator was present as well.

Absent: Peter Roy was excused.

Called to order: 4:00 p.m.

Adjourned: 5:00 p.m.

The minutes of the July 21, 2011 meeting were postponed until the next meeting to give everyone a chance to look at them.

Ed Wojnowski made copies of the water and wastewater studies for everyone to review in advance of the meeting. Sean Greig was present to give an overview of the reports and the recommendations.

- 201 Facilities Plan Update – Executive Summary and Sections 7,8 and 9 prepared by Underwood Engineers, Inc., October 10, 2010 -- This preliminary engineering report reflects recommendations for the new treatment plant in response to new nitrogen and phosphorous standards that are being instituted by the U.S. Environmental Protection Agency (EPA). It includes an analysis of alternative methods to achieve the standards and cost data for recommended improvements to the existing wastewater treatment facility. At this point, it is not clear what standards will be required for Nitrogen. Total effluent limits of 8, 5 and 3 mg/L are being considered. Three different systems were narrowed down for review. The recommendation is for what is known as the 4 stage Bardenpho, The cost is approximately \$15,430,000.

- Final Draft Report, Twenty Year Sewer Buildout Study, prepared by Underwood Engineers, Inc, February 15, 2011. – A sewer build out study was completed to more accurately identify probable areas of development and growth in the system and estimate the flows that will be received at the wastewater treatment facility within a twenty-year period. The current wastewater treatment facility handles 580,000 gallons per day. The anticipated twenty year flow based on this study is 905,000 gallons per day. This figure is well below the figure which was projected in the 2002 facility plan which projected the need for a 1.85 million gallon per day plant. The current plant is permitted for .85 million gallons per day. It is nearing the 80% design capacity. The reduction in the size of the plant will reduce the overall cost of the system by about \$2,000,000. The cost of the plant would be \$13,000,000 rather than \$15,430,000 as indicated above. The 201 Facility plan is currently being reviewed by the NHDES and will be revised based on the new data that has been generated.

Questions were asked about the two pump stations that need to be upgraded. For Creighton Street, the costs range from \$.6 M to \$1.2, which include at the lower end changing screens, the grinders and replacing the pump. It is noted as a priority. The Bay Road station upgrade involves installing a new pump and wet well, upgrading the existing pump and installing an emergency generator. Sean indicated that flow meters have been installed. He noted that there are high levels of inflow and infiltration (I & I) entering the system from the Mobile Home Park on Bay Road. If that could be dealt with the cost for the pump station upgrade could be lower because the flows to the lift station would be lower. Further study of this pump station is recommended. He explained there has been a major reduction in the flows in the Cedar Street area from 11,000 gallons per day to 5,000 gallons per day resulting from the sewer work that was done last year. The sewer system in the North Main Street area should be evaluated by television cameras to determine cracks and cross-connections in the system to determine how much I & I there is. We now have GIS mapping of the sewer system. Leo Filion stressed the importance of dealing with the I&I problem. Sean indicate that I&I can effectively reduce flows in the system by 30%.

The Committee turned to discussion of the water system. Sean Greig reported there are only 15 meters left to do, of the 19,000 that were slated to be replaced. The Town is finding there has been less water that is unaccounted for. Before the meters, twenty-six percent of the water was unaccounted for, now only 5% is unaccounted for. The engineering firm of Weston and Sampson has been working with the Town on development of the wells and Emery and Garrett has completed hydrogeological investigations and the required pump tests.

- The 2010 Weston and Sampson report calls for the development of the MacIntosh well as third water source as a back-up if one of the town's two shallow gravel-packed wells (the Bennett and Sewall wells) go down. At the Town meeting in May 2011, a \$3.3 bond issue to develop the MacIntosh well failed to get the required 2/3 vote. A public hearing has been held on a scaled back proposal to conduct a pilot study to determine whether treatment of the water is needed for the MacIntosh well to help address some of the questions that have been raised. This was voted down by the Town Council through a 6 to 2 vote. Sean gave a report on the status of permitting of the well. Before the Town can start pumping from the well, there has to be at least one year of monitoring of water levels in the area to create a baseline. This was a condition on the Groundwater Permit which has been issued from the NH DES.

- AECOM Town of Newmarket Water System Update and Capital Improvement Plan. The Town hired AECOM to develop a capital improvement plan for the water system. The recommendations include increasing the town's water supply, providing additional storage for equalization, fire fighting, and emergency supply, upgrading the transmission and distribution system, and upgrading existing facilities at the Sewall and Bennett Pump Station. Judith Ryan stated that she thought improvements to the existing well related to correcting electrical violations should be a high priority for the safety of the employees who work at those facilities. Sean Greig mentioned that he had received word from the NH DES that they would be willing to provide a 20% loan forgiveness on a 2.8% interest loan package through the State revolving loan fund if the Town does both the water storage tank and transmission line at the same time, which would translate into a \$600,000 grant. If they do just the water line only, they would only be able to secure a 3.56% loan through the NH Municipal Bond Bank. The Town should seize this opportunity.

The next CIP meeting will be August 25, 2011 to consider the requests of the wastewater and water department, at which time Sean Grieg will be invited back to meet with the committee.

Don Parnell gave members of the committee copies of the Report of Trust Funds and answered related questions.

Adjourn

#### Action

Motion: Rick McMenimen made a motion to adjourn at 5:00 p.m.

Second: Diane Hardy

Vote: All in Favor