

CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE REPORT

WEDNESDAY, FEBRUARY 19, 2014

Present: Ald. Crossley (Chairman), Albright, Salvucci, Gentile, Crossley, Danberg, Laredo and Lappin

Absent: Ald. Lennon

Also present: Ald. Baker, Fuller, Hess-Mahan, Lipof, Norton, Leary, Sangiolo and Yates

#31-14 NSTAR ELECTRIC petitioning for a grant of location to install and maintain 587' ± of conduit in VARICK HILL ROAD from Manhole #20340 at the intersection of Varick Road and Varick Hill Road in a southwesterly direction to new Manhole #29800 continuing to new Manhole # 29801 at 44 Varick Hill Road. (Ward 5) [12/26/13 @ 10:35 AM]

ACTION: **APPROVED 6-0 (Gentile not voting)**

NOTE: NStar Permit Representative Maureen Carroll presented the petition for a grant of location to install approximately 587' of conduit and two new manholes in Varick Hill Road. The installation of the conduit and manholes are already complete. Shortly after NStar submitted the petition to replace the old, unreliable direct bury system in Varick Hill Road there was a power outage. In order to repair a direct bury system, NStar must open the roadway until they find the issue causing the outage. Although NStar did not have approval for the grant of location, it was in NStar's and neighborhood's best interest to replace the direct bury system with a conduit system instead of repairing the direct bury system to avoid opening the roadway twice.

The public hearing was opened and no one spoke for or against the petition. Ald. Albright moved approval of the petition, which carried unanimously.

#131-13 ALD. CROSSLEY, FULLER, SALVUCCI, JOHNSON, CICCONE requesting periodic updates and discussion, at the discretion of the members of the Public Facilities Committee or the Commissioner of Public Works, on the condition functioning, operations and management of all elements of the City sewer, water and storm water systems including the following:

- Water meters
- Implementation of the ten project area strategic plan to remove infiltration in the City sewer system
- Implementation of the long range strategic plan to repair and replace City water mains, especially to correct for fire flow
- Status of the City's Private Inflow Removal Program to resolve and disconnect illegal storm water connections to the City sewer system
- Current billing practices

- Rates analyses needed to facilitate an informed comparison of billing options to include the following options either alone or in combination: seasonal rates, second meters, tiered rates, frequency of billing, low income credits. [03/23/13 @ 11:13 AM]

ACTION: **HELD 7-0**

NOTE: Docket Item #153-13 and #131-13 were discussed in conjunction. The focus of the discussion was on possible revisions to the water/sewer rate structure. Commissioner of Public Works David Turocy began the discussion with the attached PowerPoint presentation. The Commissioner explained the largest issue for a number of residential ratepayers is that they are paying sewer fees on water that is used outdoors, such as irrigation water. The City bases sewer fees on the amount of water used by each property. Therefore, the City's sewer revenue is partially derived from water that does not necessarily enter the sewer system. Of the approximately \$30 million needed to pay the Massachusetts Water Resource Authority (MWRA), and fund maintenance, operations and repairs, between \$4 and \$5 million is generated on the basis of outdoor water use. A restructure of the rates would intend to correct this perceived inequity.

The City fully funds the water and sewer operations through its separate enterprise funds. All operation costs, capital improvement projects and funds for the MWRA assessments for water and sewer are generated through the water and sewer rates. If the City changes its water and sewer rate methodology, the City would need to raise the sewer rates to capture the lost \$4 to \$5 million from outdoor water use revenue. The City currently bills for water and sewer through an incrementally three- tiered rate structure based on the number of hundred cubic feet (HCFs) of water used. The City charges higher rates for greater usage.

The Administration would like to create a rate structure that both charges equitably for services rendered and that raises sufficient revenue to cover the cost of doing business. The Administration considered two options to meet these goals, 1) second water meters for outdoor usage with water billing only and 2) a winter-based sewer fee, to meet those goals. After weighing the pros and cons of each option, the administration decided to recommend a winter-based sewer rate. Although a second water meter would provide the most accurate measurement of outdoor water use, there are drawbacks to this system:

- Uncertainty in estimating the number of second meters that may be installed each year.
- Public Works Department estimated an average \$1,000 cost to purchase and install second water meters.
- Inequity in model: for some residents the costs of a second water meter may be a problem or not make financial sense. However, these folks will pay increasing sewer rates needed to meet the revenue requirements.
- The City will need to inspect and approve a possibly large number of requests in a timely way.
- There is an administrative cost in billing and inspecting.

The winter-based rate method uses an average of sewer use over several winter months to determine the yearly sewer fee for all property owners. Using the winter-based fee method would eliminate from the sewer fee a majority of that which is based on outdoor water use. There would be no installation cost to property owners or additional costs for meter readings and billing. The City could institute the winter-based sewer rate method immediately, and it would affect all users. However, there are some cases where resident use and occupancy are inconsistent that would require special attention. The Administration has solved most of these through various algorithms, except it remains unclear how to locate and charge property owners who do not spend the winter months in Newton. The winter-based sewer rate system is being used in Northbridge, and Arlington is implementing it in 2016, and as well, a number of communities outside of Massachusetts use this method to create a more equitable sewer billing process for property owners. The administration feels that the winter-based method is the most equitable and best option but would like input from the Board of Aldermen.

Chief Financial Officer Maureen Lemieux provided a presentation (attached) that included a model of how the winter-based rate method would affect property owners' bills. The administration used a control group to illustrate the impact on the sewer fees if the City were to implement a winter-based fee method in a five tiered model. One illustration assumed rate setting that showed approximately half of Newton's property owners would see either a decrease or no change in their sewer bill. The Chief Financial Officer stated that it is important to note that if the model is accurate, the illustrated impact on the fees would be very similar to the fee impact if 100% of property owners installed a second water meter and were charged only a water bill for outdoor water use.

The City recently received the preliminary MWRA assessment for water and sewer. The City's work to reduce inflow and infiltration in the sewer systems has been rewarded by a much lower rate increase than the majority of MWRA communities. The MWRA preliminary assessment shows an increase of only 0.2% in the sewer assessment. Continued implementation of the strategic plan to restore both the water and sewer systems requires a 3.9% increase in the water/sewer rates regardless of whether or not the City implements winter-based rates or a second water meter option.

The Administration is considering proposing a five-tier rate structure that includes a micro tier for both very low and very high-end water and sewer users. Examples of both the three-tiered and five-tiered water and sewer rates by HCF consumption are attached. Every property owner starts in the lowest tier at the lowest rate but as a property owner's water and sewer HCFs increase, they move up the tiers. Aldermen asked to see an analysis of how many households would fall into each tier in both the three- and five-tier system. Aldermen questioned the rationale being used to determine the rates assigned to each tier and felt this is important not only to balancing the budget but also to be fair to low users and encourage water conservation. It was suggested that the Administration consider developing a discount program for water and sewer bills for residents who qualify for financial assistance.

Several Aldermen voiced concern that the winter-based fee system is another way of estimating bills and that recent City history estimating bills was problematic and controversial.

There was also concern that it was a complicated system compared to the second water meter option and would be difficult for the City to explain to citizens. Others questioned whether the fixed costs in the system would be accurately distributed. Chief Finance Officer Maureen Lemieux made it clear that the second water meter option could still be implemented. The implementation of second water meters would take place at the earliest on January 1, 2015.

There were a number of questions from the Aldermen related to both the second water meter option and winter-based sewer rates, which are attached. Ald. Albright moved hold on both items for further discussion. The motion for hold carried unanimously. The Administration will provide the requested information in a month. The Chair asked the Aldermen to forward any additional questions to the Committee Clerk.

#153-13 PUBLIC FACILITIES COMMITTEE requesting periodic updates on the progress of the citywide storm water system assessment needed to define the scope of repairs to the system, as well as methods of financing the assessment and an accounting of the storm water enterprise fund. [04/02/13 @ 11:02 AM]

ACTION: **HELD 7-0**

NOTE: See above note.

REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#51-14 HIS HONOR THE MAYOR requesting authorization to appropriate the sum of five hundred thousand dollars (\$500,000) from Free Cash for the purpose of covering the costs of snow and ice removal in the Public Works Department's Budget. [02/10/14 @ 6:47 PM]

ACTION: **APPROVED 7-0**

NOTE: Public Works Commissioner Turocy presented the request for \$500,000 from Free Cash to supplement the snow and ice accounts within the Department of Public Works. If the request is approved, the City will have appropriated \$3.775 million for snow and ice. At this point, the Department of Public Works has actually spent \$4.6 million on snow and ice removal for eight plowing events and other snow and ice operations; therefore, there is a shortfall of \$325,000. Commissioner Turocy expects that the Administration will be making an additional request for funds in the near future. Chief Financial Officer Maureen Lemieux added that she expects that there will be a request to amend the item to increase it by at least \$325,000, when the Finance Committee discusses the request. There is still an additional \$500,000 remaining in Free Cash dedicated to snow and ice removal and over \$500,000 in the Inclement Weather Fund.

Commissioner Turocy provided information on the City's salt supply. The salt sheds are half-full and the Public Works Department has not had a difficult time obtaining salt, which the Commissioner attributes to the fact that the City is a very good customer and will take deliveries at any time. With that, Ald. Salvucci moved approval.

REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES

#52-14 HIS HONOR THE MAYOR requesting authorization to appropriate and expend six million one hundred twelve thousand two hundred ninety-six dollars (\$6,112,296) from bonded indebtedness for the replacement of Fire Station #10, a training area and a new Wires Division Building at 755 Dedham Street and a temporary facility. [08/04/09 @ 4:29 PM]

ACTION: **APPROVED 7-0**

NOTE: Project Manager Alex Valcarce and Fire Chief Bruce Proia joined the Committee to discuss the request for \$6,112,296 for the construction of a new Fire Station #10. The project went out to bid in December with no changes to the schematic design since the site plan approval. The building façade will be brick. Seaver Construction was the low bid on the project and was awarded the contract. The \$6,112,296 will include the costs of the construction, Clerk of the Works, soft costs, commissioning, construction, temporary housing, furniture and equipment. There is a 4% contingency built into the project costs. The funding request also includes the cost of a drafting tank and a confined space training area at the Dedham Street location.

The total budget for the project is 5% higher than estimated in June 2013. Construction costs have been escalating recently due to a better economy. As a result, the bid came in slightly higher than anticipated. However, there is no way to know if the project will truly come in higher than estimated until the project is complete. The Public Buildings Department monitors the fluctuations in costs of building material and labor but it is difficult to project when increases will occur.

The Public Building Department sent notices regarding the project to both the abutters of the temporary fire station site and the abutters to Station #10 on Dedham Street. The construction of the temporary station at Nahanton Park is expected to begin in late March. As soon as that is complete, the firefighters and equipment will be moved to Nahanton Park and demolition and construction of the new station will begin.

Some of the early site work such as clearing and utility work has been started for the temporary station. The Public Buildings Department is working with the Traffic Division of the Department of Public Works to install the required traffic lights at Nahanton Park. The purchase of the traffic lights will be funded by the Department of Public Work, as they used the traffic lights that were purchased as part of the renovation of Station #7 on Elliot Street.

The City is still in the Article 97 process but it should be complete in the near future. The Executive Office of Energy and Environmental Affairs recently signed off on the Article 97 and the legislature has assigned it a Bill Number. There is no reason that it will not be approved. The City can occupy the land at Nahanton Park for six months without an Article 97 approval from the State.

There were questions regarding a City tool house located in Nahanton Park. As part of a Memorandum of Understanding with the Parks and Recreation Commission, the Public

Buildings Department will discontinue use of the existing tool house located within Nahanton Park once the construction of the temporary fire station is completed. In addition, the Administration is required to provide a Phase 1 environmental review of the tool house and surrounding land and remediate any oil, asbestos, and hazardous materials. The MOU contains a requirement that the Public Buildings Department stabilizes the exterior of the tool house until the Parks and Recreation Commission determines whether to restore or demolish the building.

Ald. Lappin moved approval of the item, which carried unanimously.

Respectfully submitted,

Deborah Crossley, Chairman



Utilities – Water/Sewer/Stormwater

FY 15 Rate Structure

Proposed Revisions

Irrigation Water - Sewer Fees



- #1 Issue with Residential Rate Payers
 - Upset at Perceived Inequity
 - Ongoing Debate for 15 years
- Sewer Revenue derived in part from water that does not go into the sewer (\$4M-\$5M)
- Irrigation users subsidizing other sewer rate payers

Irrigation Water Assessed Sewer Fees



- All rate payers should be charged for services rendered.
- Fees should reflect actual cost of doing business.
- Two options considered
 - 2nd (Irrigation) Meter
 - Winter-Based Sewer Fee

2nd (Irrigation) Meter



○ Pros

- ✦ Cleanest, most accurate measure of irrigation water to eliminate associated sewer fee

○ Cons

- ✦ Cost (~\$1,000) Purchase/Installation
- ✦ Time to install meters city-wide
- ✦ Additional Reading/Verification/Billing/Replacement
- ✦ Some residents will never participate

Winter-Based Sewer Fees



○ Pros

- ✦ Eliminate majority of irrigation water
- ✦ No cost to install
- ✦ No additional operations/billing
- ✦ Institute immediately
- ✦ Affects all irrigation users

○ Cons

- ✦ Not a direct measurement of irrigation
- ✦ Exceptions for absentee owners

Account	Total Bill W. 3.9%	Variance	Percent	Variance W Condo Factor
Account A	\$ 2,485	\$ (914.75)	-38.25%	\$ (914.75)
Account B	\$ 1,985	\$ (472.13)	-24.71%	\$ (472.13)
Account C	\$ 2,475	\$ (464.37)	-19.50%	\$ (464.37)
Account D	\$ 3,744	\$ (324.54)	-9.01%	\$ (324.54)
Account E	\$ 2,113	\$ (252.35)	-12.41%	\$ (252.35)
Account F	\$ 1,420	\$ (142.29)	-10.41%	\$ (142.29)
Account G	\$ 1,422	\$ (94.43)	-6.90%	\$ (94.43)
Account H	\$ 501	\$ (57.84)	-11.99%	\$ (57.84)
Account I	\$ 658	\$ (8.52)	-1.35%	\$ (8.52)
Account J	\$ -	\$ -		\$ -
Account K	\$ 1,742	\$ 9.72	0.58%	\$ 9.72
Account L	\$ 531	\$ 120.47	23.58%	\$ 120.47
Account M	\$ 1,488	\$ 151.24	10.56%	\$ 151.24
Account N	\$ 1,289	\$ 163.18	13.16%	\$ 163.18
Account O	\$ 777	\$ 210.98	28.23%	\$ 210.98
Account P	\$ 1,192	\$ 222.99	19.44%	\$ 222.99
Account Q	\$ 870	\$ 245.52	29.33%	\$ 245.52
Account R	\$ 1,321	\$ 255.71	20.12%	\$ 255.71
Account S	\$ 1,235	\$ 310.68	26.15%	\$ 310.68
Account T	\$ 2,477	\$ 497.46	20.87%	\$ 497.46
Account U	\$ 2,023	\$ 608.80	31.26%	\$ 608.80

WATER 75+
 Period for 6/1/2012-5/31/2013

Account	Land Use	Condo Units	Sewer Charge	Consumption	Tier 1 Usage	Tier 2 Usage	Tier 3 Usage	Average Consumption	New 0-10	11-25	26-50	51-75	75+	Annual Total B
Account A	101	0.00	1423.94	158	72	86	0	39.5	40	60	58			1,054
Account B	101	0.00	1137.75	128	71	57	0	32	40	60	28			829
Account C	101	0.00	1418.83	157	79	78	0	39.25	40	60	57			1,047
Account D	101	0.00	2280.41	286	70	72	144	71.5	40	60	100	86		2,057
Account E	101	0.00	1210.94	137	80	57	0	34.25	40	60	37			897
Account F	101	0.00	813.94	96	77	19	0	24	40	56				594
Account G	101	0.00	815.14	95	72	23	0	23.75	40	55				588
Account H	132	0.00	287.35	35	35	0	0	8.75	35					214
Account I	101	0.00	377.14	46	46	0	0	11.5	40	6				282
Account J	104	0.00	0.00	0	0	0	0	0	0					-
Account K	101	0.00	998.26	115	79	36	0	28.75	40	60	15			732
Account L	101	0.00	304.21	37	37	0	0	9.25	37					226
Account M	109	0.00	852.77	100	80	20	0	25	40	60				619
Account N	101	0.00	738.79	88	79	9	0	22	40	48				544
Account O	101	0.00	445.13	54	54	0	0	13.5	40	14				332
Account P	101	0.00	682.78	82	73	9	0	20.5	40	42				507
Account Q	101	0.00	498.42	61	61	0	0	15.25	40	21				375
Account R	101	0.00	757.02	90	78	12	0	22.5	40	50				557
Account S	101	0.00	707.63	85	79	6	0	21.25	40	45				525
Account T	101	0.00	1419.53	158	80	78	0	39.5	40	60	58			1,054
Account U	101	0.00	1159.82	131	80	51	0	32.75	40	60	31			852

Current Rates \$ 5.84 \$ 7.00 \$ 8.41
 3.9% increase \$ 6.07 \$ 7.27 \$ 8.74

Total Consump 3,136,434

Tota 1255153 913459 346633 97872 523317
 New \$ 6.10 \$ 6.25 \$ 7.50 \$ 8.00 \$ 9.50

Reve \$7,656,433 \$5,709,119 \$2,599,748 \$782,976 \$4,971,512

FY 1 \$21,719,787
 FY 1 \$21,039,750
 Variance (\$680,037)

per user	SEWER					TOTAL SEWER	Total Bill per 1/4
	New Tie 0-10	11-25	26-50	51-75	75+		
	Period for 11/1/2013-1/31/2014 consumption						
Account A	10	1	0	0	0	44 \$	129
Account B	10	4	0	0	0	56 \$	171
Account C	10	9	0	0	0	76 \$	241
Account D	10	15	1	0	0	104 \$	341
Account E	10	9	0	0	0	76 \$	241
Account F	10	4	0	0	0	56 \$	171
Account G	10	5	0	0	0	60 \$	185
Account H	5	0	0	0	0	20 \$	58
Account I	8	0	0	0	0	32 \$	92
Account J	0	0	0	0	0	0 \$	-
Account K	10	10	0	0	0	80 \$	255
Account L	9	0	0	0	0	37 \$	106
Account M	10	10	0	0	0	80 \$	255
Account N	10	8	0	0	0	72 \$	227
Account O	10	4	0	0	0	54 \$	164
Account P	10	8	0	0	0	72 \$	227
Account Q	10	5	0	0	0	60 \$	185
Account R	10	10	0	0	0	80 \$	255
Account S	10	10	0	0	0	80 \$	255
Account T	10	15	10	0	0	140 \$	480
Account U	10	15	8	0	0	131 \$	445

Current \$	8.60	\$	10.33	\$	12.40
3.9% ir \$	8.94	\$	10.73	\$	12.88
Total I	283759	Economy	141346	Average	9946
New R: \$	11.50	\$	14.00	\$	17.00
Revent	\$3,263,231	\$1,978,845	\$442,801	\$169,087	\$1,709,128

Total Consump.
2,234,284

FY 15: \$30,252,367.90

Variance \$ (1,452,367.90)

FY14 S \$28,800,000

Revent \$4,896,000