

THE STATE OF NEW HAMPSHIRE

CHAIRMAN
Martin P. Honigberg

COMMISSIONERS
Kathryn M. Bailey
Michael S. Giaimo

EXECUTIVE DIRECTOR
Debra A. Howland



PUBLIC UTILITIES COMMISSION
21 S. Fruit Street, Suite 10
Concord, N.H. 03301-2429

TDD Access: Relay NH
1-800-735-2964

Tel. (603) 271-2431

FAX (603) 271-3878

Website:
www.puc.nh.gov

NHPUC 12SEP18PM12:55

September 12, 2018

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429

Re: DW 18-022 – Pennichuck Water Works, Inc.
2018 Qualified Capital Project Adjustment Charge ("QCPAC")
Staff Recommendation for Approval of 2018 QCPAC Surcharge and
2018 QCPAC Budget

Dear Ms. Howland:

The purpose of this letter is to recommend that the Commission approve a QCPAC surcharge for Pennichuck Water Works, Inc. ("PWW" or "Company") of 1.69% effective for bills rendered 30 days after April 4, 2018. Staff also recommends that the Commission approve a 2018 QCPAC budget for PWW in the amount of \$9,142,095.

Background

On February 16, 2018, PWW filed a petition for approval of its 2018 QCPAC surcharge as well as its 2018 QCPAC budget. The Company's petition was accompanied by the direct testimonies of Donald L. Ware, PWW's Chief Operating Officer, and John J. Boisvert, PWW's Chief Engineer. PWW's filing also contained various schedules and other attachments including its estimated QCPAC budgets for 2019 and 2020 which were provided for informational purposes. On February 22, 2018, the Office of the Consumer Advocate ("OCA") filed a notice of participation in this docket in accordance with RSA 363:28. There are no other intervenors in this case.

PWW's filing was made in accordance with the QCPAC mechanism approved by the Commission in Order No. 26,070 (November 7, 2017) in docket DW 16-806, the Company's last rate proceeding. In November of 2017, PWW filed for approval of its

2017 QCPAC budget in docket DW 17-179. By Order No. 26,128 (May 3, 2018), the Commission approved the Company's 2017 QCPAC budget in the amount of \$5,266,000.

PWW's petition in the instant proceeding requested approval of a 1.62% surcharge to customer bills in order to recover additional revenues of \$509,173, including \$378,635 relative to debt service and \$130,538 in property tax expense associated with actual 2017 capital expenditures totaling \$5,291,409. PWW's petition also requested approval of its proposed 2018 QCPAC budget in the amount of \$12,054,400. The 2019 and 2020 QCPAC budgets submitted by PWW for informational purposes totaled \$12,002,800 and \$9,953,400, respectively.

Subsequent to the receipt of PWW's filing and in accordance with the procedure approved by the Commission in Order No. 26,070, Staff filed a proposed procedural schedule for this docket with the Commission on March 30, 2018 which was approved by Secretarial Letter on April 6, 2018. Staff propounded three sets of discovery to PWW to which the Company provided responses. On July 11, 2018, PWW, Staff, and the OCA met in a technical session which resulted in an additional round of discovery from Staff to the Company, to which PWW also responded. During the course of discovery, Staff also conducted an audit of the Company's 2017 capital expenditures which resulted in the issuance of a final audit report dated May 3, 2018. Additionally, Anthony Leone, Utility Analyst in the Gas-Water Division, and Joseph Vercellotti, Utility Engineer in the Safety Division, also reviewed PWW's filing and submitted reports containing their findings and recommendations in this docket. Copies of PWW's discovery responses, Staff's audit report, and the respective reports of Messrs. Leone and Vercellotti are attached to this correspondence.

2018 QCPAC Surcharge

As stated previously, PWW's petition originally requested approval of a 1.62% QCPAC surcharge on customer bills in order to collect \$378,635¹ in debt service and \$130,538 in property tax expense relative to 2017 capital additions totaling \$5,291,409. However, during the course of discovery in this proceeding, various adjustments were made relative to these elements used in computing the 2018 QCPAC surcharge which are further detailed below.

Cost of 2017 Capital Projects:

With regard to the total cost of PWW's 2017 capital additions originally reported as \$5,291,409, the Company's response to Staff Data Request 3-10 indicated that it had inadvertently excluded from its original filing \$767,357 associated with its Amherst Street project which was financed by a State Revolving Fund (SRF) loan. With the addition of this expenditure, PWW's 2017 QCPAC capital additions now total

¹ Actual debt service of \$344,214 x 1.1 debt service coverage requirement = \$378,635.

\$6,058,766 (\$5,291,409 + \$767,357). Following, is a detailed comparison of PWW's revised actual 2017 capital expenditures as compared to the budgeted amount approved in Commission Order No. 26,128 in DW 17-179:

<u>Description</u>	<u>Budget per DW 17-179</u>	<u>Actual per DW 18-022</u>	<u>Variance</u>
General Projects	\$ 864,270	\$1,348,660	\$ 484,390
Nashua and Amherst Paving	412,789	306,978	(105,811)
Amherst Street Main Replacement	856,000	935,788	79,788
City Sewer Projects	560,643	773,383	212,740
Main Street Main Replacement	837,599	783,783	(53,816)
NHDOT Route 101 Widening	172,100	259,870	87,770
Information Technology	826,842	946,811	119,969
Miscellaneous Equipment	735,757	703,493	(32,264)
Total	<u>\$5,266,000</u>	<u>\$6,058,766</u>	<u>\$ 792,766</u>

Staff asked a number of questions during discovery to obtain explanations for noted variances pertaining to specific 2017 capital projects. Based on PWW's responses to Staff's discovery, following are certain explanations relative to the larger variances indicated above regarding the General Projects, City Sewer Projects, and Information Technology categories:

General Projects

- Raw Water Transmission Main Project – Variance: \$176,829. Per the Company's response to Staff Data Request 3-8, this variance relates to various project related costs that were generated internally, such as, internal engineering, labor, overhead, and AFUDC. By virtue of the fact these expenditures are generated internally, they are ineligible for SRF financing.
- Howard Street Emergency Main Replacement – Variance: \$106,838. Per the Company's response to Staff Data Request 3-13, this project was added during the spring of 2017 but was inadvertently excluded from PWW's Interim QCPAC filing (DW 17-179).
- Sweet Hill Supplemental Well Project – Variance: \$83,831. Per the Company's response to Staff Data Request 3-11, this was originally planned as a 3-year project totaling \$252,400, with the 2017 portion being \$80,000. However, the entire project was completed during 2017 at a reduced total cost of \$163,831.
- St. Joseph's Land Purchase – Variance: \$69,790. Per the Company's response to Staff Data Request 3-15, in 2014, PWW negotiated the purchase of three parcels of property from St. Joseph's hospital for the purpose of watershed protection for its primary source of supply. However, the hospital was not able to obtain clear title to the properties until 2017, after which, PWW was able to close on the purchase of the lots.
- Hi-Lo Generator – Variance: \$47,332. Per the Company's response to Staff Data Request 3-14, this item relates to the replacement of a failed generator which occurred in the late fall of 2017.

City Sewer Projects – Variance: \$212,740. In its response to Staff Data Request 3-12, PWW explained that this variance resulted from a combination of items.

- The Company inadvertently excluded the Gillis Street project from the Interim QCPAC filing (DW 17-179) in the amount of \$71,987.
- The final paving related to the Lowell Street project, which was originally anticipated to occur in 2018, was actually completed during 2017, resulting in a cost increase of \$39,065.
- The remaining \$101,688 is related to project change orders caused by unanticipated field conditions as well as the timing and impact of permanent pavement versus temporary pavement.

Information Technology

- Network Infrastructure Project – Variance: \$113,424. Per the Company's response to Staff Data Request 3-17, the network infrastructure that was upgraded was either no longer supported or was scheduled to be unsupported by the manufacturer during 2018. This project was originally part of the Company's 2018 capital expenditure plan, but was moved to 2017.

Mr. Leone's report stated that a Staff audit was conducted relative to the original amount of 2017 capital projects proposed by PWW in the amount of \$5,291,409. The related Staff Audit Report, dated May 3, 2018, indicated that there were no exceptions found relative to the underlying costs of those projects. Mr. Leone's report also stated that when Staff became aware of the additional project costs related to the Amherst Street SRF project in the amount of \$767,357, he examined PWW's supporting documentation related to these additional costs and also found no exceptions.

Debt Service on 2017 Capital Projects:

With regard to the debt service on PWW's 2017 capital additions originally submitted as \$378,635, this amount was based on an estimated interest rate, at the time of filing, of 5.00% relative to the Company's 2018 bond financing which was approved by Commission Order No. 26,101 (February 2, 2018) in DW 17-183. Subsequently, PWW notified the Commission that it had closed on the 2017 capital project portion of this financing at an interest rate of 4.898453%.² However, this interest rate is only applicable to the financing on the 2017 capital projects as originally submitted in the amount of \$5,291,409, resulting in an annual debt service payment of \$340,240.³

As stated previously, the Company's response to Staff Data Request 3-10 indicates that it is necessary to include in its list of 2017 capital projects an additional amount of \$767,357 associated with its Amherst Street project which was financed by an SRF loan. The Company's response to Data Request Staff Tech – 1 states that the interest rate on this loan is 2.464% and its response to Data Request Staff Tech – 2 states

² See PWW's letter with attachment to the Commission in this docket dated March 28, 2018.

³ Ibid.

that the resulting additional annual debt service on this loan, less principal forgiveness, is \$25,178.

The resulting total annual debt service related to PWW's revised 2017 capital projects is \$365,418 (\$340,240 + \$25,178). When this amount is multiplied by the 1.1 debt service coverage requirement approved as part of the QCPAC mechanism, the debt service component included in the 2018 QCPAC surcharge becomes \$401,960 (\$365,418 x 1.1).

Property Tax Expense on 2017 Capital Projects:

With regard to the property tax expense on PWW's 2017 capital additions originally submitted as \$130,538, Mr. Leone's report states that as a result of the Staff audit that was conducted, an error was found in the calculation of this amount. As such, the amount of property tax expense associated with the 2017 capital additions was reduced by \$8,459 to an amount of \$122,079.⁴ With regard to the \$767,357 Amherst Street SRF Project discussed previously, PWW's revised schedules indicate this addition does not result in any additional property tax expense for purposes of calculating the QCPAC surcharge.

Calculation of 2018 QCPAC Surcharge:

Based on the above, the total revised amount that PWW is seeking to recover through the QCPAC mechanism is \$524,039 consisting of a \$401,960 debt service component and a \$122,079 property tax expense component associated with the Company's revised 2017 QCPAC capital additions totaling \$6,058,766. In order to determine the appropriate QCPAC surcharge percentage to be applied to customers' bills, the total amount being sought for recovery via the QCPAC mechanism needs to be divided by an appropriate amount related to PWW's last approved revenue requirement from its last rate proceeding, DW 16-806. In that proceeding, the Commission approved a total revenue requirement for PWW of \$31,496,787.⁵

Per PWW's original filing, the Company derived its original proposed QCPAC surcharge percentage of 1.62% by dividing the calculated QCPAC recovery amount by the entire approved revenue requirement from DW 16-806. However, Staff noted from Mr. Ware's testimony, that the QCPAC surcharge does not apply to the fixed charges associated with the Company's special contracts with Anheuser-Busch, the Town of Hudson, and the Town of Milford.⁶ In PWW's response to Data Request Staff Tech – 9, the Company confirmed that the fixed contract charges associated with these three special contracts should be deducted from the Company's approved revenue requirement from DW 16-806 in order to determine the appropriate QCPAC surcharge percentage to be applied to customer bills. PWW further indicated that the specific amount to be deducted

⁴ See Audit Issue # 1 of Staff's Final Audit Report in this docket, dated May 3, 2018.

⁵ See Commission Order No. 26,070 (November 7, 2017).

⁶ See Ware testimony at PWW0018, lines 3 – 5.

should be \$485,230.⁷ As such, the Company's last approved revenue requirement as adjusted becomes \$31,011,557 (\$31,496,787 - \$485,230). Therefore, the re-calculated 2018 QCPAC surcharge percentage based on the Company's eligible 2017 capital expenditures is 1.69% ($\$524,039 \div \$31,011,557$).

Staff calculated the projected monthly rate impact of the proposed QCPAC surcharge. For an average single family residential customer using 8.58 ccf of water and paying a rate charge of \$53.98 per month, the QCPAC surcharge will result in an additional \$0.91 ($\$53.98 \times 1.69\%$) in their monthly bill.

Per the QCPAC mechanism approved in Order No. 26,070, the QCPAC surcharge is eligible for annual recoupment for bills rendered after the date on which the debt incurred to finance the specific eligible projects is issued. Based on PWV's response to Data Request Staff Tech – 6, that date is April 4, 2018. Therefore, the Company proposes to apply the surcharge to all bills rendered 30 days after April 4, 2018. This will be accomplished through a monthly surcharge on each customer's subsequent bills, as well as a one-time recoupment charge for each customer included on their first subsequent bill in order to cover the debt service and property taxes incurred during the period between the bond issuance date and the date of the Commission's order approving the 2018 QCPAC surcharge.⁸

Conclusion and Recommendation:

Staff thoroughly reviewed the Company's proposed 2018 QCPAC surcharge including the underlying 2017 capital projects upon which it is based as well as the debt service and property tax expense components which comprise the surcharge. After reviewing these elements, Staff recommends that the Commission make a finding that the 2017 QCPAC projects are prudent, used and useful. Further, Staff recommends that the Commission approve the proposed 2018 QCPAC recovery amount of \$524,039 via a customer surcharge of 1.69% for all bills rendered 30 days after April 4, 2018, which will include a one-time recoupment charge covering the period between the effective date of the financing (April 4, 2018) and the date of the Commission's order approving the QCPAC surcharge.

2018 QCPAC Budget

In its original filing, PWV proposed a 2018 QCPAC budget of \$12,054,400. However, based on its responses to Staff Data Requests 1-5 and 3-28, PWV revised its 2018 QCPAC budget to an amount of \$10,048,000. The purpose of this revision was so that the 2018 QCPAC budget presented for approval to the Commission would better

⁷ This amount is based on Exhibit 2 (Page 29) of the Settlement Agreement approved in DW 16-806, and includes the following annual fixed contract charges: Anheuser-Busch - \$371,430; Town of Milford - \$81,000; Town of Hudson - \$32,800.

⁸ Assuming a Commission Order is issued by 10/4/18, an average residential customer will pay a one-time QCPAC recoupment surcharge of \$5.46 ($\0.91×6 months).

conform to the budget which was approved by PWW's board of directors in January 2018. PWW's revised 2018 QCPAC budget is summarized as follows:

<u>Description</u>	<u>Budget</u>
Main Additions/Replacements and Paving	\$ 7,017,000
Service, Hydrant, Valve, Meter Additions/Replacements	914,000
Information Technology	908,000
Vehicle and Equipment Purchases/Replacements	668,000
Miscellaneous Projects	541,000
Total	<u>\$10,048,000</u>

Staff propounded a number of questions during discovery regarding PWW's proposed 2018 QCPAC budget. In addition, Staff Engineer, Joseph Vercellotti, specifically reviewed PWW's proposed Main Additions and Replacements including certain changes which were indicated in PWW's first quarterly update filing (see below). Mr. Vercellotti's report indicated that during 2018, PWW planned to replace or add approximately 24,000 linear feet of water main, and that of this total, water main replacement represented approximately 18,000 linear feet, or roughly 0.8%, of the total pipe in PWW's system. Mr. Vercellotti's report concluded that the Company's 2018 projects and estimated costs appear to be prudent and that he supports approval of PWW's petition.

Quarterly Update Filing of 2018 Capital Projects:

On August 23, 2018, PWW filed its first quarterly update relative to its 2018 QCPAC budget for the period ended June 30, 2018. In its update, the Company indicated that it had reduced its overall 2018 QCPAC budget by an amount of \$905,905 to \$9,142,095. PWW's updated 2018 QCPAC budget is summarized as follows:

<u>Description</u>	<u>Budget</u>
Main Additions/Replacements and Paving	\$ 5,918,418
Service, Hydrant, Valve, Meter Additions/Replacements	914,000
Information Technology	1,095,876
Vehicle and Equipment Purchases/Replacements	662,160
Miscellaneous Projects	551,641
Total	<u>\$ 9,142,095</u>

Staff requested a summary of the major changes reflected in PWW's updated 2018 QCPAC budget as compared to its original revised 2018 budget. In response, the Company provided the following:

- PWW's asset management plan was originally budgeted for \$330,000. However, that original budget did not include a \$281,000 carryover from 2017 project work.

- PWW's Coburn Woods main replacement project originally budgeted for \$1,024,400 was deferred in order to allow the Company to partner with the City of Nashua's 2018 sewer projects on Kinsley and Harvard Streets.
- PWW's Northwest Water Main Improvements plan, originally budgeted for \$1,540,000, was deferred until 2019 in order to attempt to take advantage of lower cost financing for the project.
- An estimated \$727,000 of originally unbudgeted water main replacement work was added for the replacement of poor quality and/or undersized water mains located on streets which are a part of the City's 2018 paving program.
- PWW added the Shakespeare High Pressure System upgrade project at an estimated cost of \$273,000. This project evolved after a number of water meters were burst this past spring due to a water hammer.

Projected Rate Impact:

In PWW's quarterly update filing, the Company estimated that its updated 2018 QCPAC budget would increase its revenue requirement by \$899,955, including \$654,177 in estimated additional debt service and \$245,778 in estimated additional property tax expense. This would increase PWW's QCPAC surcharge percentage by an additional 2.90% to 4.59% (1.69% + 2.90%). For an average residential customer, such would increase their monthly QCPAC surcharge by an additional \$1.57 to \$2.48 (\$0.91 + \$1.57), assuming 8.58 ccf of usage and a water rate charge of \$53.98. ($\$53.98 \times 4.59\% = \2.48)

Conclusion and Recommendation:

Staff thoroughly reviewed the Company's proposed 2018 QCPAC budget as amended and subsequently updated. As a result of its review, Staff recommends that the Commission make a finding that the 2018 QCPAC budget, as updated, is prudent and that it approve such budget in the amount of \$9,142,095.

2019 and 2020 QCPAC Budgets

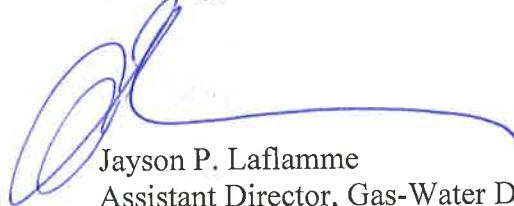
In its original filing and for informational purposes, PWW provided anticipated QCPAC budgets for the years 2019 and 2020 in the amounts of \$12,002,800 and \$9,953,400, respectively. However, based on its responses to Staff Data Requests 1-5 and 3-28, PWW revised its projected 2019 and 2020 QCPAC budgets to the amounts of \$11,604,200 and \$8,731,500, respectively. The purpose of these revisions were so that the 2019 and 2020 QCPAC budgets presented for informational purposes to the Commission would better conform to the budgets for these two years which were approved by PWW's board of directors in January 2018.

Overall Summary and Conclusion

In conclusion, based on its review of the Company's filing in this case, including the associated discovery, Staff Audit Report, as well as PWV's QCPAC update filing submitted on August 23, 2018, Staff recommends that the Commission approve a QCPAC surcharge for Pennichuck Water Works, Inc. ("PWV" or "Company") of 1.69% effective for bills rendered 30 days after April 4, 2018. Staff also recommends that the Commission approve a 2018 QCPAC budget for PWV in the amount of \$9,142,095. Before filing this letter with the Commission, Staff provided the OCA with a draft copy for its review. In response, the OCA indicated that it assented to Staff's recommendations.

Thank you for your attention and assistance with this matter. If you have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jayson P. Laflamme', with a long horizontal flourish extending to the right.

Jayson P. Laflamme
Assistant Director, Gas-Water Division

Attachments: Staff Report of Anthony J. Leone
Staff Audit Report dated May 3, 2018
Staff Report of Joseph M. Vercellotti
Discovery Responses

cc: Service List

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: September 5, 2018
AT (OFFICE): NHPUC

FROM: Anthony J. Leone
Utility Analyst

SUBJECT: Pennichuck Water Works, Inc.
DW 18-022 Qualified Capital Project Adjustment Charge (QCPAC)

TO: Steve Frink, Director Gas-Water Division, NHPUC
Jayson Laflamme, Asst. Director Gas-Water Division, NHPUC

Introduction

Pennichuck Water Works, Inc. (PWW) had been participating in a Water Infrastructure and Conservation Adjustment (WICA) Pilot Program approved under the June 9, 2011 Commission Order 25,230. In Docket DW 16-806 the Commission issued Order 26,070 replacing the WICA with the Qualified Capital Project Adjustment Charge (QCPAC) program. On February 16, 2018 PWW filed the 2018 QCPAC petition in Docket DW 18-022 seeking the following:

- Approval of PWW's 2017 projects for recovery under the QCPAC mechanism in 2018 and authorize PWW to bill and collect a QCPAC surcharge of 1.62% which will be recouped beginning with bills rendered after the date for which bonded debt that is incurred with respect to the specific eligible projects is issued or consummated;
- Preliminary approval of PWW's proposed 2018 projects as being eligible for recovery through the QCPAC surcharge mechanism, subject to the Commission's audit and prudence review of the final costs associated with those projects; which are subject to further refinement through quarterly updates filed with the Commission for the purpose of keeping the Commission apprised of the Company's progress with regard to its 2018 projects (to be filed on or before July 15, October 15 and January 15) and subject to the Commission's review with the Company's 2019 QCPAC filing; and to
- Provide information regarding PWW's proposed 2019 and 2020 projects for informational purposes only.

My review pertains to the assessment of the financial aspects of the completed 2017 capital projects and the calculation of the proposed QCPAC surcharge based on those projects. Staff reviewed the petition and testimony submitted as part of Docket DW 18-022 including PWW's responses to three sets of data requests and additional project information discussed in a July 11, 2018 technical session. The attached Audit Report that I completed indicates I audited a sample

of the \$5,291,409 of completed projects included in the original filing and the underlying costs with one exception. The Company has used an incorrect tax rate which, when corrected, resulted in decreasing the property tax impact from \$130,538 to \$122,079.

One other issue was brought forward by the Company during the July 11, 2018 tech session, the addition of \$767,357 of costs related to the Amherst Street Water Main Replacement. In its response to Staff Data Request 3-10, it was found that funds were spent in 2017 for the completion of this project which were provided from an SRF loan. A portion of the principal and interest on this loan was recovered through the DW 16-806 Step Adjustment (Step). However, the remaining portion of this project, completed after the effective date of the Step, in the amount of \$767,357, was inadvertently omitted from PWV's original filing in the instant docket (DW 18-022). Due to the size of this late addition, Staff requested, and the Company produced, supporting materials for the \$767,357 amount which I reviewed, finding no discrepancies. Therefore, the correct amount of QCPAC eligible projects completed during 2017 is \$6,058,766 (\$5,291,409 + \$767,357).

Regarding the QCPAC surcharge of 1.62% originally filed in Docket DW 18-022. This figure was based upon qualified capital projects of \$5,291,409, a corresponding property tax impact of \$130,538 and an estimated 5.0% interest rate on the bonds being sold. As stated earlier, the Audit decreased the property tax impact to \$122,079, the Company updated the final capital costs to \$6,058,766, and the Company updated the final interest rate on the bond issuance to 4.89% as well as included the remaining portion of the SRF financing on the Amherst Street project at 2.464%. These changes resulted in the proposed QCPAC surcharge increasing from 1.62% to 1.69% as indicated in PWV's quarterly update submitted on August 23, 2018. I reviewed the calculation of the proposed revised surcharge and found it to be correct.

Conclusion

Based on the assessment of the financial aspects of the completed 2017 capital projects described in the petition, testimony, data requests, and technical session, I support approval of the Company's proposed 1.69% QCPAC surcharge. Please let me know if you need anything further in this regard.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: May 3, 2018

AT (OFFICE): NHPUC

FROM: Anthony Leone, Utility Analyst

SUBJECT: Pennichuck Water Works, Inc.
DW 18-022 Qualified Capital Project Adjustment Charge- QCPAC
FINAL Audit Report

TO: Steve Frink, Director Gas-Water Division, NHPUC
Jayson Laflamme, Asst. Director Gas-Water Division, NHPUC

Introduction

Pennichuck Water Works, Inc. (PWW, The Company) had been participating in a Water Infrastructure and Conservation Adjustment (WICA) Pilot Program since approved by Commission Order 25,230 on June 9, 2011. In Docket DW 16-806 the Commission issued Order 26,070 replacing the WICA with the Qualified Capital Project Adjustment Charge (QCPAC).

On November 20, 2017, in Order No. 26,070 of Docket DW 17-179, PWW filed an interim application for Approval of its 2017 QCPAC projects. On February 16, 2018, PWW filed the initial 2017 QCPAC reconciliation. This reconciliation, and the associated projects, subject to a Commission Audit and subsequent Order, would then be eligible for recovery through the QCPAC.

Regulatory Approval

As required by Order 26,070, to be eligible for recovery through the 2018 QCPAC, a project must meet the following standards:

- (1) Completed, in service and used and useful on or before December 31, 2017;
- (2) Financed by debt that has been approved by the Commission; and
- (3) Corresponds with a capital budget that has previously been submitted by the Company and approved by the Commission.

Included on bates page 13 of the February 16, 2018 testimony of Mr. Donald Ware of PWW in the instant docket, the Company plans to pay off the short term debt incurred with the 2017 Projects (including the tax impact) with a Bond issuance in March 2018. Subsequent to the bond issuance, PWW indicated it would calculate the QCPAC to cover 1.1 times the principal and interest payments of those bonds. The Commission authorized the issuance of Bonds in order 26,101.

2017 Projects

PWW presented to the Commission, in Staff Data Request 2-21 of Docket DW 16-806, various capital projects for 2017 totaling \$9,787,000. As presented to the Commission in Docket DW 17-179, that total was revised to \$5,266,000. Finally, as filed in Exhibit 2 on 2/16/2018 in Docket DW 18-022, as of 1/20/2018, the final unaudited project total of \$5,291,409 and a final unaudited increase in property tax of \$130,538 was included totaling \$5,421,947.

Discussed on bates pages 12 and 13 of the testimony of D. Ware in Docket DW 17-179 and captured in the Staff Recommendation filed on 2/15/2018 also in Docket DW 17-179, PWW stated the reason for the decrease in capital expenses was due to scheduling constraints, resource constraints, as well as the realization that certain budgeted projects were either not necessary or not as extensive as originally anticipated.

Review of Selected Projects

Audit has included the following table showing the projects that were selected for review, a dollar total of those projects and the annual property tax impact if applicable. In addition to the mains, services, and paving projects that were historically included under the WICA, to be eligible for recovery through the QCPAC a project can be related to replacement of vehicles, network infrastructure and building improvements. Therefore, Audit has reviewed several of these projects as well.

Description	Work Order #	Cost	Property Tax Impact
Howard Street	1601379, 1600371	\$ 106,839	\$ 3,186
Route 101	1701891, 1702840	\$ 162,178	\$ 3,761
Sweet Hill	1701490	\$ 163,832	\$ 4,651
Buchanan Street	1702843	\$ 96,013	\$ 2,863
Lovell Street	1703644	\$ 82,060	\$ 2,447
Chestnut Street	1703643	\$ 131,689	\$ 3,927
Reception Area	1708425	\$ 18,814	-
Vehicle #99	1800480	\$ 27,323	-
Vehicle #363	1708349	\$ 102,176	-
GPS Units	1708349	\$ 21,287	-
Network Upgrades	1716547	\$ 113,424	-
		\$ 1,025,635	\$ 20,835

Howard Street, Nashua – Work Order #1601379 and #1600371

According to the E-22 in the Howard Street file, the mains under a portion of the street dating back to 1926 and 1928 are no longer able to provide adequate water service to customers and for necessary fire protection. In addition to replacing older pipes, work order 1600371 indicated new pipe would be added to the area as well as another hydrant for firefighting purposes.

The work order detail report listed all of the charges for both of the work orders. Charges included ENG/ISOH (internal engineering, information systems costs and overhead), Park

Construction (third party contractor), and truck charges. Audit notes on this work order, there was a shared cost related to the paving. Specifically, the paving costs totaled \$46,800 with 50% of that cost noted to be covered by Liberty Utilities. The Company correctly recorded and only included in the cost to recover their portion of the paving costs at \$23,400.

The Company booked the cost of the project as seen in the accounts below. In addition PWV correctly booked the original acquisition cost (Gross) and immediately booked a corresponding credit to cover the Cost of Removal (COR) of the old assets resulting in the Book value or the depreciated value. The COR that PWV takes is a general 10% of the Gross cost.

<u>Account</u>	<u>Description</u>	<u>Gross</u>	<u>COR</u>	<u>Book</u>
331200	Distribution Mains	\$79,523	\$7,952	\$71,570
331200	Distribution Mains	\$ 816	\$ 81	\$ 734
331250	Distribution Gates	\$ 2,250	\$ 225	\$2,025
331002	Pavements	\$23,400	\$2,340	\$21,060
335000	Hydrants	\$ 850	\$85	\$765
		\$106,839	\$10,683	\$96,154

Route 101 Widening, Bedford – Work Order #1701891 & #1702840

These two work orders are part of a larger Route 101 project in Bedford, NH that included multiple work orders. The E-22 indicated that the State of NH was widening portions of Route 101 and current PWV assets would be in conflict with drainage, sewer and general road improvements. The #1701891 work order total was noted in the filing and in submitted documentation as \$45,974 while the #1702840 work order was noted as \$116,205 resulting in a combined total of \$162,179.

The work order detail reports included costs from Imtek Reprographics, The Telegraph, Unishipper, ENG/ISOH, Microtech, RH White, Union Leader as well as general labor, OH and various truck charges. Audit reviewed the various invoices without exception.

The Company booked the cost of the project as seen in the accounts below. In addition PWV correctly booked the original acquisition cost (Gross) and immediately booked a corresponding credit to cover the Cost of Removal (COR) of the old assets resulting in the Book value or the depreciated value. The COR that PWV takes is a general 10% of the Gross cost.

<u>Account</u>	<u>Description</u>	<u>Gross</u>	<u>COR</u>	<u>Book</u>
331200	Distribution Mains	\$ 45,974	\$4,597	\$41,376
333200	Renewed Services	\$ 106,028	\$10,603	\$95,426
333004	Services Pavements	\$ 10,176	\$1,017	\$9,159
		\$ 162,178	\$16,217	\$145,961

Sweet Hill Well, Plaistow – Work Order #1701490

The project was a part of the Sweet Hill Well Project in Plaistow, NH. This specific work order was part of a series of work orders starting with #1503914 continuing through #1602428 and ending with this one, #1701490. The E-22 indicated the current source of water did not meet

supply, especially during peak summer months. Audit reviewed the work order detail and associated invoices without exception.

The Company booked the cost of the project as seen in the general ledger accounts below. This project was a new project and as such it did not replace any existing assets and did not have any cost of removal. The Company correctly booked the COR at \$-0- resulting in the Gross and Book values being the same.

Account	Description	Gross	COR	Book
307100	Wells & Springs	\$151,569	\$-0-	\$151,569
307210	Well Pump & Pipes	\$10,103	\$-0-	\$10,103
334000	Meters	<u>\$2,160</u>	<u>\$-0-</u>	<u>\$2,160</u>
		\$163,832	\$-0-	\$163,832

Buchanan Street, Nashua – Work Order #1702843

This project was a part of the greater Main Street Nashua project in that the E-22 indicated several side streets off the main road were suffering from poor firefighting flows. Audit reviewed the work order detail, time sheets, invoices, and other charges without exception.

The Company booked the cost of the project as seen in the accounts below. In addition PWW correctly booked the original acquisition cost (Gross) and immediately booked a corresponding credit to cover the Cost of Removal (COR) of the old assets resulting in the Book value or the depreciated value. The COR that PWW takes is a general 10% of the Gross cost.

Account	Description	Gross	COR	Book
331200	Distribution Mains	\$78,868	\$7,887	\$70,981
331250	Dist. Gates & Valves	\$3,800	\$380	\$3,420
335000	Hydrants	\$8,000	\$800	\$7,200
333200	Renewed Services	<u>\$5,345</u>	<u>\$535</u>	<u>\$4,810</u>
		\$96,013	\$9,602	\$86,411

Lovell Street, Nashua – Work Order #1703644

The Lovell Street costs in this work order were for the final paving costs associated with main replacements detailed in a previous work order. The cost of the paving was included in a combined payment that was requested from and issued to the City of Nashua. The City of Nashua provided a breakdown of the costs in the payment request noting the final paving costs associated with each project in the request.

The Company booked the cost of the project as seen in the accounts below. In addition PWW correctly booked the original acquisition cost (Gross) and immediately booked a corresponding credit to cover the Cost of Removal (COR) of the old assets resulting in the Book value or the depreciated value. The COR that PWW takes is a general 10% of the Gross cost.

Account	Description	Gross	COR	Book
331002	Pavements-Dist. Mains	\$82,060	\$8,206	\$73,854

Chestnut Street, Nashua – Work Order #1703643

The costs in this work order were for the final paving costs associated with main replacements in a previous (2016) work order for Chestnut Street. The work order detail report with project and engineering costs was reviewed by Audit. All costs for contracting work by J.P. Cardillo & Sons, Inc. and PWW engineering were reviewed without exception. Audit requested further information regarding two charges on the work order detail report. Specifically, the two charges were for paving costs and both were approximately for the same amount of money, \$65,000. The Company explained that in this case both charges were valid since PWW was 100% responsible for covering the cost of paving a portion of the road and was also 50% responsible with the City of Nashua for covering another portion of the road. This explanation corresponds to the new water lines in the area as well as the Company replacing older lines in tandem with the City of Nashua's work on their sewer system.

The Company booked the cost of the project as seen in the accounts below. In addition PWW correctly booked the original acquisition cost (Gross) and immediately booked a corresponding credit to cover the Cost of Removal (COR) of the old assets resulting in the Book value or the depreciated value. The COR that PWW takes is a general 10% of the Gross cost.

<u>Account</u>	<u>Description</u>	<u>Gross</u>	<u>COR</u>	<u>Book</u>
331002	Pavement-Dist. Mains	\$131,689	\$13,169	\$118,520

Reception Area Improvements – Work Order #1708425

This project was approved in order to address security concerns at the front desk/reception area conducted by an external safety expert. Audit reviewed the work order detail report for the costs without exception. According to the Asset Depreciation tables submitted, and the Lease contract of the building where the work was performed, PWW correctly listed the depreciation life of the improvements as 4.75 years (the remaining life of the lease) as described in the Uniform System of Accounts (USOA) Section (e)(6)-A Utility Plant- Expenditures on Leased Property.

<u>Account</u>	<u>Description</u>	<u>Amount</u>
304950	Structures and Improvements	\$18,824

Replace Vehicle #99 – Work Order #1800480

This work order replaces a 2006 vehicle that was described as becoming “unreliable and unsafe as it continues to deteriorate with age.” Audit verified this vehicle was part of the bid list with the lowest bidder winning. Audit notes the work order # of 1800480 corresponds to one created in 2018. However, as the Company has clarified, this work order was part of a larger 2017 job where other vehicles were replaced with newer ones. In addition, the Company verified that all vehicles associated with this job were picked up and in use by 12/21/2017.

<u>Account</u>	<u>Description</u>	<u>Amount</u>
341000	Transportation Equip.	\$27,323

Replace Vehicle #363 – Work Order #1708349

This project was approved to replace a 2007 dump truck that required spring work, frame work, dump body repairs and other maintenance in order to ensure it was safe and could be used effectively. In addition, the E-22 indicated replacement of this dump truck was scheduled as part of the Company's continued effort to rotate the fleet of vehicles. According to the documents submitted, different dealerships bid to replace company vehicles with the lowest bid winning.

<u>Account</u>	<u>Description</u>	<u>Amount</u>
341000	Transportation Equip.	\$102,176

Replace Handheld GPS Devices – Work Order #1713734

This project was approved to replace various handheld GPS devices used to map the water system (mains, gates, valves, hydrants, etc.) as part of an overall GIS program upgrade. The E-22 also stated that centimeter GPS units save significant labor hours. In addition, the presence of significant uncertainty regarding support of the software and hardware of the current units was a concern, as the main software vendor had indicated certain programs would no longer receive security updates.

The work order detail report with project costs totaling \$21,287 was reviewed by Audit. The GPS units and associated equipment cost \$20,108 while various iPad accessories cost \$1,179. The work was booked to the general ledger account #347- Computer Equipment in September (from CWIP) and December 2017.

<u>Account</u>	<u>Description</u>	<u>Amount</u>
347110	Computer Equipment	\$20,108
347110	Computer Equipment	<u>\$ 1,179</u>
		\$21,287

Replace Network Switches – Work Order #1716547

This project was approved to replace various network switches and servers that had reached the end of their useful life. The E-22 additionally stated that due to the age of the hardware, the Company was not able to extend vendor maintenance contracts. The upgraded equipment will also result in reduced maintenance costs and is needed to support the corporate data storage upgrade scheduled for 2018.

This project also included costs for service contracts related to the new equipment covering a period of 3 years. The combined cost of the two contracts was \$1,362 and was included in the overall cost to be capitalized. These costs were booked to the general ledger account #347- Computer Equipment in September and December 2017. The capitalization of any contracts in connection with the construction or creation of a capital project or the purchase of capital equipment depends on various factors and should not always be assumed to be allowed. In this case, the small monetary amount in relation to the equipment and the relatively short life of the contract leads Audit to believe it is appropriate to capitalize.

The work order detail report with project costs totaling \$113,424 was reviewed by Audit. Costs included \$1,475 of ENG&ISOH, and \$111,949 of hardware, software and miscellaneous

computer equipment supplied by two vendors. The work was booked to the general ledger account #347- Computer Equipment in December 2017 as indicated below:

<u>Account</u>	<u>Description</u>	<u>Amount</u>
347110	Computer Equipment	\$113,424

Overhead Rates

Overhead rates are input into Synergen by the Senior or Staff Accountant and are automatically calculated and posted to the general ledger when the work orders are posted to the general ledger at the end of the month.

For 2017, the Union overhead rate decreased from 70.28% to 67.96%. This rate is calculated on the total Union labor hours for a specific job and is intended to capture the cost of benefits for Union employees while the general overhead rate remained at 2%. The general OH rate is calculated on the total job cost including the union labor rate as described above. The general OH rate is determined by an analysis of the employee benefits which is reviewed/revised annually as part of the budget process. Audit verified the OH rates to the work order detail reports of each project reviewed. The work order detail report is a listing of all the charges for each project and the total of the report directly corresponds to entries in the plant accounts and depreciation tables of the company's ledgers.

Cost of Removal

The company submitted a detailed spreadsheet showing the cost of removal for the selected projects totaling \$86,807 on the gross investment of \$1,314,938 in 2017. Where the project was a new project, the Company correctly indicated and booked no cost of removal.

As explained by the Company in the WICA program (WICA being the precursor to QCPAC) "the cost of removal is applied to any asset type that has a negative salvage value on the most recent depreciation study. The percentage used is whatever the negative salvage value is." The rates would change with the next depreciation study. Audit noted that the assets reviewed in 2017 all had a cost of removal rate of 10% of the total project cost.

Retirements

Audit requested the list of retired assets and documentation that those assets had been taken off the books and records of PWW associated with the specific projects chosen and PWW produced a spreadsheet that listed those retirements.

Audit reviewed the retirement worksheet referencing specific general ledger account numbers and amounts that were also found on the general ledger itself. Audit specifically inquired about the retirement of Distribution Mains totaling \$3,021. The Company responded that the amount in question is correct; and that "95% of the main replacement assets being retired were installed from 1887-1940 and have \$0 NBV [Net Book Value]. The cost [retirement amount] of \$3,021 would average to roughly 2,135' of pipe that was disposed of using the average unit cost of Cast Iron pipe in 1955 (1955 being the 1st year unit cost for CI [cast iron] pipe that was recorded on our books)."

Depreciation

The Company submitted to Audit a detailed spreadsheet for the selected additions to utility plant. This spreadsheet indicated a total depreciation charge of \$27,261 from total selected additions of \$1,314,938. This figure represents a ½ year depreciation charge for 2017 in accordance with utility accounting standards. Overall, for the \$5,291,409 of projects, the total 2017 depreciation expense was reported as \$135,710.

Bid Summary

Audit requested and was provided with a record of bid proposals for the 2017 projects. The bid summary excel spreadsheet was listed by work order and included up to the top 4 bidders per work order. Every work order indicated the lowest bidder was the winning bidder. There was one instance that did not contain multiple bidders however, and the Company indicated there was only one vendor who was able to provide the service (specific software) and therefore no other bidders were included.

Taxes

The February 18 filing by the Company indicated an estimated property tax impact of \$130,538. During this audit it came to the attention of PWW that due to... “various versions of the [project] spreadsheet being worked on to complete the filing the incorrect tax rates were copied into the final schedule.” The Company and Audit were able to verify a new property tax impact of \$122,079 based on corrected tax rates. **Audit Issue #1**

Summary

In Summary, the Company submitted \$5,291,409 worth of projects and an initial tax impact of \$130,538 totaling \$5,421,947. During the audit a revised property tax impact of \$122,079 was presented decreasing the total to \$5,413,488 for recovery through the 2018 QCPAC.

As required by Order 26,070, to be eligible for recovery through the 2018 QCPAC, a project must meet the following standards:

- (1) Completed, in service and used and useful on or before December 31, 2017;
- (2) Financed by debt that has been approved by the Commission; and
- (3) Corresponds with a capital budget that has previously been submitted by the Company and approved by the Commission.

After reviewing the material submitted, and notwithstanding the Audit Issue below, the Company has shown that these projects were used and useful and booked to the appropriate plant accounts as of 12/31/2017; financed by debt approved by the Commission in Order No. 26,101; and that the projects in question had been submitted to the PUC as part of DW 17-179 and 18-806. Support for project costs was provided in the form of the general ledger (GL) balances, journal entries, work orders, work order detail reports, E-22's, invoices and Excel spreadsheets.

Audit Issue #1 – Property Taxes

Background

The majority of the capital projects included for recovery by the QCPAC increase the base which is used to calculate the property taxes of PWW. PWW has included a final unaudited tax impact from these projects of \$130,538.

Issue

During the Audit, it came to the attention of PWW that the incorrect rates were used in the Filing and in material submitted to Audit. The Company and Audit worked together to determine the correct rates and a corrected property tax impact of \$122,079.

Audit Recommendation

The Company and Audit have already discussed and researched the issue arriving at a new property tax impact of \$122,079. This will decrease the amount to be recovered through the QCPAC.

Company Comment

The Company is in agreement with the Audit Recommendation.

Audit Response

Audit appreciates the Company's assistance in determining the correct Property Tax impact.

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: September 5, 2018
AT (OFFICE): NHPUC

FROM: Joseph M. Vercellotti, P.E.
Utility Engineer

SUBJECT: Pennichuck Water Works, Inc.
DW 18-022 Qualified Capital Project Adjustment Charge (QCPAC)

TO: Steve Frink, Director Gas-Water Division, NHPUC
Jayson Laflamme, Asst. Director Gas-Water Division, NHPUC

Introduction

Pennichuck Water Works, Inc. (PWW) had been participating in a Water Infrastructure and Conservation Adjustment (WICA) Pilot Program approved under the June 9, 2011 Commission Order 25,230. In Docket DW 16-806 the Commission issued Order 26,070 replacing the WICA with the Qualified Capital Project Adjustment Charge (QCPAC) program. On February 16, 2018 PWW filed the 2018 QCPAC petition in Docket DW 18-022 seeking the following:

- Approval of PWW's 2017 projects for recovery under the QCPAC mechanism in 2018 and authorize PWW to bill and collect a QCPAC surcharge of 1.62% which will be recouped beginning with bills rendered after the date for which bonded debt that is incurred with respect to the specific eligible projects is issued or consummated;
- Preliminary approval of PWW's proposed 2018 projects as being eligible for recovery through the QCPAC surcharge mechanism, subject to the Commission's audit and prudence review of the final costs associated with those projects; which are subject to further refinement through quarterly updates filed with the Commission for the purpose of keeping the Commission apprised of the Company's progress with regard to its 2018 projects (to be filed on or before July 15, October 15 and January 15) and subject to the Commission's review with the Company's 2019 QCPAC filing; and to
- Provide information regarding PWW's proposed 2019 and 2020 projects for informational purposes only.

This review pertains to the assessment of the engineering and operational aspects of the proposed 2018 water main replacement projects. Staff reviewed the petition and testimony submitted as part of the Docket DW 18-022 including PWW's responses to three sets of data requests, project information discussed in a July 11, 2018 technical session and the August 23, 2018 PWW

Quarterly Update of 2018 projects . PWW proposed the following water main replacement projects for 2018.

Proposed 2018 Water Main Replacements/Additions (19 Projects)

- Gilman Street: Replace 1,470 linear feet (LF) of 8 inch cast iron (CI) main with 12 inch ductile iron pipe cement lined (DIPCL)
- Ritter Street: Replace 500LF of 6 inch CI with 12 inch DIPCL
- Woodward Street: Replace 300 LF of 6 inch CI with 12 inch DIPCL
- Factory Street: Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL
- Pennichuck Street: Replace 100 LF of 12 inch CI with 12 inch DIPCL
- Fossa Avenue: Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL
- Russell Avenue: Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL
- Taylor Street: Replace 790 LF of 6 inch CI with 8 inch DIPCL
- Burnett Street: Replace 535 LF of 6 inch CI with 12 inch DIPCL
- Field Street: Replace 325 LF of 6 inch CI with 6 inch DIPCL
- Fernwood Street: Replace 450 LF of 6 inch CI with 6 inch DIPCL
- Revere Street: Replace 760 LF of 6 inch CI with 8 inch DIP
- Stevens Street: Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF of 4 inch DIPCL
- Evergreen Street: Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL
- Morton Street: Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL
- Park Avenue : Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF of 4 inch DIPCL
- Coburn Woods: Replace 4,400 LF of 2 inch PVC with 4 inch DIPCL

- Lake Street: Replace 2,950 LF of 6 inch CI with 12 inch DI
- Northwest Water Main Improvements, which are collectively:
 - o Manchester Street: Add 2,700 LF of 24 inch DIPCL on Manchester St.
 - o Route 101A and Route 121 (Amherst): Add 2200 LF of 12 inch DIPCL to close loop between two long “dead end” mains.
 - o Tinker Road: Replace 825 LF of 16 inch asbestos cement (AC) with 825 LF of 24 inch DIPCL.

August Quarterly Update Project Modifications (4 Projects)

PWW’s Company’s August 23, 2018 quarterly project update indicated the following modifications:

- The Coburn Woods project, estimated at a cost of \$1,024,400 was deferred in order to make funds available to allow the Company to partner with the City of Nashua’s 2018 sewer projects on Kinsley and Harvard Streets as well as other unbudgeted projects that developed during the first half of 2018.
- The Northwest water main improvement projects, estimated at a cost of \$1,540,000, were deferred until 2019 in order to try to take advantage of lower cost financing that is available from the State’s Drinking Water and Groundwater Trust fund.
- An estimated \$727,000 of unbudgeted water main replacement work was added to replace poor quality and/or undersized water main that was going to be paved over as part of the City’s 2018 paving program.
- A new project, the Shakespeare High pressure system upgrade, unveiled itself in the spring of 2018. The estimated cost of this project is \$273,000. This project evolved after a number of water meters burst during the spring due to water hammer. A hydraulic analysis of the neighborhood where the meters burst revealed a series of dead end water mains subject to hydraulic pressure transients associated with pump station starts and stops. The project will eliminate the dead ends and associated pressure transients while also increasing the water pressure for several dozen homes from less than 40 pounds per square inch (psi) to between 50 and 78 psi.

The 2018 projects will replace and/or add approximately 24,000 LF of water main at an estimated cost of \$9,142,095. Of this total, water main replacement represents about 18,000, LF or roughly 0.8% of the total pipe in the system. PWW also estimated that during 2018 the pavement restoration cost for water mains added or replaced in 2017 is estimated to be approximately \$635,000. PWW indicated the 2018 projects will be coordinated with municipal and natural gas company work to further control restoration costs.

Conclusion

Based on the assessment of the engineering and operational aspects of the proposed 2018 water main replacement projects described in the petition, testimony, data requests, technical session, and August 2018 quarterly update, the company's proposed 2018 projects and estimated costs appear to be prudent and as such, I support approval of the company's petition. Please let me know if you need anything further in this regard.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-1

Date of Response: 4/30/18
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2 Page 2, 2018 QCPAC Capital Expenditures (PWW0026): Please provide detailed cost estimates for the following 2018 projects:

- a) Coburn Woods (Replace 4400 LF of 2 inch PVC with 4 inch DIPCL)
- b) Northwest Water Main Improvements:
 - i) Manchester Street: (Add 2700 LF of 24 inch DIPCL)
 - ii) Route 101A and Route 121: (Add 2200 LF of 12 inch DIPCL)
 - iii) Tinker Road: (Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL)
- c) Lake Street: (Replace 2950 LF of 6 inch CI with 12 inch DI)

RESPONSE:

The Company cannot produce detailed cost estimates for the Capex Budgets as the design necessary to complete a high level estimate has not been completed yet. The Budget cost estimates are based on costs for similar projects completed in previous years. The budget level estimate accounts such variables as the type of street (high traffic vs. low traffic), whether temporary main is required, whether night work is required, the number of intersections, the bidding environment going into the year, the potential presence of ledge, the Community where the work is being performed, whether other underground utilities exist that may conflict with the installation of the new water main as well as other factors that may make the project being budgeted for similar or different from previous year projects where we have recent pricing information.

In 2017 the average cost of all pipe work completed in the City of Nashua was approximately \$26.90/in-Dia/ft. This is pipe work pricing was for built-up areas like the City of Nashua and includes poly wrapped or zinc plated ductile iron pipe, temporary water mains, temporary water connections, hydrant connections, service reconnects and side street reconconnections. Prices from previously completed work are increased by 3% per year to help account for inflationary effects on pricing.

Non pipework costs used for budget estimates associated with the installation of a water main (based on experience) were adjusted for the following factors using the rates below:

Pavement restoration –	Light traffic - \$82/LF
Pavement restoration –	High Traffic - \$100.00/LF

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-1

Date of Response: 4/30/18
Witness: Donald L. Ware

b) ii) RT 101A and Route 121 –

2200 LF of 12" DIPCL with 20" steel sleeve and 200 LF pipe jacking across Rt 101. This project was not a candidate for the same estimating methodology as inner city work due to the pipe jacking and absence of other underground utilities. So the \$26.90 in-ft charge is not applicable. The Budget priced was drawn from other comparable projects in past years.

Pipe work -	- (2200 x \$165)	= \$ 363,000
Route 101 steel sleeve jacking	- (1 x \$110,000)	= \$ 110,000
1 – Localized landscaping and pavement	-	= \$ <u>27,000</u>
	Budget Estimate	= \$ 500,000

b) iii) Tinker Road – 825 LF of 24" DIPCL

This project was not a candidate for the same estimating methodology as inner city work due to the fact that his project is along a low traffic street with the absence of other underground utilities. So the \$26.90 in-ft charge is not applicable. The Budget priced was drawn from other comparable projects in past years.

Pipe work -	- (825 x 4 x \$180)	= \$ 148,500
Pavement Restorations	- (660 x \$82)	= \$ 92,400
AC water main removal and disposal	- (800 x \$50)	= \$ <u>40,000</u>
	Budget Estimate	= \$ 290,900

c) Lake Street – 2950 LF of 12" DIPCL

Pipe work -	- (2900 x 12 x \$26.90)	= \$ 952,260
Pavement Restorations	- (2950 x \$100.00)	= \$ 295,000
Difficult Intersection	- (1 x \$70,000)	= \$ <u>70,000</u>
	Budget Estimate	= \$1,317,260

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-2

Date of Response: 4/30/18
Witness: Donald L. Ware

REQUEST: Re: Mr. Ware's Testimony: Page 10 (Bates PWW0017), Lines 8-10, of Mr. Ware's Testimony in DW 17-179, PWW's Interim QCPAC Filing, discussed the inclusion of \$767,357 in SRF Financing associated with the Amherst Area Water Main replacement. Please update the status of the use of these funds as reflected in the Company's 2018 QCPAC filing.

RESPONSE:

All work on the Amherst Street project was completed in 2017. All SRF funds associated with the Amherst Street project were fully drawn down in 2017 and this loan is in repayment mode.

Pennichuck Water Works, Inc.
DW 18-022
2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)
Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-3

Date of Response: 4/30/18
Witness: Donald L. Ware

REQUEST: Re: PWW 0018, Mr. Ware's Testimony, Lines 3-5: Please explain why the Tyngsborough Contract is not mentioned along with Anheuser-Busch, Town of Hudson, and Town of Milford.

RESPONSE:

The Tyngsborough Contract has an annual guaranteed minimum purchase volume, not a fixed contract fee like the Anheuser-Busch, Town of Hudson and Town of Milford contracts. This annual guaranteed minimum purchase volume results in guaranteed minimum annual revenue. Per this contract the guaranteed annual minimum annual revenue changes with each general rate case as the rate per CCF used to calculate this minimum annual revenue is adjusted by the same percentage as the general metered class volumetric rate per the contract with Tyngsborough.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-4

Date of Response: 4/30/18
Witness: Donald L. Ware

REQUEST: Re: PWW 0035, Attachment A: Can the proposed message relative to pending QCPAC surcharge filings be communicated to customers in a more prominent manner either on individual billings or by some other alternative means? Please discuss.

RESPONSE:

Yes, but it would come at an additional expense. The current notification method does not cost any money. Please note that the current bill format does not have a space large enough to provide the level of detail the Company believes is necessary for its customers regarding the QCPAC filing and the proposed QCPAC increase. The Company could communicate to its customers in a more prominent manner either via:

1. A direct mailing. The cost of direct mailing would be about \$13,680 per year (based on 28,500 customers).

2. Via a buck slip insert with the bill. The cost of inserting a buck slip in with each bill would be about \$1,425 per year (based on 28,500 customers).

If the Commission and Company decided that one of the two more direct methods of notifying the customers was appropriate the Company would propose expensing the annual cost of this notification since it would become an annual expense with each annual QCPAC filing.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 1

Date Request Received: 4/18/18
Request No. Staff 1-5

Date of Response: 4/30/18
Witness: Donald L. Ware

REQUEST: Re: PWW 0044, Corporate Secretary's Certificate: Do the actual board minutes contain the actual capital budget / spending plan amounts approved for 2018, 2019, and 2020? If yes, please provide a copy(s).

RESPONSE: Yes, the actual board minutes do contain the actual capital budget/spending plan amounts approved for 2018. Please see the attached excerpt from the minutes with the overall 2018 capital budget amount as well as the presentation that was given to the board.

Capital Expenditures and Pumpage Review – December 2017

G. Torres reviewed the summary of capital expenditures and pumpage chart as of December 2017. Capital expenditures of \$8.0 million were below the budgeted amount of \$16.3 million. Pumpage for the month of December (285 million gallons) was ahead of budget (265 million gallons).

2018 Budget

G. Torres reviewed the key budget assumptions utilized in preparing the 2018 Budget.

2018 Capital Budget and 2019/2020 CapEx Plans - G. Torres presented a revised 2018 capital budget and 2019/2020 CapEx Plans. He reviewed the change from the capital budget presented at the December Board meeting, which has resulted in an increase in the budget of \$30,000. The increase was due to a true-up of carryover projects from 2017 for asset management, resulting in an overall 2018 capital budget of \$15.899 million.

After discussion, on motion duly made by S. Genest and seconded by P. Stanley, all of the Directors then voting, it was unanimously

Resolved: that the revised 2018 Capital Budget and 2019/2020 Capital Expenditure Plans, as presented at this meeting, are hereby approved.

2018 Operating Budget - L. Goodhue and G. Torres presented a review of the Company's proposed 2018 operating budget, a copy of which was included in the written materials. After discussion, it was determined that corrections need to be made to the balance sheet and cash flow statements prior to approval by the Board.

On motion duly made by J. Dore and seconded by J. Murphy, all of the Directors then voting, it was unanimously

Resolved: that the Consolidated 2018 Budgeted Statement of Income, as presented at this meeting, is hereby approved.

Move to Non-Public Session

S. Genest moved that the Board enter into non-public session to (i) discuss the promotion or compensation of employees pursuant to RSA 91-A:3, II(a), and (ii) discuss confidential or financial information pursuant to RSA 91-A:3, II(j). P. Stanley seconded the motion.

A roll call of the Directors was taken, which resulted as follows:

Yea: D. Bernier, G. Bower, J. Dore, E. Dunn, S. Genest, T. Leonard, J. Lustig,
J. McGrath, J. Murphy, P. Stanley

Nay:

Motion was carried to enter into non-public session at 9:39 a.m.

2018 Budget Review

As of January 26, 2018

Pennichuck Corporation 2018 Key Budget Assumptions

Overall

- **Budget is constructed by each department manager on a detailed line item basis, based on known and bid amounts to the extent possible.**
- **Cross-functional process for the review, inclusion, and appropriateness of budgeted items for both Capital and Operating Expenses.**
- **Budget is completed based upon basic sub-cycles:**
 - **Revenue Budgets for PWW, PEU, PAC and PWSC**
 - **Union and Non-union compensation budgets, including new hires, overtime calculations, allocation of labor, capitalization of labor for Capex projects**
 - **Capital budget for all operating subsidiaries**
 - **Cashflow needs**
 - **Depreciation and amortization calculations**
 - **Operating expense budgets for all departments of all operating subsidiaries**
 - **Treasury budget**
 - **Debt portfolio**
 - **Cashflow planning**
 - **Line of Credit usage**
 - **Corporate level operating costs**
 - **Management fee allocation**
 - **From PWW**
 - **From Parent**
 - **Balance Sheet and Cash Flow Statement budgets**

Revenue

- **Regulated utility revenue is based on actual existing rates (as provided for in previous rate cases before the NH Public Utilities Commission) times estimated consumption.**
 - **2018 PWW revenues include rate increase of 10.81% from the 2016 rate case for the full year, as approved by the NHPUC.**
 - **2018 revenues for PEU include projected rate increase of 21% for the full year from the 2017 rate case, pending approval by the NHPUC.**
 - **2018 revenues for PAC include current rates, as approved by the NHPUC.**
 - **2018 revenues also include the following:**
 - **QCPAC increase for PWW**
- **Full year budgeted consumption is based upon the 2016 consumption budget**
 - **Analysis done of average consumption over the last five years.**
 - **Determined that the 2016 budget was more indicative of normal consumption patterns, and was more conservative than the average of those years**
 - **Water Treatment Plant pumpage, a proxy for consumption, is budgeted at 4.048 billion gallons (“bg”) in 2018.**
- **PWSC revenues – Revenues for existing contracts, including:**
 - **annual contract CPI increases included, as per contract terms**
 - **renegotiation of the Amesbury billing contract**
 - **renewal of the Hudson O&M contract**
 - **consideration given to any new contracts (and correlated expenses) only to the extent they are certain to be added in 2018**
 - **Meter revenues are estimated for the year**
 - **Unplanned maintenance revenues decreased for the year**

Expenses

- Annual wage increase budgeted for personnel (union and non-union) effective 1/1/18 (union) and 4/1/18 (non-union), respectively.
- Compensation budget reflects current staff, which includes:
 - Replacement positions during 2017; 1 HR Administrator
 - Addition – 1 Customer Relations Billing Supervisor (budgeted for 2017); 1 Construction Maintenance Coordinator (new role)
 - 2017 mid-year upgrades of Customer Relations Coordinator, Engineering Coordinator to GIS Administrator, and Water Supply Engineer
- Overtime budgeted based on the flushing plan (for Operations personnel) and historical data/trends, and estimated needs in support of Capex projects, for all other departments and activities.
- No bonus amounts included in the budget.
- Electric costs (“all in”) based on contractual agreements, as discussed with the Board in prior meetings.
- Fuel costs estimated at \$2.75 per gallon for gas/diesel.
- Charitable contributions total budget amount is \$39.9K based on the 2017 budgeted amount, with no inflationary increase. This amount budgeted as expense on PWSC’s books.
- Health care expense up 7.5%. Overall increase due to inflationary factors and coverage mix.
- Pension/OPEB expense down -1.3%, based on quotes and actuary’s estimate (impacted by changes in the discount rate; market driven). 401k expense up 3.9% due to wage increases and impact of hires in 2017/2018.
- Our overall insurance portfolio premiums (Property, Crime, Auto, General and Excess Liability, Workers Comp, etc.) are down \$83K or -9.6% (chiefly driven by decreases in our Workers Comp and Excess Liability premiums) based on renewal quotes received in 12/2017.
- Property tax increase of \$418K based on rates and additions. This does include the current state utility tax valuation for 2018, increases in property for 2018, and the final 2017 tax bills received by community for all of the companies.

- **Income taxes are budgeted at federal and state blended effective rate after giving consideration for known and measurable permanent book-tax differences. The statutory rate is 39.61%, but the effective rate giving consideration to these items is only 1.85% (with the major impact being the permanent book-to-tax difference for the amortization of the MARA of \$1.9M). The budget for the separate entities is at the same consolidated rate. Actuals by subsidiary will change but consolidated should be accurate. Impact of the 2018 Tax Act is yet to be determined. Impact could involve a limitation on interest deduction and/or establishment of a Regulatory Liability and the repayment of tax benefits to rate payers.**

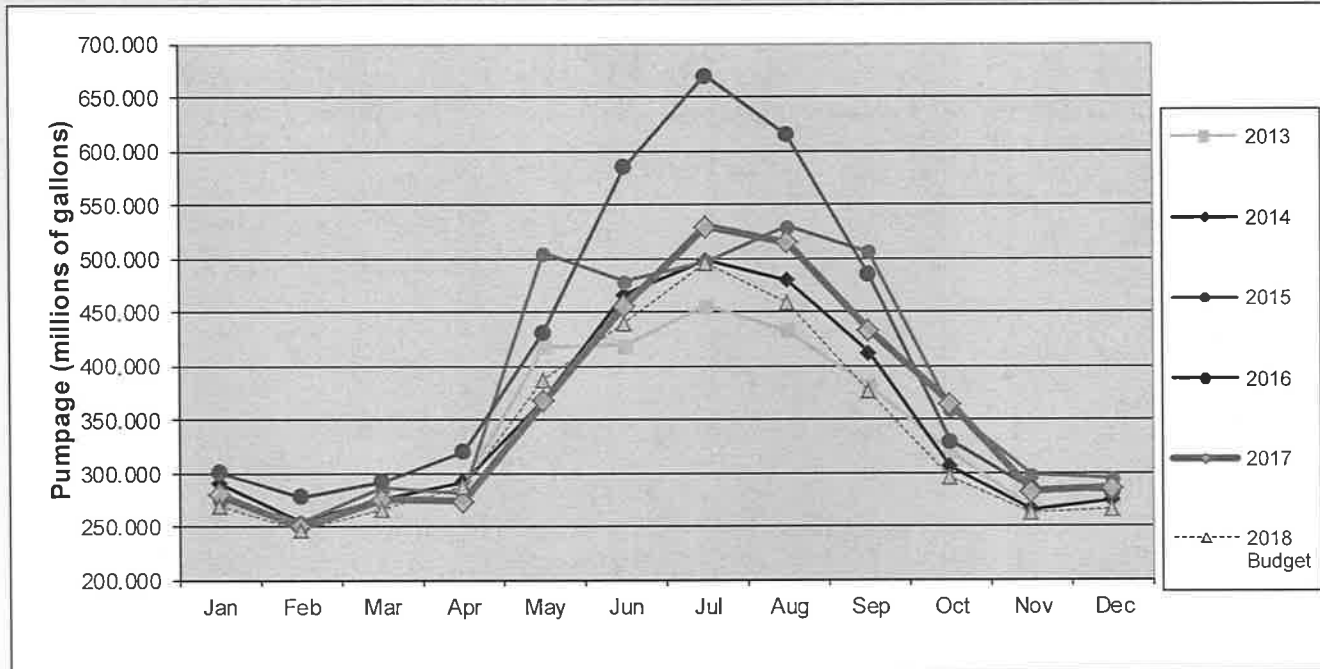
Treasury

- **Borrowings under the line of credit are modeled based on timing of spending of the capital budget, as well as monthly cash flow needs.**
- **Known or anticipated borrowings and draws from the State Revolving Fund have been budgeted into 2018. Several projects have already been pre-approved by NHDES for this financing under this program for 2018, which have been identified as a part of the Capital Budget process; specifically the Merrimack River Interconnection in PWV and the next phase of the Locke Lake system replacement in PEU. \$600K grant from the Water & Groundwater Trust fund for the Merrimack River Interconnection is included in this budget.**
- **Special Dividend of \$500K to City for Eminent Domain Cost recovery has not been budgeted for 2018. Final determination of any payments for this special dividend would need to be approved by the Board based on available cash flows, outside of the regulated utilities per NHPUC determination.**
- **Monthly loan payment to City of \$707K in connection with initial funding of Company. Quarterly dividends of approximately \$69K are required to provide City with funds needed to service the \$150.7 million of acquisition borrowings.**

Acquisition Premium

- **Amortization methodology consistent with the required accounting methodology from the Merger Order/Settlement Agreement. Has no cash flow impact on the financial statements.**

Pennichuck Corporation PWW Pumpage



Pumpage Data (millions of gallons)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
2013	271.598	251.530	270.310	287.902	417.950	419.280	455.300	432.310	381.320	318.700	265.880	275.370	4,047.450
2014	289.730	253.750	275.460	291.780	367.720	465.900	497.640	478.960	411.680	305.600	265.030	274.390	4,177.640
2015	274.890	253.900	285.910	281.040	504.440	478.850	496.730	529.140	506.020	359.060	297.530	294.560	4,562.070
2016	300.130	277.350	291.250	319.540	430.760	584.950	670.110	614.830	484.920	329.410	284.400	282.010	4,869.660
2017	279.330	249.500	274.680	273.160	366.790	455.660	529.650	514.210	432.840	364.900	281.650	285.860	4,308.230

Pumpage Data - Budget (millions of gallons)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
2018 Budget	269.255	246.203	264.976	286.678	386.822	440.318	495.238	458.976	376.559	295.958	261.560	265.590	4,048.133

2018 Capital Budget and 2019/2020 Capex Plans - Consolidated

	Total Budgeted for 2017	Total Budgeted in 2018 for Carryover/Multi- year Projects	Total Budgeted in 2018 for New Projects	Total Budgeted for 2018	Total Planned in 2019 for Carryover & New Projects	Total Planned in 2020 for Carryover & New Projects
Main Replacements and Main Replacements	\$ 7,632	\$ 1,260	\$ 6,379	\$ 7,639	\$ 2,379	\$ 3,694
Booster Stations, Tanks, Generators and Pumps	890	-	170	170	1,737	120
Water Treatment Media and Miscellaneous Water Supply Upgrades	1,540	-	675	675	1,355	2,960
Service, Hydrants and Meters	1,834	-	2,013	2,013	1,183	865
IT, Applications and System Monitoring	460	10	275	285	382	392
North Country Operations Facility	320	-	-	-	-	-
Dpac (Data Presentment and Collection) System/Click Mobile	157	-	170	170	-	-
GIS System	-	-	-	-	-	-
Asset Management System	936	330	231	561	39	33
All Other	1,715	90	906	996	533	1,524
Subtotals	<u>15,484</u>	<u>1,690</u>	<u>10,819</u>	<u>12,509</u>	<u>7,608</u>	<u>9,588</u>
Bowers Pond	-	-	90	90	2,000	-
Merrimack River Intake	823	-	-	-	5,500	-
PWW/PEU Merrimack River Interconnection	-	-	3,300	3,300	-	-
Kessler Farm Tank Replacement	-	-	-	-	-	3,080
Total Capex Budgeted 2018-2020	<u>\$ 16,307</u>	<u>\$ 1,690</u>	<u>\$ 14,209</u>	<u>\$ 15,899</u>	<u>\$ 15,108</u>	<u>\$ 12,668</u>
Total Capex Budgeted 2018-2020 approved 12/2017	\$ 16,307	\$ 1,660	\$ 14,209	\$ 15,869	\$ 15,108	\$ 12,668
Variances	<u>\$ (0)</u>	<u>\$ 30</u>	<u>\$ -</u>	<u>\$ 30</u>	<u>\$ 0</u>	<u>\$ (0)</u>

2018 Capital Budget and 2019/2020 Capex Plans – Pennichuck Water Works

	<u>Total Budgeted for 2017</u>	<u>Total Budgeted in 2018 for Carryover/Multi- year Projects</u>	<u>Total Budgeted in 2018 for New Projects</u>	<u>Total Budgeted for 2018</u>	<u>Total Planned in 2019 for Carryover & New Projects</u>	<u>Total Planned in 2020 for Carryover & New Projects</u>
Main Replacements and Main Replacements	\$ 4,320	\$ 638	\$ 6,379	\$ 7,017	\$ 2,379	\$ 3,694
Booster Stations, Tanks, Generators and Pumps	810	-	60	60	60	60
Water Treatment Media and Miscellaneous Water Supply Upgrades	230	-	95	95	975	645
Service, Hydrants and Meters	788	-	914	914	886	630
IT, Applications and System Monitoring	460	10	275	285	382	392
Dpac (Data Presentment and Collection) System/Click Mobile	157	-	170	170	-	-
Asset Management System	936	330	231	561	39	33
All Other	1,600	90	856	946	483	536
Subtotals	9,300	1,068	8,980	10,048	5,204	5,990
Bowers Pond Spillway Reconstruction	-	-	90	90	2,000	-
Merrimack River Intake	823	-	-	-	5,500	-
Kessler Farm Tank Replacement	-	-	-	-	-	3,080
Total Capex Budgeted 2018-2020	\$ 10,123	\$ 1,068	\$ 9,070	\$ 10,138	\$ 12,704	\$ 9,070
Total Capex Budgeted 2018-2020 approved 12/2017	\$ 10,123	\$ 1,038	\$ 9,070	\$ 10,108	\$ 12,704	\$ 9,070
Variances	\$ -	\$ 30	\$ (0)	\$ 30	\$ 0	\$ 0

2018 Capital Budget and 2019/2020 Capex Plans – Pennichuck East Utility

	<u>Total Budgeted for 2017</u>	<u>Total Budgeted in 2018 for Carryover/Multi- year Projects</u>	<u>Total Budgeted in 2018 for New Projects</u>	<u>Total Budgeted for 2018</u>	<u>Total Planned in 2019 for Carryover & New Projects</u>	<u>Total Planned in 2020 for Carryover & New Projects</u>
Main Replacements and Main Replacements	\$ 3,287	\$ 622	\$ -	\$ 622	\$ -	\$ -
Booster Stations, Tanks, Generators and Pumps	80	-	60	60	827	60
Water Treatment Media and Miscellaneous Water Supply Upgrades	1,285	-	535	535	105	2,305
Service, Hydrants and Meters	198	-	270	270	261	199
North Country Operations Facility	320	-	-	-	-	-
All Other	80	-	40	40	40	978
Subtotals	<u>5,250</u>	<u>622</u>	<u>905</u>	<u>1,526</u>	<u>1,233</u>	<u>3,542</u>
Merrimack River Interconnection with PWW	-	-	3,300	3,300	-	-
Total Capex Budgeted 2018-2020	<u>\$ 5,250</u>	<u>\$ 622</u>	<u>\$ 4,205</u>	<u>\$ 4,826</u>	<u>\$ 1,233</u>	<u>\$ 3,542</u>

2018 Capital Budget and 2019/2020 Capex Plans – Pittsfield Aqueduct Company

	<u>Total Budgeted for 2017</u>	<u>Total Budgeted in 2018 for Carryover/Multi- year Projects</u>	<u>Total Budgeted in 2018 for New Projects</u>	<u>Total Budgeted for 2018</u>	<u>Total Planned in 2019 for Carryover & New Projects</u>	<u>Total Planned in 2020 for Carryover & New Projects</u>
Main Replacements and Main Replacements	\$ 25	\$ -	\$ -	\$ -	\$ -	\$ -
Booster Stations, Tanks, Generators and Pumps	-	-	50	50	850	-
Water Treatment Media and Miscellaneous Water Supply Upgrades	25	-	45	45	275	10
Service, Hydrants and Meters	49	-	30	30	36	36
All Other	35	-	10	10	10	10
Total Capex Budgeted 2018-2020	\$ 134	\$ -	\$ 135	\$ 135	\$ 1,171	\$ 56

2018 Capital Budget and 2019/2020 Capex Plans – Pennichuck Water Service

	<u>Total Budgeted for 2017</u>	<u>Total Budgeted in 2018 for Carryover/Multi- year Projects</u>	<u>Total Budgeted in 2018 for New Projects</u>	<u>Total Budgeted for 2018</u>	<u>Total Planned in 2019 for Carryover & New Projects</u>	<u>Total Planned in 2020 for Carryover & New Projects</u>
Main Replacements and Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Booster Stations, Tanks, Generators and Pumps	-	-	-	-	-	-
Water Treatment Media and Miscellaneous Water Supply Upgrades	-	-	-	-	-	-
Service, Hydrants and Meters	800	-	800	800	-	-
All Other	-	-	-	-	-	-
Total Capex Budgeted 2018-2020	<u>\$ 800</u>	<u>\$ -</u>	<u>\$ 800</u>	<u>\$ 800</u>	<u>\$ -</u>	<u>\$ -</u>

Pennichuck Consolidated 2018 Budgeted Statement of Income

	Budget				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Revenues:								
Water Utility Operations	\$ 8,670,124	\$ 10,591,388	\$ 13,777,610	\$ 9,406,115	\$ 42,445,237	\$ 37,473,631	\$ 4,971,606	13.3%
Water Management Services	885,775	863,543	932,703	899,309	3,581,330	3,307,756	\$ 273,574	8.3%
Total Water Revenues	9,555,899	11,454,931	14,710,313	10,305,424	46,026,567	40,781,387	\$ 5,245,180	12.9%
Real Estate Operations	-	-	-	-	0	0	\$ -	0.0%
Other	-	-	-	-	0	0	\$ -	0.0%
Total Revenues	9,555,899	11,454,931	14,710,313	10,305,424	46,026,567	40,781,387	\$ 5,245,180	12.9%
Operating Expenses:								
Water Utility Operations	8,066,430	8,528,511	8,790,145	8,160,468	33,535,554	31,972,783	\$ 1,562,771	4.9%
Water Management Services	843,640	886,219	868,903	877,693	3,476,455	3,400,908	\$ 75,547	2.2%
Total Water Expenses	8,900,070	9,414,730	9,659,048	9,038,161	37,012,009	35,373,691	\$ 1,638,318	4.6%
Real Estate Operations	12,036	12,159	12,041	12,028	48,264	44,483	\$ 3,781	8.5%
Other	16,343	15,631	15,129	15,129	62,232	25,624	\$ 36,608	142.9%
Total Expenses	8,928,449	9,442,520	9,686,218	9,065,318	37,122,505	35,443,798	\$ 1,678,707	4.7%
Operating Income	627,450	2,012,411	5,024,095	1,240,106	8,904,062	5,337,589	\$ 3,566,473	66.8%
Eminent Domain & Merger Related Costs	-	-	-	-	0	0	\$ -	0.0%
Net Earnings (Loss) from joint ventures	(939)	(939)	(939)	(939)	(3,756)	(3,756)	\$ (1)	0.0%
Other Income, Net	2,835	2,835	2,835	2,835	11,340	10,997	\$ 343	3.1%
Allowance for Funds Used During Construction	-	-	-	-	0	27,005	\$ (27,005)	-100.0%
Interest Income	-	-	-	-	0	0	\$ -	0.0%
Interest Expense:								
Long Term Debt	(2,704,505)	(2,717,747)	(2,822,752)	(2,852,235)	(11,097,239)	(10,714,210)	\$ (383,029)	-3.6%
Intercompany Interest	39	8	(4,998)	(9,873)	(14,824)	(883)	\$ (13,941)	-1578.8%
Line of Credit Expense	(30,692)	-	-	-	(30,692)	(6,876)	\$ (23,816)	-346.4%
Total Interest Expense	(2,735,158)	(2,717,739)	(2,827,750)	(2,862,108)	(11,142,755)	(10,721,969)	\$ (420,786)	-3.9%
Income Before Provision for Income Taxes	(2,105,812)	(703,432)	2,198,241	(1,620,106)	(2,231,109)	(5,350,133)	\$ 3,119,024	58.3%
Tax Provision								
Existing Operations	(38,915)	(13,000)	40,625	(29,940)	(41,230)	(1,982,933)	\$ 1,941,703	97.9%
Total Tax Provision	(38,915)	(13,000)	40,625	(29,940)	(41,230)	(1,982,933)	\$ 1,941,703	97.9%
Net Income (Loss)	\$ (2,066,897)	\$ (690,432)	\$ 2,157,616	\$ (1,590,166)	\$ (2,189,879)	\$ (3,367,200)	\$ 1,177,321	35.0%
EBITDA	\$ 2,663,048	\$ 4,051,295	\$ 7,064,687	\$ 3,281,418	\$ 17,060,448	\$ 13,226,758	\$ 3,833,690	29.0%
Add Back: Extraordinary Items	(2,835)	(2,835)	(2,835)	(2,835)	(11,340)	(11,335)	\$ (5)	0.0%
Normalized EBITDA	\$ 2,660,213	\$ 4,048,460	\$ 7,061,852	\$ 3,278,583	\$ 17,049,108	\$ 13,215,423	\$ 3,833,685	29.0%
Less: P&I on External Debt	(3,588,539)	(1,433,458)	(1,555,891)	(1,596,523)	(8,174,411)	(5,478,346)		
Less: CBFRF payments to City	(2,190,000)	(2,190,000)	(2,190,000)	(2,190,000)	(8,760,000)	(8,765,734)		
Less: Special Dividend to City (ED Costs)	-	-	-	-	-	-		
Net Remainder	\$ (3,118,326)	\$ 425,002	\$ 3,315,961	\$ (507,940)	\$ 114,697	\$ (1,028,657)		

Pennichuck Corporation and Subsidiaries - Consolidated
Quarterly Budgeted Balance Sheet
For the year ended December 31, 2018

ASSETS	Estimated Dec-17	BUD Q1 17	BUD Q2 17	BUD Q3 17	BUD Q4 17
Land	3,305,270	3,305,270	3,305,270	3,305,270	3,305,270
Buildings	66,380,445	66,390,445	66,400,445	66,420,445	66,430,445
Equipment & software	207,336,969	208,055,569	211,940,269	216,944,369	223,185,569
	277,022,684	277,751,284	281,645,984	286,670,084	292,921,284
Accumulated depreciation	(70,698,642)	(72,451,124)	(74,203,190)	(75,958,633)	(77,715,643)
	206,324,042	205,300,160	207,442,794	210,711,451	215,205,641
Work in process	4,952,726	5,222,726	7,702,726	9,492,726	4,952,726
Net Plant and Equipment	211,276,768	210,522,886	215,145,520	220,204,177	220,158,367
CURRENT ASSETS					
Cash	4,533,895	9,496,059	3,957,203	11,937,491	10,564,211
Short term investments: FHLB	-	-	-	-	-
Short term investments: MM	-	-	-	-	-
Restricted cash	8,145,642	4,100,000	7,400,000	5,200,000	8,200,000
Accounts receivable-billed, net	3,030,548	2,871,526	3,283,204	4,295,788	3,458,809
Accounts receivable-unbilled, net	2,164,889	2,196,184	2,913,708	3,478,947	2,054,175
Accounts receivable-other	403,703	(845,863)	(845,863)	(845,863)	(845,863)
Inventory	616,858	584,712	567,633	539,560	526,255
Prepaid expenses	564,954	576,015	539,221	394,681	404,166
Prepaid property taxes	1,143,278	10,723	1,143,277	74,285	1,143,276
Prepaid income taxes	515,866	515,866	515,866	515,866	515,866
	21,119,633	19,505,222	19,474,248	25,590,754	26,020,894
OTHER ASSETS					
Deferred land costs	2,256,677	2,256,677	2,256,677	2,256,677	2,256,677
Debt issuance expenses	4,208,673	4,176,007	4,143,341	4,110,675	4,078,009
Investment in partnerships	103,053	102,114	101,175	100,236	99,297
Regulated Asset - Acquisition Premium	73,226,784	72,683,079	72,135,467	71,587,856	71,040,245
Other Regulated Assets	10,984,940	11,031,088	11,117,236	11,173,717	11,239,353
	90,780,128	90,248,966	89,753,897	89,229,162	88,713,582
TOTAL ASSETS	323,176,528	320,277,073	324,373,665	335,024,093	334,892,843

Pennichuck Corporation and Subsidiaries - Consolidated
Quarterly Budgeted Balance Sheet
For the year ended December 31, 2018

	Estimated Dec-17	BUD Q1 17	BUD Q2 17	BUD Q3 17	BUD Q4 17
EQUITY AND LIABILITIES					
Common stock	10	10	10	10	10
Paid in capital	30,561,126	30,492,771	30,424,416	30,356,061	30,287,706
Accumulated other comprehensive income	305,180	305,180	305,180	305,180	305,180
Retained earnings	(14,316,907)	(16,383,804)	(17,074,236)	(14,916,620)	(16,506,786)
Treasury stock and other	-	-	-	-	-
	<u>16,549,409</u>	<u>14,414,157</u>	<u>13,655,370</u>	<u>15,744,631</u>	<u>14,086,110</u>
MINORITY INTEREST					
LONG TERM DEBT					
Bonds, notes and mortgages	205,572,393	207,999,214	213,323,951	218,917,702	217,450,795
CURRENT LIABILITIES					
Line of credit	5,574,326	(0)	(0)	(0)	(0)
Current portion of long term debt	5,580,238	6,257,315	6,259,154	6,318,096	8,094,290
Accounts payable	1,154,277	1,213,061	1,312,486	1,437,423	1,235,496
Accrued property taxes	115,219	306,412	115,219	133,848	115,219
Accrued interest payable	1,624,541	786,291	14,046	625,825	1,496,562
Other accrued expenses	1,251,480	2,120,526	1,040,657	1,905,081	1,015,155
Income taxes payable	(16,342)	(16,342)	(16,342)	(16,342)	(16,342)
Customer deposits & other	76,015	10,204	10,204	10,204	10,204
	<u>15,359,753</u>	<u>10,677,467</u>	<u>8,735,424</u>	<u>10,414,134</u>	<u>11,950,584</u>
OTHER LIABILITIES AND DEFERRED CREDITS					
Deferred income taxes	20,691,084	22,094,592	23,526,109	25,009,743	26,424,579
Accrued liability pension	9,791,662	9,913,642	9,985,622	9,821,602	9,893,582
Unamortized ITC	503,634	495,375	487,116	478,857	470,598
Regulatory Liability	-	(4,989)	(9,978)	(14,967)	(19,956)
Customer Advances	181,158	181,158	181,158	181,158	181,158
CIAC, net	47,649,894	47,561,905	47,473,915	47,385,926	47,297,937
Accrued Post Retirement Benefits	3,047,040	3,047,040	3,047,040	3,047,040	3,047,040
Other liability: derivative instrument	374,204	374,204	374,204	374,204	374,204
Other long-term liabilities	3,456,299	3,523,310	3,593,736	3,664,064	3,736,214
	<u>85,694,974</u>	<u>87,186,236</u>	<u>88,658,921</u>	<u>89,947,626</u>	<u>91,405,355</u>
TOTAL LIABILITIES AND EQUITY	<u>323,176,528</u>	<u>320,277,073</u>	<u>324,373,665</u>	<u>335,024,093</u>	<u>334,892,843</u>



PENNICHUCK

Pennichuck Corporation and Subsidiaries - Consolidated

Quarterly Budgeted Stmt of Cash Flows

For the year ended December 31, 2018

	BUD Q1 17	BUD Q2 17	BUD Q3 17	BUD Q4 17	BUD Full Year	2017 (Projected)	Change Amount	%
Operating Activities:								
Net Income	(2,066,897)	(690,432)	2,157,616	(1,590,166)	(2,189,879)	(3,723,962)	1,534,083	41.2%
Adjustments to reconcile net income to net cash provided by operating activities:								
Depreciation and amortization	2,060,156	2,063,646	2,065,354	2,066,074	8,255,230	7,098,045	1,157,185	16.3%
Gain on sale of land/cell tower leases	-	-	-	-	-	(31,196)	31,196	100.0%
Amortization of deferred investment tax credits	(8,259)	(8,259)	(8,259)	(8,259)	(33,036)	(30,283)	(2,753)	9.1%
Provision for deferred income taxes	1,403,508	1,431,517	1,483,634	1,414,836	5,733,495	(508,210)	6,241,705	1228.2%
Allowance for funds used during construction	-	-	-	-	-	(8,139)	8,139	100.0%
Undistributed earnings in real estate partnerships	(939)	(939)	(939)	(939)	(5,756)	1,942	(5,698)	-293.4%
Special shareholder distributions	-	-	-	-	-	-	-	0.0%
Change in assets and liabilities:								
(Increase) decrease in accounts receivable and unbilled revenue	1,377,293	(1,129,202)	(1,577,823)	2,261,751	932,019	1,303,640	(371,621)	-28.5%
(Increase) decrease in refundable income taxes	-	-	-	-	-	-	-	0.0%
(Increase) decrease in materials and supplies	32,146	17,079	28,073	13,305	90,603	57,668	32,935	57.1%
(Increase) decrease in prepaid expenses	1,121,494	(1,095,760)	1,213,533	(1,078,477)	160,790	304,808	(144,018)	-47.2%
(Increase) decrease in deferred charges and other assets	532,674	496,581	526,247	517,092	2,072,594	441,988	1,630,606	368.9%
Increase (decrease) in accounts payable and accrued expenses	349,129	(1,875,528)	1,688,124	(171,390)	(9,664)	(3,675,277)	3,665,613	99.7%
Increase (decrease) in other	(316,349)	(301,030)	(535,458)	(296,789)	(1,449,626)	(654,137)	(795,489)	-121.6%
Net cash provided by (used in) operating activities	4,483,955	(1,092,326)	7,040,101	3,127,039	13,558,769	576,887	12,981,882	2250.3%
Investing Activities:								
Purchases of property, plant and equipment	(998,600)	(6,374,700)	(6,814,100)	(1,711,200)	(15,898,600)	(7,421,268)	(8,477,332)	-114.2%
Contributions in aid of construction	-	-	-	-	-	-	-	0.0%
(Increase) decrease in restricted cash	4,045,642	(3,300,000)	2,200,000	(3,000,000)	(54,358)	8,718,665	(8,773,023)	-100.6%
Sale (purchase) of investment securities	-	-	-	-	-	-	-	0.0%
Net (increase) decrease in notes receivable	-	-	-	-	-	-	-	0.0%
Proceeds from sale of land	-	-	-	-	-	36,758	(36,758)	-100.0%
Net change in investment in real estate partnerships and deferred land costs	-	-	-	-	-	-	-	0.0%
Net cash provided by (used in) investing activities	3,047,042	(9,674,700)	(4,614,100)	(4,711,200)	(15,952,958)	1,354,155	(17,287,113)	-1295.7%
Financing Activities:								
(Repayments) advances on line of credit	(5,574,326)	-	-	-	(5,574,326)	-	(5,574,326)	0.0%
Payments on long-term debt	(3,024,489)	(886,910)	(909,782)	(931,652)	(5,752,833)	(4,906,869)	(845,964)	-17.2%
Proceeds on long-term borrowings	6,098,909	6,184,008	6,532,997	1,211,461	20,027,375	1,536,591	18,490,784	1203.4%
Debt issuance costs	(573)	(573)	(573)	(573)	(2,292)	20,700	(22,992)	-111.1%
Proceeds from issuance of common stock and dividend reinvestment plan	-	-	-	-	-	-	-	0.0%
Dividends paid	(68,355)	(68,355)	(68,355)	(68,355)	(273,420)	(279,247)	5,827	2.1%
Net cash provided by (used in) financing activities	(2,568,834)	5,228,170	5,554,287	210,881	8,424,504	(3,628,825)	12,053,329	332.2%
Net increase (decrease) in cash	4,962,163	(5,538,856)	7,980,288	(1,373,280)	6,030,315	(1,717,783)	7,748,098	451.1%
Cash at beginning of period	4,533,895	9,496,059	3,957,203	11,937,491	4,533,895	2,446,159	2,087,736	85.3%
Cash at end of period	9,496,059	3,957,203	11,937,491	10,564,211	10,564,211	728,376	9,835,835	1350.4%



PENNICHUCK

Pennichuck Water Works

2018 Budgeted Statement of Income

	Budget				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Total Revenues	\$ 6,914,916	\$ 8,177,499	\$ 11,039,663	\$ 6,839,153	\$ 32,971,231	\$ 29,484,232	\$ 3,486,999	11.8%
Expenses:								
Production	1,058,587	1,273,969	1,561,169	1,114,312	5,008,037	4,571,844	436,193	9.5%
Distribution	533,328	592,091	571,812	521,397	2,218,628	2,155,992	62,636	2.9%
Engineering	267,405	295,004	301,428	286,761	1,150,598	1,169,360	(18,762)	-1.6%
Customer Accounting	117,348	116,984	116,984	117,627	468,943	447,889	21,054	4.7%
Administration	1,784,088	1,884,353	1,868,384	1,862,858	7,399,683	7,028,000	371,683	5.3%
Management fee	(772,085)	(746,546)	(769,046)	(771,462)	(3,059,139)	(3,015,200)	(43,939)	-1.5%
Total O&M	2,988,671	3,415,855	3,650,731	3,131,493	13,186,750	12,357,885	828,865	6.7%
Depreciation	1,420,606	1,420,257	1,408,974	1,407,531	5,657,368	5,411,618	245,750	4.5%
Amortization CIAC	(175,861)	(175,861)	(175,861)	(175,861)	(703,444)	(683,588)	(19,856)	-2.9%
Amortization Expense	483,603	486,873	485,205	484,359	1,940,040	1,937,887	2,153	0.1%
Gain on Disp. Of Utility Property	-	-	-	-	-	-	-	0.0%
Gain from forgiveness of SRF debt	(13,482)	(13,482)	(13,482)	(13,482)	(53,928)	(53,925)	(3)	0.0%
Taxes other than income	1,373,158	1,378,502	1,380,054	1,375,780	5,507,494	5,210,697	296,797	5.7%
Income taxes	(2,049)	13,126	59,840	(8,536)	62,381	941,214	(878,833)	-93.4%
Total Expenses	6,074,646	6,525,270	6,795,461	6,201,284	25,596,661	25,121,788	474,873	1.9%
Net Operating Income	840,270	1,652,229	4,244,202	637,869	7,374,570	4,362,444	3,012,126	69.0%
Other Income, Net	-	-	-	-	-	-	-	0.0%
AFUDC	-	-	-	-	-	18,304	(18,304)	-100.0%
Interest Income	-	-	-	-	-	-	-	0.0%
<u>Interest Income/(Expense):</u>								
Long term debt	(971,796)	(988,774)	(1,096,456)	(1,131,298)	(4,188,324)	(3,776,329)	(411,995)	-10.9%
Short-term debt - Interco	22,723	33,680	30,514	40,072	126,989	235,957	(108,968)	-46.2%
Interest on Cust Deposits	-	-	-	-	-	-	-	0.0%
Total Interest Expense	(949,073)	(955,094)	(1,065,942)	(1,091,226)	(4,061,335)	(3,540,372)	(520,963)	-14.7%
Net Income	\$ (108,803)	\$ 697,135	\$ 3,178,260	\$ (453,357)	\$ 3,313,235	\$ 840,376	\$ 2,472,859	294.3%

EBITDA	\$ 2,566,569	\$ 3,396,624	\$ 6,022,360	\$ 2,345,362	\$ 14,330,915	\$ 11,987,879	2,343,036	19.5%
Add Back: Extraordinary Items	-	-	-	-	-	-	-	0.0%
Normalized EBITDA	\$ 2,566,569	\$ 3,396,624	\$ 6,022,360	\$ 2,345,362	\$ 14,330,915	\$ 11,987,879	2,343,036	19.5%
Less: P&I on External Debt	(3,249,950)	(1,119,150)	(1,234,826)	(1,270,715)	(6,874,641)	(4,403,197)		
Less: CBFRR trfs to Parent	(1,929,828)	(1,929,828)	(1,929,828)	(1,929,828)	(7,719,312)	(7,076,036)		
Net Remainder	\$ (2,613,209)	\$ 347,646	\$ 2,857,706	\$ (855,181)	\$ (263,038)	\$ 508,646		

Pennichuck East Utility

2018 Budgeted Statement of Income

	Budget				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Total Revenues	\$ 1,566,610	\$ 2,217,257	\$ 2,537,063	\$ 2,374,878	\$ 8,695,808	\$ 7,197,307	\$ 1,498,501	20.8%
Expenses:								
Production	495,283	506,130	575,000	497,075	2,073,488	1,966,063	\$ 107,425	5.5%
Distribution	156,883	163,239	158,007	129,217	607,346	688,388	\$ (81,042)	-11.8%
Engineering	-	-	-	-	-	-	\$ -	0.0%
Customer Accounting	47,136	47,136	47,136	47,136	188,544	192,789	\$ (4,245)	-2.2%
Administration	39,997	54,253	39,539	39,741	173,530	167,569	\$ 5,961	3.6%
Management fee	524,882	531,171	525,631	525,036	2,106,720	2,059,574	\$ 47,146	2.3%
Total O&M	1,264,181	1,301,929	1,345,313	1,238,205	5,149,628	5,074,383	\$ 75,245	1.5%
Depreciation	306,403	306,347	303,631	303,215	1,219,596	1,115,615	\$ 103,981	9.3%
Amortization CIAC	(93,620)	(93,619)	(93,620)	(93,620)	(374,479)	(304,958)	\$ (69,521)	-22.8%
Amortization Expense	63,735	64,106	64,106	64,105	256,052	263,495	\$ (7,443)	-2.8%
Taxes other than income	273,492	273,492	273,492	273,492	1,093,968	933,267	\$ 160,701	17.2%
Gain from SRF	(5,652)	(5,652)	(5,652)	(5,652)	(22,608)	(22,613)	\$ 5	0.0%
Gain from Disp/Util Prop	-	-	-	-	-	-	\$ -	0.0%
Income taxes	(7,823)	3,442	8,515	7,475	11,609	(272,797)	\$ 284,406	-104.3%
Total Expenses	1,800,716	1,850,045	1,895,785	1,787,220	7,333,766	6,786,392	\$ 547,374	8.1%
Net Operating Income	(234,106)	367,212	641,278	587,658	1,362,042	410,915	\$ 951,127	231.5%
Other Income, Net	-	-	-	-	-	(338)	\$ 338	100.0%
AFUDC	-	-	-	-	-	8,701	\$ (8,701)	-100.0%
Interest Income	-	-	-	-	-	-	-	0.0%
Interest Expense:								
Long term debt	(157,695)	(161,899)	(167,043)	(169,625)	(656,262)	(572,177)	\$ (84,085)	-14.7%
Short-term debt - Interco	(23,705)	(22,451)	(21,978)	(21,017)	(89,151)	(115,567)	\$ 26,416	22.9%
Interest on Cust Deps	-	-	-	-	-	-	\$ -	0.0%
Total Interest, Net	(181,400)	(184,350)	(189,021)	(190,642)	(745,413)	(687,744)	\$ (57,669)	-8.4%
Net Income	\$ (415,506)	\$ 182,862	\$ 452,257	\$ 397,016	\$ 616,629	\$ (268,466)	\$ 885,095	329.7%

EBITDA	\$ 34,589	\$ 647,488	\$ 923,910	\$ 868,833	\$ 2,474,820	\$ 1,220,633	\$ 1,254,187	102.7%
Less: P&I on External Debt	(307,057)	(312,846)	(319,289)	(324,031)	(1,263,223)	(1,068,154)		
Less: CBFRR tfrs to Parent	(223,599)	(223,599)	(223,599)	(223,599)	(894,396)	(819,863)		
Net Remainder	\$ (496,067)	\$ 111,043	\$ 381,022	\$ 321,203	\$ 317,201	\$ (667,384)		

Pittsfield Aqueduct Company

2018 Budgeted Statement of Income

	Budget				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Total Revenues	\$ 188,598	\$ 196,632	\$ 200,884	\$ 192,084	\$ 778,198	\$ 792,092	\$ (13,894)	-1.8%
Expenses:								
Production	27,385	24,155	24,820	26,425	102,785	116,764	\$ (13,979)	-12.0%
Distribution	11,477	12,366	9,999	10,624	44,466	82,996	\$ (38,530)	-46.4%
Engineering	-	-	-	-	-	-	\$ -	0.0%
Customer Accounting	4,650	4,650	4,650	4,650	18,600	18,126	\$ 474	2.6%
Administration	5,618	5,938	5,610	7,130	24,296	19,654	\$ 4,642	23.6%
Management fee	42,929	43,469	42,993	42,942	172,333	168,971	\$ 3,362	2.0%
Total O&M	92,059	90,578	88,072	91,771	362,480	406,511	\$ (44,031)	-10.8%
Depreciation	25,473	25,462	25,458	25,408	101,801	102,014	\$ (213)	-0.2%
Amortization CIAC	(5,748)	(5,748)	(5,748)	(5,748)	(22,992)	(23,080)	\$ 88	0.4%
Amortization Expense	9,111	9,171	9,171	9,171	36,624	35,919	\$ 705	2.0%
Taxes other than income	50,301	50,301	50,301	50,301	201,204	211,656	\$ (10,452)	-4.9%
Income taxes	40	216	334	104	694	(927)	\$ 1,621	174.9%
Total Expenses	171,236	169,980	167,588	171,007	679,811	732,093	\$ (52,282)	-7.1%
Net Operating Income	17,362	26,652	33,296	21,077	98,387	59,999	\$ 38,388	64.0%
Other Income, Net	-	-	-	-	-	-	\$ -	0.0%
AFUDC	-	-	-	-	-	-	\$ -	0.0%
Interest Income/(Expense):								
Long term debt	(840)	(839)	(835)	(829)	(3,343)	(119)	\$ (3,224)	-2709.2%
Short-term debt - Interco	(14,428)	(14,354)	(14,772)	(14,711)	(58,265)	(60,772)	\$ 2,507	4.1%
Total Interest, Net	(15,268)	(15,193)	(15,607)	(15,540)	(61,608)	(60,891)	\$ (717)	-1.2%
Net Income	\$ 2,094	\$ 11,459	\$ 17,689	\$ 5,537	\$ 36,779	\$ (892)	\$ 37,671	4223.2%

EBITDA	\$ 46,238	\$ 55,753	\$ 62,511	\$ 50,012	\$ 214,514	\$ 173,925	\$ 40,589	23.3%
Less: P&I on External Debt	(840)	(1,462)	(1,776)	(1,777)	(5,855)	(119)		
Less: CBFRF trfs to Parent	(36,354)	(36,354)	(36,354)	(36,354)	(145,416)	(133,298)		
Net Remainder	\$ 9,044	\$ 17,937	\$ 24,381	\$ 11,881	\$ 63,243	\$ 40,508		

Pennichuck Water Service Company

2018 Budgeted Statement of Income

	Budget				Budget 2018	#	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4				Amount	Percent
Total Revenues	885,775	863,543	932,703	899,309	3,581,330		3,307,756	\$ 273,574	8.3%
Total Operating Expenses	520,008	561,261	527,733	533,173	2,142,175		2,088,952	\$ 53,223	2.5%
Operating Income	365,767	302,282	404,970	366,136	1,439,155		1,218,804	\$ 220,351	18.1%
Professional Fees & Services	300	300	300	300	1,200		1,822	\$ (622)	-34.1%
Insurance	28,416	28,416	28,416	28,416	113,664		130,474	\$ (16,810)	-12.9%
Admin & General Expense	15,039	15,039	15,039	15,039	60,156		63,418	\$ (3,262)	-5.1%
Uncollectible Accounts	870	870	870	870	3,480		(4,904)	\$ 8,384	171.0%
PCP Management Fee allocation	279,007	280,333	279,165	279,039	1,117,544		1,121,146	\$ (3,602)	-0.3%
Total Corporate Expense	323,632	324,958	323,790	323,664	1,296,044		1,311,956	\$ (15,912)	-1.2%
Depreciation Expense	-	-	17,380	20,856	38,236		-	\$ 38,236	0.0%
Amortization Expense	-	-	-	-	-		-	\$ -	0.0%
Total Operating Deductions	-	-	17,380	20,856	38,236		-	\$ 38,236	0.0%
Other (Expense)	-	-	-	-	-		-	\$ -	0.0%
Interco Interest Income/(Expense)	(171)	37	(4,874)	(9,615)	(14,623)		(3,397)	\$ (11,226)	-330.5%
Total Interest - PWSCO	(171)	37	(4,874)	(9,615)	(14,623)		(3,397)	\$ (11,226)	-330.5%
Net Income Before Taxes	41,964	(22,639)	58,926	12,001	90,252		(96,549)	\$ 186,801	193.5%
Tax Provision (Benefit)	775	(419)	1,089	222	1,667		(38,243)	\$ 39,910	104.4%
Net Income after Taxes (Loss)	\$ 41,189	\$ (22,220)	\$ 57,837	\$ 11,779	\$ 88,585		\$ (58,306)	\$ 146,891	251.9%

EBITDA	\$ 42,135	\$ (22,676)	\$ 81,180	\$ 42,472	\$ 143,111	\$ (93,152)	\$ 236,263	253.6%
--------	-----------	-------------	-----------	-----------	------------	-------------	------------	--------

Less: P&I on External Debt
Less: CBFRR payments to City

Net Remainder

	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	\$ 42,135	\$ (22,676)	\$ 81,180	\$ 42,472	\$ 143,111	\$ (93,152)	



Southwood Corporation

2018 Budgeted Statement of Income

	Budget				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Income Property, Net								
Revenues - HECOP IV	(939)	(939)	(939)	(939)	(3,756)	(3,755)	\$ (1)	0.0%
Total income property, net	(939)	(939)	(939)	(939)	(3,756)	(3,755)	\$ (1)	0.0%
Land Sales								
Other land/timber sales	-	-	-	-	-	-	\$ -	0.0%
Total land sales	-	-	-	-	-	-	\$ -	0.0%
Other								
Other Income	2,835	2,835	2,835	2,835	11,340	11,335	\$ 5	0.0%
Total other	2,835	2,835	2,835	2,835	11,340	11,335	\$ 5	0.0%
Total Revenues	1,896	1,896	1,896	1,896	7,584	7,580	\$ 4	0.1%
Property taxes	6,828	6,828	6,828	6,828	27,312	24,259	\$ 3,053	12.6%
Professional fees & services	1,152	1,152	1,152	1,152	4,608	4,827	\$ (219)	-4.5%
Miscellaneous general expense	-	-	-	-	-	270	\$ (270)	-100.0%
Insurance Expense	678	678	678	678	2,712	3,052	\$ (340)	-11.1%
Capitalization of costs to Deferred Land Costs	-	-	-	-	-	-	\$ -	0.0%
Interco management fee - Southwood	3,378	3,501	3,383	3,370	13,632	12,075	\$ 1,557	12.9%
Total Expenses	12,036	12,159	12,041	12,028	48,264	44,483	\$ 3,781	8.5%
Interco interest (charge)/credit	(129)	(151)	(172)	(194)	(646)	(790)	\$ 144	18.2%
Net Income Before Taxes	(10,269)	(10,414)	(10,317)	(10,326)	(41,326)	(37,693)	\$ (3,633)	-9.6%
Tax Provision (Benefit)	(189)	(192)	(190)	(192)	(763)	(14,930)	\$ 14,167	94.9%
Net Income (Loss)	\$ (10,080)	\$ (10,222)	\$ (10,127)	\$ (10,134)	\$ (40,563)	\$ (22,763)	\$ (17,800)	-78.2%
EBITDA	\$ (10,140)	\$ (10,263)	\$ (10,145)	\$ (10,132)	\$ (40,680)	\$ (36,903)	\$ (3,777)	-10.2%
Add Back: Extraordinary Items (net of tax impact)	(2,835)	(2,835)	(2,835)	(2,835)	(11,340)	(11,335)	\$ (5)	0.0%
Normalized EBITDA	\$ (12,975)	\$ (13,098)	\$ (12,980)	\$ (12,967)	\$ (52,020)	\$ (48,238)	\$ (3,782)	-7.8%
Less: P&I on External Debt	-	-	-	-	-	-	-	-
Less: CBFRF payments to City	-	-	-	-	-	-	-	-
Net Remainder	\$ (12,975)	\$ (13,098)	\$ (12,980)	\$ (12,967)	\$ (52,020)	\$ (48,238)		

Holding Company

2018 Budgeted Statement of Income

	Budgets				Budget	Fcstd 2017	Change –	
	Q1	Q2	Q3	Q4	2018		Amount	Percent
Revenues:								
Lease income - towers	\$ -	\$ -	\$ -	\$ -	-	\$ -	-	0.0%
Miscellaneous	-	-	-	-	-	-	-	0.0%
Operating Expenses:								
Depreciation	-	-	-	-	-	-	-	0.0%
Property Taxes	1,029	1,029	1,029	1,029	4,116	5,125	(1,009)	-19.7%
Professional fees	21,842	22,668	22,668	22,668	89,846	69,087	20,759	30.0%
Lobbying Fees	5,700	5,700	5,700	5,700	22,800	19,108	3,692	19.3%
Marketing Costs	-	-	-	-	-	-	-	0.0%
Stockholders Exp/Director Fee	56,175	89,175	59,375	56,175	260,900	248,462	12,438	5.0%
Other Admin & Gen Exp	9,708	8,993	8,493	8,493	35,687	30,408	5,279	17.4%
Management fee	(78,111)	(111,934)	(82,136)	(78,936)	(351,117)	(346,566)	(4,551)	-1.3%
Total Operating Expenses	16,343	15,631	15,129	15,129	62,232	25,624	36,608	142.9%
Eminent Domain & Merger Related Costs	-	-	-	-	-	-	-	0.0%
Other Income	-	-	-	-	-	-	-	0.0%
Income Before Interest and Income Taxes	(16,343)	(15,631)	(15,129)	(15,129)	(62,232)	(25,624)	(36,608)	-142.9%
Investment Interest Income	-	-	-	-	-	-	-	0.0%
Interest Income/(Expense):								
Long-term debt	(1,600,597)	(1,592,893)	(1,585,076)	(1,577,141)	(6,355,707)	(6,477,201)	121,494	1.9%
Short-term debt - Interco	15,718	3,247	6,284	(4,408)	20,841	(56,314)	77,155	137.0%
Amort- Debt Expense	26,454	26,658	26,658	26,658	106,428	111,616	(5,188)	-4.6%
Other Interest Expense	-	-	-	-	-	-	-	0.0%
Line of Credit Expense	(30,692)	-	-	-	(30,692)	(6,876)	(23,816)	-346.4%
Total Interest (Expense)	(1,589,117)	(1,562,988)	(1,552,134)	(1,554,891)	(6,259,130)	(6,428,775)	169,645	2.6%
Income (Loss) Before Taxes	(1,605,460)	(1,578,619)	(1,567,263)	(1,570,020)	(6,321,362)	(6,454,399)	133,037	2.1%
Tax Provision (Benefit)	(29,669)	(29,173)	(28,963)	(29,013)	(116,818)	(2,597,250)	2,480,432	95.5%
Net (Loss)	\$ (1,575,791)	\$ (1,549,446)	\$ (1,538,300)	\$ (1,541,007)	\$ (6,204,544)	\$ (3,857,149)	\$ (2,347,395)	-60.9%

EBITDA	\$ (16,343)	\$ (15,631)	\$ (15,129)	\$ (15,129)	\$ (62,232)	\$ (25,624)	(36,608)	-142.9%
Add Back: Extraordinary Items	-	-	-	-	-	-	-	0.0%
Normalized EBITDA	(16,343)	(15,631)	(15,129)	(15,129)	(62,232)	(25,624)	(36,608)	-142.9%
Less: P&I on External Debt	(30,692)	-	-	-	(30,692)	(6,876)	-	-
Less: CBFRR payments to City	(2,190,000)	(2,190,000)	(2,190,000)	(2,190,000)	(8,760,000)	(8,765,734)	-	-
Less: Special Dividend to City (ED Costs)	-	-	-	-	-	-	-	-
Net Remainder	\$ (2,237,035)	\$ (2,205,631)	\$ (2,205,129)	\$ (2,205,129)	\$ (8,852,924)	\$ (8,798,234)	-	-

2018 vs 2017 Budget Comparative Review

As of January 26, 2018

Pennichuck Consolidated Budgeted Statement of Income Comparison 2018 vs. 2017

	Budget 2018	Budget 2017	Change – Amount	Percent
Revenues:				
Water Utility Operations	\$ 42,445,237	\$ 38,019,590	\$ 4,425,647	11.6%
Water Management Services	3,681,330	3,208,766	\$ 372,664	11.6%
Total Water Revenues	46,026,567	41,228,356	\$ 4,798,211	11.6%
Real Estate Operations	-	-	\$ -	0.0%
Other	-	-	\$ -	0.0%
Total Revenues	46,026,567	41,228,356	\$ 4,798,211	11.6%
Operating Expenses:				
Water Utility Operations	33,635,554	31,800,360	\$ 1,735,204	5.5%
Water Management Services	3,476,455	3,434,781	\$ 41,674	1.2%
Total Water Expenses	37,012,009	35,235,131	\$ 1,776,878	5.0%
Real Estate Operations	48,264	47,106	\$ 1,158	2.5%
Other	62,232	60,343	\$ 1,889	3.1%
Total Expenses	37,122,605	35,342,680	\$ 1,779,925	5.0%
Operating Income	8,904,062	5,885,776	\$ 3,018,286	51.3%
Eminent Domain & Merger Related Costs	-	-	\$ -	0.0%
Net Earnings (Loss) from joint ventures	(3,756)	(5,772)	\$ 2,016	34.9%
Other Income, Net	11,340	-	\$ 11,340	0.0%
Allowance for Funds Used During Construction	-	-	\$ -	0.0%
Interest Income	-	-	\$ -	0.0%
Interest Expense:				
Long Term Debt	(11,097,239)	(10,843,971)	\$ (253,268)	-2.3%
Intercompany Interest	(14,824)	(14,871)	\$ 47	0.3%
Line of Credit Expense	(30,692)	(82,542)	\$ 51,850	62.8%
Total Interest Expense	(11,142,765)	(10,941,384)	\$ (201,371)	-1.8%
Income Before Provision for Income Taxes	(2,231,109)	(5,061,380)	\$ 2,830,271	55.9%
Tax Provision				
Existing Operations	(41,230)	(1,213,870)	\$ 1,172,640	96.6%
Total Tax Provision	(41,230)	(1,213,870)	\$ 1,172,640	96.6%
Net Income (Loss)	\$ (2,189,879)	\$ (3,847,510)	\$ 1,657,631	43.1%
EBITDA	17,060,448	13,670,339	\$ 3,490,109	25.7%
Add Back: Extraordinary Items	(11,340)	-	\$ (11,340)	0.0%
Normalized EBITDA	17,049,108	13,670,339	\$ 3,478,769	25.6%
Less: P&I on External Debt	(8,174,411)	(7,835,324)		
Less: CBFRF payments to City	(8,760,000)	(8,760,000)		
Less: Special Dividend to City (ED Costs)	-	-		
Net Remainder	\$ 114,697	\$ (3,024,985)		

Pennichuck Water Works

Budgeted Statement of Income Comparison

2018 vs. 2017

	Budget 2018	Budget 2017	Change -- Amount	Percent
Total Revenues	\$ 32,971,231	\$ 29,887,973	\$ 3,083,258	10.3%
Expenses:				
Production	5,008,037	4,544,734	463,303	10.2%
Distribution	2,218,628	1,774,108	444,520	25.1%
Engineering	1,150,598	1,153,885	(3,287)	-0.3%
Customer Accounting	468,943	444,648	24,295	5.5%
Administration	7,399,683	7,371,574	28,109	0.4%
Management fee	(3,059,139)	(2,868,062)	(191,077)	-6.7%
Total O&M	13,186,750	12,420,887	765,863	6.2%
Depreciation	5,657,368	5,262,055	395,313	7.5%
Amortization CIAC	(703,444)	(670,868)	(32,576)	-4.9%
Amortization Expense	1,940,040	1,936,118	3,922	0.2%
Gain on Disp. Of Utility Property	-	-	-	0.0%
Gain from forgiveness of SRF debt	(53,928)	(53,928)	-	0.0%
Taxes other than income	5,507,494	5,153,443	354,051	6.9%
Income taxes	62,381	485,866	(423,485)	-87.2%
Total Expenses	25,596,661	24,533,573	1,063,088	4.3%
Net Operating Income	7,374,570	5,354,400	2,020,170	37.7%
Other Income, Net	-	-	-	0.0%
AFUDC	-	-	-	0.0%
Interest Income	-	-	-	0.0%
Interest Income/(Expense):				
Long term debt	(4,188,324)	(3,896,020)	(292,304)	-7.5%
Short-term debt - Interco	126,989	81,633	45,356	55.6%
Interest on Cust Deposits	-	-	-	0.0%
Total Interest Expense	(4,061,335)	(3,814,387)	(246,948)	6.5%
Net Income	\$ 3,313,235	\$ 1,540,013	\$ 1,773,222	115.1%
EBITDA	\$ 14,330,915	\$ 12,367,571	1,963,344	15.9%
Add Back: Extraordinary Items	-	-	-	0.0%
Normalized EBITDA	\$ 14,330,915	\$ 12,367,571	1,963,344	15.9%
Less: P&I on External Debt	(6,874,641)	(6,446,974)		
Less: CBFRF trfs to Parent	(7,719,312)	(7,719,312)		
Net Remainder	\$ (263,038)	\$ (1,798,715)		

Pennichuck East Utility

Budgeted Statement of Income Comparison

2018 vs. 2017

	Budget 2018	Budget 2017	Change — Amount	Percent
Total Revenues	\$ 8,695,808	\$ 7,361,797	\$ 1,334,011	18.1%
Expenses:				
Production	2,073,488	2,131,758	\$ (58,270)	-2.7%
Distribution	607,346	522,914	\$ 84,432	16.1%
Engineering	-	-	\$ -	0.0%
Customer Accounting	188,544	183,716	\$ 4,828	2.6%
Administration	173,530	175,682	\$ (2,152)	-1.2%
Management fee	2,106,720	1,912,749	\$ 193,971	10.1%
Total O&M	5,149,628	4,926,819	\$ 222,809	4.5%
Depreciation	1,219,596	1,041,159	\$ 178,437	17.1%
Amortization CIAC	(374,479)	(276,186)	\$ (98,293)	-35.6%
Amortization Expense	256,052	264,748	\$ (8,696)	-3.3%
Taxes other than income	1,093,968	1,098,060	\$ (4,092)	-0.4%
Gain from SRF	(22,608)	(22,608)	\$ -	0.0%
Gain from Disp/Util Prop	-	-	\$ -	0.0%
Income taxes	11,609	(81,170)	\$ 92,779	114.3%
Total Expenses	7,333,766	6,950,822	\$ 382,944	5.5%
Net Operating Income	1,362,042	410,975	\$ 951,067	231.4%
Other Income, Net	-	-	\$ -	0.0%
AFUDC	-	-	\$ -	0.0%
Interest Income	-	-	-	0.0%
Interest Expense:				
Long term debt	(656,262)	(573,488)	\$ (82,774)	-14.4%
Short-term debt - Interco	(89,151)	(94,767)	\$ 5,616	5.9%
Interest on Cust Deps	-	-	\$ -	0.0%
Total Interest, Net	(745,413)	(668,255)	\$ (77,158)	-11.5%
Net Income	\$ 616,629	\$ (257,280)	\$ 873,909	339.7%

EBITDA	\$ 2,474,820	\$ 1,359,526	\$ 1,115,294	82.0%
Less: P&I on External Debt	(1,263,223)	(1,304,529)		
Less: CBFRR tfrs to Parent	(894,396)	(894,396)		
Net Remainder	\$ 317,201	\$ (839,399)		

Pennichuck Aqueduct Company

Budgeted Statement of Income Comparison

2018 vs. 2017

	Budget 2018	Budget 2017	Change – Amount	Percent
Total Revenues	\$ 778,198	\$ 769,820	\$ 8,378	1.1%
Expenses:				
Production	102,785	101,905	\$ 880	0.9%
Distribution	44,466	47,698	\$ (3,232)	-6.8%
Engineering	-	-	\$ -	0.0%
Customer Accounting	18,600	17,295	\$ 1,305	7.5%
Administration	24,296	23,588	\$ 708	3.0%
Management fee	172,333	180,329	\$ (7,996)	-4.4%
Total O&M	362,480	370,815	\$ (8,335)	-2.2%
Depreciation	101,801	102,604	\$ (803)	-0.8%
Amortization CIAC	(22,992)	(22,984)	\$ (8)	0.0%
Amortization Expense	36,624	35,352	\$ 1,272	3.6%
Taxes other than income	201,204	234,864	\$ (33,660)	-14.3%
Income taxes	694	(2,501)	\$ 3,195	127.7%
Total Expenses	679,811	718,150	\$ (38,339)	-5.3%
Net Operating Income	98,387	51,670	\$ 46,717	90.4%
Other Income, Net	-	-	\$ -	0.0%
AFUDC	-	-	\$ -	0.0%
Interest Income/(Expense):				
Long term debt	(3,343)	(1,279)	\$ (2,064)	-161.4%
Short-term debt - Interco	(58,265)	(58,322)	\$ 57	0.1%
Total Interest, Net	(61,608)	(59,601)	\$ (2,007)	-3.4%
Net Income	\$ 36,779	\$ (7,931)	\$ 44,710	563.7%
EBITDA	\$ 214,514	\$ 164,141	\$ 50,373	30.7%
Less: P&I on External Debt	(5,855)	(1,279)		
Less: CBFRR tfrs to Parent	(145,416)	(145,416)		
Net Remainder	\$ 63,243	\$ 17,446		

Pennichuck Water Service Company **Budgeted Statement of Income Comparison** **2018 vs. 2017**

	Budget 2018	Budget 2017	Change -- Amount	Percent
Total Revenues	3,581,330	3,208,766	\$ 372,564	11.6%
Total Operating Expenses	2,142,175	2,113,061	\$ 29,114	1.4%
Operating Income	1,439,155	1,095,705	\$ 343,450	31.3%
Professional Fees & Services	1,200	600	\$ 600	100.0%
Insurance	113,664	138,408	\$ (24,744)	-17.9%
Admin & General Expense	60,156	61,000	\$ (844)	-1.4%
Uncollectible Accounts	3,480	9,600	\$ (6,120)	-63.8%
PCP Management Fee allocation	1,117,544	1,093,775	\$ 23,769	2.2%
Total Corporate Expense	1,296,044	1,303,383	\$ (7,339)	-0.6%
Depreciation Expense	38,236	18,337	\$ 19,899	108.5%
Amortization Expense	-	-	\$ -	0.0%
Total Operating Deductions	38,236	18,337	\$ 19,899	108.5%
Other (Expense)	-	-	\$ -	0.0%
Interco Interest Income/(Expense)	(14,623)	(17,128)	\$ 2,505	14.6%
Total Interest - PWSCO	(14,623)	(17,128)	\$ 2,505	14.6%
Net Income Before Taxes	90,252	(243,143)	\$ 333,395	137.1%
Tax Provision (Benefit)	1,667	(58,313)	\$ 59,980	102.9%
Net Income after Taxes (Loss)	\$ 88,585	\$ (184,830)	\$ 273,415	147.9%

EBITDA	\$ 143,111	\$ (207,678)	\$ 350,789	168.9%
Less: P&I on External Debt				
Less: CBFRR payments to City				
Net Remainder	\$ 143,111	\$ (207,678)		

Southwood Corporation

Budgeted Statement of Income Comparison

2018 vs. 2017

	Budget 2018	Budget 2017	Change – Amount	Percent
Income Property, Net				
Revenues - HECOP IV	(3,756)	(5,772)	\$ 2,016	34.9%
Total income property, net	(3,756)	(5,772)	\$ 2,016	34.9%
Land Sales				
Other land/timber sales	-	-	\$ -	0.0%
Total land sales	-	-	\$ -	0.0%
Other				
Other Income	11,340	-	\$ 11,340	0.0%
Total other	11,340	-	\$ 11,340	0.0%
Total Revenues	7,584	(5,772)	\$ 13,356	231.4%
Property taxes	27,312	30,480	\$ (3,168)	-10.4%
Professional fees & services	4,608	-	\$ 4,608	0.0%
Miscellaneous general expense	-	-	\$ -	0.0%
Insurance Expense	2,712	3,060	\$ (348)	-11.4%
Capitalization of costs to Deferred Land Costs	-	-	\$ -	0.0%
Interco management fee - Southwood	13,632	13,566	\$ 66	0.5%
Total Expenses	48,264	47,106	\$ 1,158	2.5%
Interco interest (charge)/credit	(646)	(482)	\$ (164)	-34.0%
Net Income Before Taxes	(41,326)	(53,360)	\$ 12,034	22.6%
Tax Provision (Benefit)	(763)	(12,797)	\$ 12,034	94.0%
Net Income (Loss)	\$ (40,563)	\$ (40,563)	\$ -	0.0%
EBITDA	\$ (40,680)	\$ (52,878)	\$ 12,198	23.1%
Add Back: Extraordinary Items (net of tax impact)	(11,340)	-	\$ (11,340)	0.0%
Normalized EBITDA	\$ (52,020)	\$ (52,878)	\$ 858	1.6%
Less: P&I on External Debt	-	-		
Less: CBFRR payments to City	-	-		
Net Remainder	\$ (52,020)	\$ (52,878)		

Holding Company

Budgeted Statement of Income Comparison

2018 vs. 2017

Revenues:
Lease income - towers
Miscellaneous

Operating Expenses:

Depreciation
Property Taxes
Professional fees
Lobbying Fees
Marketing Costs
Stockholders Exp/Director Fee
Other Admin & Gen Exp
Management fee
Total Operating Expenses

Eminent Domain & Merger Related Costs
Other Income

Income Before Interest
and Income Taxes

Investment Interest Income

Interest Income/(Expense):

Long-term debt
Short-term debt - Interco
Amort- Debt Expense
Other Interest Expense
Line of Credit Expense
Total Interest (Expense)

Income (Loss) Before Taxes

Tax Provision (Benefit)

Net (Loss)

EBITDA

Add Back: Extraordinary Items
Normalized EBITDA

Less: P&I on External Debt
Less: CBFR payments to City
Less: Special Dividend to City (ED Costs)
Net Remainder

	Budget 2018	Budget 2017	Change – Amount	Percent
Revenues:				
Lease income - towers	-	-	\$ -	0.0%
Miscellaneous	-	-	-	0.0%
	-	-	-	0.0%
Operating Expenses:				
Depreciation	-	-	-	0.0%
Property Taxes	4,116	2,064	2,052	99.4%
Professional fees	89,846	85,344	4,502	5.3%
Lobbying Fees	22,800	22,800	-	0.0%
Marketing Costs	-	-	-	0.0%
Stockholders Exp/Director Fee	260,900	245,800	15,100	6.1%
Other Admin & Gen Exp	35,687	36,692	(1,005)	-2.7%
Management fee	(351,117)	(332,357)	(18,760)	-5.6%
Total Operating Expenses	62,232	60,343	1,889	3.1%
Eminent Domain & Merger Related Costs	-	-	-	0.0%
Other Income	-	-	-	0.0%
Income Before Interest and Income Taxes	(62,232)	(60,343)	(1,889)	-3.1%
Investment Interest Income	-	-	-	0.0%
Interest Income/(Expense):				
Long-term debt	(6,355,707)	(6,477,205)	121,498	1.9%
Short-term debt - Interco	20,841	74,195	(53,354)	-71.9%
Amort- Debt Expense	106,428	104,021	2,407	2.3%
Other Interest Expense	-	-	-	0.0%
Line of Credit Expense	(30,692)	(82,542)	51,850	62.8%
Total Interest (Expense)	(6,259,130)	(6,381,531)	122,401	1.9%
Income (Loss) Before Taxes	(6,321,362)	(6,441,874)	120,512	1.9%
Tax Provision (Benefit)	(116,818)	(1,544,955)	1,428,137	92.4%
Net (Loss)	\$ (6,204,544)	\$ (4,896,919)	\$ (1,307,625)	-26.7%
EBITDA	(62,232)	(60,343)	(1,889)	-3.1%
Add Back: Extraordinary Items	-	-	-	0.0%
Normalized EBITDA	(62,232)	(60,343)	\$ (1,889)	-3.1%
Less: P&I on External Debt	(30,692)	(82,542)		
Less: CBFR payments to City	(8,760,000)	(8,760,000)		
Less: Special Dividend to City (ED Costs)	-	-		
Net Remainder	\$ (8,852,924)	\$ (8,902,885)		

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18

Request No. Staff 2-1

Date of Response: 5/30/18

Witness: Donald L. Ware

REQUEST: As noted on page 4 of 14 (bates page 0023) of the exhibits of D. Ware as filed on 2/16/2018, under the Amherst Street Project heading is a line item to construct a nature walk around the Pennichuck Bog. This project was noted as “deferred” in the 2017 project list.

- a) What is the current status of this project?
- b) What benefit does the nature walk provide the customers of Pennichuck Water Works?

RESPONSE:

a) This project has been deferred indefinitely. The project was to be a joint project between the Nashua School Board and Pennichuck Water Works. The Nashua School Board is no longer pursuing this project.

b) The Boardwalk was being constructed around a wetlands area to be used in school educational tours regarding the value of wetlands in the protection of water quality. The goal of the education program was to build awareness among “future” customer as to the value of wetlands and why they should not be eliminated.

Pennichuck Water Works, Inc.
DW 18-022
2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)
Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18
Request No. Staff 2-2

Date of Response: 5/30/18
Witness: Donald L. Ware

REQUEST: For 2017 (actual), 2018 (estimated) and 2019 (estimated) please provide project list totals by General Ledger Account number.

RESPONSE:

The 2017 actual General Ledger Account numbers are found on Exhibit 3 which was developed as part of the QCPAC audit. The estimated General Ledger Account numbers for 2018 and 2019 are found on Exhibit 2.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18
Request No. Staff 2-3

Date of Response: 5/30/18
Witness: Donald L. Ware

REQUEST: Now that the annual recoupment charge (QCPAC) includes a variety of Capital Projects, does the Company have a preliminary schedule for future rate cases and, if so, what does that schedule look like for the next 10 years?

RESPONSE:

The Company does not have a preliminary schedule for future rate cases. The driver for future rate cases will be inflationary pressure on Operating Expenses. With adequate operating reserves the Company hopes to file rate cases every three years. Whereas the CBFRR does not change between rate cases and the expenses associated with capital expenditures (Principal and Interest plus property tax expenses) are covered by the QCPAC process and where operating expenses (exclusive of property taxes) currently account for about 38% of operating revenues the Company would expect an increase of about 8.0% every three years to cover an inflationary pressure of 2.0% per year on operating expenses (exclusive of increase in property taxes which should be substantially covered via the annual QCPAC Surcharge) and to allow for a true up of the Company's reserve funds. Please see the attached Exhibit 1 titled "Pennichuck Water Works Reserve Fund Scenarios" in support of these numbers. The projected rate increase every three years is based on the Good Year, Neutral Year, Bad Year scenario and the assumption that the reserve deficit will be funded over debt to be fully amortized over ten years at a rate of 5%.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18
Request No. Staff 2-4

Date of Response: 5/30/18
Witness: Donald L. Ware

REQUEST: Now that the Audit of the 2017 QCPAC Projects is complete, when does the Company anticipate updating the applicable schedules to reflect the lower anticipated property tax impact?

RESPONSE:

The updated schedule for the 2017 QCPAC schedules have been updated to reflect the lower anticipated property tax impact of \$122,079. The updated schedule is included as Exhibit 2.

Pennichuck Water Works, Inc.

DW 18-022

2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)

Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18

Request No. Staff 2-5

Date of Response: 5/30/18

Witness: Donald L. Ware

REQUEST: The original estimate for 2017 QCPAC Projects was approximately \$9,787,000 and the final Audited total was \$5,291,409. Discussed on bates pages 12 and 13 of the testimony of D. Ware in Docket DW 17-179 and captured in the Staff Recommendation filed on 2/15/2018 also in Docket DW 17-179, PWW stated the reason for the decrease in capital expenses was due to scheduling constraints, resource constraints, as well as the realization that certain budgeted projects were either not necessary or not as extensive as originally anticipated. Please explain if the Company believes that such reductions are something that should be anticipated for future project years.

RESPONSE:

No, the difference between the projected an actual Capital Expenditures in 2017 should not be expected in the future. The Company expects to invest about 100% of its projected capital expenditures each year. The difference in 2017 was almost exclusively driven by a substantial portion of the Company's Engineering Staff's time being consumed by designing and managing the installation of over 10.1 miles of water main, over 11.6 miles of water services associated with 356 water services associated with the PFOA response in Litchfield. The diverted Engineering Staff time and the cost of the PFOA water main/service work was paid for by the responsible party, St. Gobain Industries.

Pennichuck Water Works, Inc.
DW 18-022
2018 Petition For Qualified Capital Project Adjustment Charge (QCPAC)
Responses to Staff Data Requests – Set 2

Date Request Received: 5/16/18
Request No. Staff 2-6

Date of Response: 5/30/18
Witness: Donald L. Ware

REQUEST: Please list all overhead rates for the Company over the past 5 years.

RESPONSE:

The following are the direct overhead rates for both union and non-union labor for the past five years:

	Non-Union DOH	Union DOH
2013	56.27%	80.27%
2014	49.84%	64.35%
2015	45.38%	54.92%
2016	51.53%	70.28%
2017	51.25%	67.96%

In addition to the Direct Overhead rates detailed above the Company adds 2% for indirect overhead (management) to routine monthly capital work order activity.

Increase In Material Operating Expenses of per year based on average increase of these expenses per year between 2012 and 2017. See Table below for calculation.

PWV Proforma Test Year 2016 with Step Increase						
Proformed Revenue Requirement ¹ - \$ 31,560,798						
	CBFRR	Material Operating Expense Revenue Requirement	Operating Expense Revenue Requirement	P&I Revenue Requirement ²	0.1 P&I Revenue Requirement	
Revenue Requirement ² -	\$ 7,465,139	\$ 16,608,695	\$ 659,700	\$ 6,206,604	\$ 620,660	
Percentage of Revenues -	23.65%	52.62%	2.09%	19.67%	1.97%	
3 Years coverage -	\$ 363,113	\$ 5,633,822		\$ 332,086	\$ -	
Requested Rate Stabilization Fund by Revenue Category ^{3,4} -	\$ 360,000	\$ 5,630,000	No Stabilization Fund	\$ 330,000	No Stabilization Fund	
Initial funding with available funds from PWV CBFRR -	\$ 224,000	\$ 3,496,000		\$ 210,000		
Based on largest variance from five year ave of -	2.88%					

Revenue Type	2011 PWV Billed Revenue	2012 PWV Billed Revenue	2013 PWV Billed Revenue	2014 PWV Billed Revenue	2015 PWV Billed Revenue
Total Volumetric Charges	\$ 16,622,272	\$ 15,489,325	\$ 15,039,623	\$ 15,290,306	\$ 16,250,823
Total Meter Charge (fixed)	\$ 7,785,233	\$ 7,984,498	\$ 8,162,854	\$ 8,243,956	\$ 8,447,197
Total Fire Protection (fixed)	\$ 1,060,406	\$ 1,015,440	\$ 1,028,211	\$ 1,039,276	\$ 1,058,281
Total Hydrant Charges (fixed)	\$ 3,023,363	\$ 3,030,318	\$ 3,047,037	\$ 3,060,346	\$ 3,075,100
Total Billed Revenue	\$ 28,491,274	\$ 27,519,581	\$ 27,277,725	\$ 27,633,883	\$ 28,831,402
% of Revenues that are variable	58.3%	56.3%	55.1%	55.3%	56.4%
% of Revenues that are fixed	41.7%	43.7%	44.9%	44.7%	43.6%

Calculation of MOERR RSF, based on increase in MOE's over the past 5 years:		
	Inflation	Revenue Shortfall
Yr 1 -	\$ 780,215	\$ 268,069
Yr 2 -	\$ 1,597,081	\$ 268,069
Yr 3 -	\$ 2,452,320	\$ 268,069
	\$ 4,829,615	\$ 804,207
Totals -	\$ -	\$ 5,633,822

Average percentage of revenues that were variable during the previous 5 years -

56.3%

Expense Type	2011 PWV Actual Variable Expenses	2012 PWV Actual Variable Expenses	2013 PWV Actual Variable Expenses	2014 PWV Actual Variable Expenses	2015 PWV Actual Variable Expenses	2016 PWV Actual Variable Expenses	2017 PWV Actual Variable Expenses
Purchased Water	\$ 360,484	\$ 417,588	\$ 415,331	\$ 393,060	\$ 462,177	\$ 481,729	\$ 437,664
Electric	\$ 952,788	\$ 1,012,378	\$ 873,619	\$ 898,211	\$ 1,164,461	\$ 1,264,668	\$ 1,053,878
Chemicals	\$ 576,807	\$ 638,690	\$ 659,914	\$ 596,649	\$ 668,919	\$ 703,466	\$ 765,438
Sludge Disposal	\$ 185,987	\$ 195,990	\$ 246,601	\$ 302,057	\$ 316,654	\$ 348,455	\$ 385,873
Total Variable Costs	\$ 2,076,066	\$ 2,264,646	\$ 2,195,465	\$ 2,190,977	\$ 2,612,211	\$ 2,798,318	\$ 2,642,853
Variable Expenses as a Percent of Total Revenues	7.3%	8.2%	8.0%	7.9%	9.1%		

	2011 Actual CCF's sold by PWV	2012 Actual CCF's sold by PWV	2013 Actual CCF's sold by PWV	2014 Actual CCF's sold by PWV	2015 Actual CCF's sold by PWV
Annual Metered Sales (CCF)	4,991,346	5,203,729	4,948,660	4,964,738	5,347,512
Percentage Variance between Current and High Consumption Year	-7.14%	-2.76%	-8.06%	-7.71%	0.00%
Average Consumption (CCF) over the past five years	5,091,197				
Variance between current and 5 Yr Ave Consumption	-2.00%	2.16%	-2.88%	-2.55%	4.79%

Largest percentage reduction in volumetric sales at	PWW of	2.88%	over the past five years from the five year average of volumetric sales
Results in a Revenue loss of	\$ 468,074		
Results in an Operating Expense reduction of	\$ 75,240		
Results in an Operating Income reduction of	\$ 392,834		

Calculation of Annual Material Operating Expense Adjustment Percentage⁵

	2011 PWV Material Operating Expenses	2012 PWV Material Operating Expenses	2013 PWV Material Operating Expenses	2014 PWV Material Operating Expenses	2015 PWV Material Operating Expenses	2016 PWV Material Operating Expenses	Percentage Increase in Expenses over the past 4 years ^{6,7}	Average annual increase in expenses over the past 4 years
Production Expenses	\$ 3,637,768	\$ 3,918,901	\$ 3,869,154	\$ 4,099,166	\$ 4,515,441	\$ 4,705,567	3.50%	0.86%
Transmission & Distribution Expenses	\$ 1,610,745	\$ 1,607,781	\$ 1,547,952	\$ 1,868,516	\$ 1,858,477	\$ 1,802,912	12.14%	2.91%
Engineering Expenses	\$ 640,257	\$ 691,374	\$ 833,292	\$ 964,081	\$ 1,065,646	\$ 1,169,785	69.20%	14.05%
Customer Acct & Collection Exp	\$ 463,003	\$ 458,587	\$ 436,393	\$ 442,290	\$ 463,937	\$ 458,503	-0.02%	0.00%
Administrative & General Expense	\$ 6,827,976	\$ 6,631,510	\$ 6,386,960	\$ 5,785,972	\$ 6,106,621	\$ 6,609,929	-0.33%	-0.08%
Inter Div Management Fee	\$ (1,734,948)	\$ (1,842,040)	\$ (1,966,838)	\$ (2,055,908)	\$ (2,120,673)	\$ (2,768,716)	50.31%	16.72%
Amortization Expense	\$ (167,100)	\$ (265,029)	\$ (305,102)	\$ (212,349)	\$ (185,384)	\$ (207,365)		0.90%
Property Taxes	\$ 3,622,834	\$ 2,563,670	\$ 4,123,297	\$ 4,468,936	\$ 4,617,857	\$ 4,845,833	89.02%	17.25%
Total Annual MOERR Expenses	\$ 14,900,535	\$ 13,764,754	\$ 14,925,108	\$ 15,360,704	\$ 16,321,921	\$ 16,616,448		
Less change in variable expenses over prior year	\$ 2,076,066	\$ 2,264,646	\$ 2,195,465	\$ 2,190,977	\$ 2,612,211	\$ 2,798,318		
Total Annual MOERR Expenses less variable expenses	\$ 12,824,469	\$ 11,500,108	\$ 12,729,643	\$ 13,169,727	\$ 13,709,710	\$ 13,818,130		
Total Percentage Increase in Material Operating Expenses over the past four years -							20.16%	
Average annual increase in Material Operating expenses over the past four years -							4.70%	
Total Percentage Increase in Material Operating Expenses over the past four years exclusive of Property and Payroll Taxes -							0.40%	
Average annual increase in Material Operating expenses exclusive of Property and Payroll Taxes over the past four years -							0.10%	

PEU Proforma Test Year 2017 with Step Increase - 3 Bad Years ⁸						
	Yr. 1	Yr. 2	Yr. 3			
Proformed Revenue Requirement ¹ - \$ 31,560,798						
Projected Bad Year impact on MOE Revenues -	\$ (268,069)	\$ (268,069)	\$ (268,069)			
Bad Year Impact in Material Operating Expenses -	\$ 830,435	\$ 1,702,391	\$ 2,617,946			
Bad Year Impact on MOE RSF -	\$ (1,098,504)	\$ (1,970,460)	\$ (2,886,014)			
	CBFRR	Material Operating Expense Revenue Requirement	Operating Expense Revenue Requirement ⁶	P&I Revenue Requirement ¹	0.1 P&I Revenue Requirement	
Revenue Requirement ² -	\$ 7,465,139	\$ 16,608,695	\$ 659,700	\$ 6,206,604	\$ 620,660	
Percentage of Revenues -	23.65%	52.62%	2.09%	19.67%	1.97%	
3 Years coverage -	\$ 363,113	\$ 5,633,822		\$ 332,086	\$ -	
Requested Rate Stabilization Fund by Revenue Category ^{3,4} -	\$ 360,000	\$ 5,630,000	No Stabilization Fund	\$ 330,000	No Stabilization Fund	
Year 1 Ending RSF Account Balances -	\$ 238,962	\$ 4,331,496		\$ 229,368	\$ 610,597	
Year 2 Ending RSF Account Balances -	\$ 117,925	\$ 2,561,036		\$ 128,736	\$ 1,221,194	
Year 3 Ending RSF Account Balances -	\$ (8,113)	\$ (324,978)		\$ 28,103	\$ 1,831,792	
Total RSF funds @ Yr End					\$ 6,320,000	
					\$ 5,610,424	
					\$ 4,028,891	
					\$ 1,531,804	
					\$ -	
					\$ 4,788,196	

PEU Proforma Test Year 2017 with Step Increase - 3 Neutral Years ⁹						
	Yr. 1	Yr. 2	Yr. 3			
Proformed Revenue Requirement ¹ - \$ 31,560,798						
Projected Neutral Year impact on MOE Revenues -	\$ -	\$ -	\$ -			
Neutral Year impact in Material Operating Expenses -	\$ 780,215	\$ 1,597,081	\$ 2,452,320			
Neutral Year Impact on MOE RSF -	\$ (780,215)	\$ (1,597,081)	\$ (2,452,320)			
	CBFRR	Material Operating Expense Revenue Requirement	Operating Expense Revenue Requirement ⁶	P&I Revenue Requirement ¹	0.1 P&I Revenue Requirement	
Revenue Requirement ² -	\$ 7,465,139	\$ 16,608,695	\$ 659,700	\$ 6,206,604	\$ 620,660	
Percentage of Revenues -	23.65%	52.62%	2.09%	19.67%	1.97%	
3 Years coverage -	\$ 363,113	\$ 5,633,822		\$ 332,086	\$ -	
Requested Rate Stabilization Fund by Revenue Category ^{3,4} -	\$ 360,000	\$ 5,630,000	No Stabilization Fund	\$ 330,000	No Stabilization Fund	
Year 1 Ending RSF Account Balances -	\$ 360,000	\$ 4,849,785		\$ 330,000	\$ 620,660	
Year 2 Ending RSF Account Balances -	\$ 360,000	\$ 3,252,705		\$ 330,000	\$ 1,241,321	
Year 3 Ending RSF Account Balances -	\$ 360,000	\$ 800,385		\$ 330,000	\$ 1,861,981	
Total RSF funds @ Yr End					\$ 6,320,000	
					\$ 6,160,446	
					\$ 5,184,026	
					\$ 3,352,366	
					\$ -	
					\$ 2,967,634	

PEU Proforma Test Year 2017 with Step Increase - 3 Good Years ¹⁰						
	Yr. 1	Yr. 2	Yr. 3			
Proformed Revenue Requirement ¹ - \$ 31,560,798						
Projected Good Year impact on MOE Revenues -	\$ 448,128	\$ 448,128	\$ 448,128			
Good Year impact on Material Operating Expenses -	\$ 332,174	\$ 670,991	\$ 1,016,585			
Good Year Increase in MOERR RSF -	\$ 115,954	\$ (222,864)	\$ (568,457)			
	CBFRR	Material Operating Expense Revenue Requirement	Operating Expense Revenue Requirement ⁶	P&I Revenue Requirement ¹	0.1 P&I Revenue Requirement	
Revenue Requirement ² -	\$ 7,465,139	\$ 16,608,695	\$ 659,700	\$ 6,206,604	\$ 620,660	
Percentage of Revenues -	23.65%	52.62%	2.09%	19.67%	1.97%	
3 Years coverage -	\$ 363,113	\$ 5,633,822		\$ 332,086	\$ -	
Requested Rate Stabilization Fund by Revenue Category ^{3,4} -	\$ 360,000	\$ 5,630,000	No Stabilization Fund	\$ 330,000	No Stabilization Fund	
Year 1 Ending RSF Account Balances -	\$ 561,421	\$ 5,745,954		\$ 497,464	\$ 637,407	
Year 2 Ending RSF Account Balances -	\$ 762,841	\$ 5,523,090		\$ 664,927	\$ 1,274,814	
Year 3 Ending RSF Account Balances -	\$ 964,262	\$ 4,954,633		\$ 832,391	\$ 1,912,220	
Total RSF funds @ Yr End					\$ 6,320,000	
					\$ 7,442,245	
					\$ 8,225,672	
					\$ 8,663,506	
					\$ -	
					\$ (2,343,506)	

PEU Proforma Test Year 2017 with Step Increase - Neutral Year 1, Good Year 2, Bad Year 3 ^{10,11,12}						
	Yr. 1 (Neutral)	Yr. 2 (Good)	Yr. 3 (Bad)			
Proformed Revenue Requirement ¹ - \$ 31,560,798						
Projected MOERR Revenues -	\$ -	\$ 448,128	\$ (268,069)			
Good Year Increase in Material Operating Expenses -	\$ 780,215	\$ 1,576,033	\$ 2,411,643			
Good Year Increase in MOERR RSF -	\$ (780,215)	\$ (1,127,906)	\$ (2,680,932)			
	CBFRR	Material Operating Expense Revenue Requirement	Operating Expense Revenue Requirement ⁶	P&I Revenue Requirement ¹	0.1 P&I Revenue Requirement	
Revenue Requirement ² -	\$ 7,465,139	\$ 16,608,695	\$ 659,700	\$ 6,206,604	\$ 620,660	
Percentage of Revenues -	23.65%	52.62%	2.09%	19.67%	1.97%	
3 Years coverage -	\$ 363,113	\$ 5,633,822		\$ 332,086	\$ -	
Requested Rate Stabilization Fund by Revenue Category ^{3,4} -	\$ 360,000	\$ 5,630,000	No Stabilization Fund	\$ 330,000	No Stabilization Fund	
Year 1 Ending RSF Account Balances -	\$ 360,000	\$ 4,849,785		\$ 330,000	\$ 620,660	
Year 2 Ending RSF Account Balances -	\$ 561,421	\$ 3,721,880		\$ 497,464	\$ 1,258,067	
Year 3 Ending RSF Account Balances -	\$ 440,383	\$ 1,040,948		\$ 396,831	\$ 1,868,664.41	
Total RSF funds @ Yr End					\$ 6,320,000	
					\$ 6,160,446	
					\$ 6,038,831	
					\$ 3,746,826	
					\$ -	
					\$ 2,573,174	

Notes:

- Based on Debt Service Multiplier of 1.10 per Sch A of 1604.06 schedules
- Revenue requirements per Sch A of 1604.06 schedules
- Requested Rate Stabilization Fund for Operating Expense and P & I Coverage each have a contingency of 0%
- PWW share of the \$5,000,000 RSF for distribution to the RSF, MOERR RSF and the P&I RSF is 78.6% based on % of PWW revenues (2012 Rate Case) to % of all three regulated utilities revenues (2012 Rate Case) or \$ 3,930,000
- Proposed Annual adjustment of MOE RSF based on average increase in MOE expenses over the previous 4 years. Four years was used as opposed to five years as 2011 was still the traditional Investor Owned Utility. Increase in Production expenses is exclusive of variable expenses.
- Increase in engineering expenses was offset by increase was largely offset by Management Fee allocation.
- Bad Year, Volumetric Sales off by -2.88% to five year average. Inflation to expenses up by 0.0%
- Neutral Year, Volumetric Sales off by 0% to five year average. Inflation to expenses up by 4.70%
- Good Year, Volumetric Sales up by 4.79% to five year average. Inflation to expenses up by 2.0%

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Funded in DW 16 806 Step	Estimated Project Cost as of 1/18/2017	Estimated Project Cost as of 11/15/2017	Final Unaudited Project Costs as of 1/19/2018	Community	Taxable	Tax Rate (l)	QCPAC Eligible Annual Tax Expense	Explanation for Change/Addition/Deletion since 1/18/2017
Heavy Dump Truck Replacement (#12)	Heavy Dump Truck Replacement (#12)	1702309	DW14-130	25,734	11/7/2014	Yes	\$ 130,000	Paid 2014 Bond		Merrimack			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Services	9 Renewed Services with 2014 Bond Funds	Monthly 21, 22, 23	DW14-130	25,735	11/7/2014	Partial	\$ 80,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Hydrants	23 Renewed Services with 2018 Bond Funds	Monthly 31	DW17-183	26,101	2/2/2018	No	\$ -	40,000	\$ 100,454	Nashua	Yes	\$ 29.82	\$ 2,996	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Valves	3 Hydrants replaced with 2014 Bond Funds	Monthly 12, 13	DW14-130	25,735	11/7/2014	Partial	\$ 42,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
New Services	5 Hydrants replaced with 2018 Bond Funds	Monthly 20	DW17-183	26,101	2/2/2018	No	\$ -	11,000	\$ 18,643	Nashua	Yes	\$ 29.82	\$ 556	P&I and property taxes to be recovered in 2018 QCPAC
Replace Leaded Brass Meters with Lead free brass meters	3 Valve Replacements	Monthly 50	DW17-183	26,101	2/2/2018	No	\$ -	50,000	\$ 53,122	Nashua	Yes	\$ 29.82	\$ 1,584	Based on final valve replacement expenditures in 2017
Replace Aging meter reading Radios	2 New Services for Single Family Residential, owner build, per Tariff	Monthly 54	DW14-130	25,735	11/7/2014	Partial	\$ 832,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Ferrromagnetic Pipe locators (3)	410 New Meters for Lead Meter exchanges - 5/8"x6"	Monthly 54	DW17-183	26,101	2/2/2018	No	\$ -	247,266	\$ 267,950	Nashua	Yes	\$ 29.82	\$ 7,990	P&I and property taxes recovered in DW16-806 Step Increase
Heavy Dump Truck Replacement (#86)	Replace 99 failed radios		DW14-130	25,735	11/7/2014	Partial	\$ 28,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes to be recovered in 2018 QCPAC
Service Truck replacement (#47)	Replace 238 failed radios		DW17-183	26,101	2/2/2018	Remainder	\$ -	34,537	\$ 22,802	Nashua	Yes	\$ 29.82	\$ 680	P&I and property taxes recovered in DW16-806 Step Increase
Replacement of Foreman truck	Ferrromagnetic Pipe locators (3)		DW17-183	26,101	2/2/2018	No	\$ 10,500	\$ 10,500	\$ -	Merrimack			\$ -	P&I and property taxes to be recovered in 2018 QCPAC
Replace Dump Truck Body	Heavy Dump Truck Replacement (#86)		DW17-183	26,101	2/2/2018	No	\$ 100,000	\$ 100,000	\$ 102,176	Merrimack	No		\$ -	None acquired
Medium Duty Dump Truck Replacement (#71)	Service Truck replacement (#47)		DW17-183	26,101	2/2/2018	No	\$ 60,000	\$ 38,950	\$ 47,889	Merrimack	No		\$ -	
Replace Truck #70	Replacement of Foreman truck						\$ 90,000	\$ 75,000	\$ -	Merrimack			\$ -	Deferred until 2018
Replace Truck #58	#312 - Replace Dump Truck Body						\$ 70,000	\$ 70,000	\$ 15,740	Merrimack	No		\$ -	Project added at end of year using existing truck chassis for new dump body
20 Ton Tag Trailer replacement	Medium Duty Dump Truck Replacement (#71)		DW17-183	26,101	2/2/2018	No	\$ -	\$ 32,034	\$ 32,034	Merrimack	No		\$ -	Truck replaced when transmission failed rather than repair transmission on a 10 year old truck
Variable Message Signs - 2	Replace 2006 Truck with 104,000 miles						\$ -	\$ -	\$ 6,242	Merrimack	No		\$ -	
Replacement Radio Meter Reading Equipment (4)	20 Ton Tag Trailer replacement						\$ 20,000	\$ -	\$ -				\$ -	Deferred
Pipe Saws (5)	Customer Notification		DW14-130	25,734	11/7/2014	Yes	\$ 30,000	Paid 2014 Bond					\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Metal Detectors (6)	Replace 10 year old radio meter reading handheld units		DW14-130	25,734	11/7/2014	Yes	\$ 25,000	Paid 2014 Bond					\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replacement Excavator	Pipe Saws (5)		DW17-183	26,101	2/2/2018	No	\$ 20,000	\$ -	\$ 9,384	Merrimack	No		\$ -	
Complete construction of 16 DW Highway	Metal Detectors (6)		DW17-183	26,101	2/2/2018	No	\$ 7,000	\$ 6,360	\$ 6,360	Merrimack	No		\$ -	
MRS meter reading device	Replacement Excavator		DW17-183	26,101	2/2/2018	No	\$ 75,000	\$ 69,554	\$ 69,554	Merrimack	No		\$ -	
GPS Units	Final billing for the completion of work by contractor at 16 DW Highway		DW17-183	26,101	2/2/2018	No	\$ -	\$ 67,050	\$ 65,140	Merrimack	Yes	\$ 28.17	\$ 1,835	Billing from final work on 16 DW not carried over in original budget
Raw Water Transmission Main project	MRS meter reading device		DW17-183	26,101	2/2/2018	No	\$ -	\$ 8,190	\$ 8,190	Various	No		\$ -	Existing 8 year old meter reading device failed
	Tumble Devices						\$ -	\$ 21,287	\$ 21,287	Merrimack	No		\$ -	Devices purchased early to support field deployment of GIS
	Finalization of 2016 project						\$ -	\$ -	\$ 176,829	Merrimack	Yes	\$ 28.17	\$ 4,981	Charges are for Internal engineering, O&I, Union Labor, truck and AFDUC. These expenses are not eligible for SRF funding.
Nashua & Amherst Paving	Final paving associated with watermain projects						\$ -	\$ -	\$ -				\$ -	Budget Placeholder
Nashua & Amherst Paving	Park Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ 4,908	\$ 4,908	\$ 4,908	Nashua	Yes	\$ 29.82	\$ 146	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Mulberry Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ 6,840	\$ 6,840	\$ 6,840	Nashua	Yes	\$ 29.82	\$ 204	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Contribution to City of Nashua in lieu of final trench restoration - includes Rochette, Ash, and Marquis		DW17-183	26,101	2/2/2018	No	\$ 120,000	\$ 20,040	\$ 20,040	Nashua	Yes	\$ 29.82	\$ 598	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Chestnut Street Phase 1 Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ 65,780	\$ 131,689	\$ 131,689	Nashua	Yes	\$ 29.82	\$ 3,927	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Scripture Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ 11,200	\$ 2,466	\$ 2,466	Nashua	Yes	\$ 29.82	\$ 74	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Gorman Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 400	\$ 400	Nashua	Yes	\$ 29.82	\$ 12	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Water Street Water Main Replacement project paving						\$ 44,561	\$ -	\$ -				\$ -	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Brook Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 9,844	\$ 9,844	Nashua	Yes	\$ 29.82	\$ 294	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Ash Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 22,678	\$ 22,678	Nashua	Yes	\$ 29.82	\$ 676	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Worcester Street Area Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 3,020	\$ 3,020	Nashua	Yes	\$ 29.82	\$ 90	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Lovell Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 82,000	\$ 82,000	Nashua	Yes	\$ 29.82	\$ 2,447	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Towells Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 17,233	\$ 17,233	Nashua	Yes	\$ 29.82	\$ 514	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Howard Street Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 2,800	\$ 2,800	Nashua	Yes	\$ 29.82	\$ 83	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Hoists Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 1,000	\$ 1,000	Nashua	Yes	\$ 29.82	\$ 30	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Shedds Ave. Water Main Replacement project paving		DW17-183	26,101	2/2/2018	No	\$ -	\$ 2,000	\$ 2,000	Nashua	Yes	\$ 29.82	\$ 60	Budgeted under Final Paving associated with water main replacement projects
Amherst Street Project	Amherst Street Area Water Main Replacement Project													
Amherst Street Project - Amherst Street water main replacement	Replace xxx LF of 6" Unlined CI Water main on Amherst Street		DW16-236	25,887	4/24/86	Yes		Paid for by SRF	\$ 156,428	Nashua				
Amherst Street Project - Berkshire Street water main replacement	Replace xxx LF of 8"/s" Steel/Unlined CI Water main on Berkshire Street		DW16-236	25,887	4/24/86	Yes		Paid for by SRF	\$ 6,058	Nashua	No			Charges are for Internal engineering, O&I, Union Labor, truck and AFDUC. These expenses are not eligible for SRF funding.
Amherst Street Project - Terrace Ave. water main replacement	Replace 280 LF of 2"/4" Steel/Unlined CI Water main on Terrace Ave.		DW16-236	25,887	4/24/86	Yes	\$ 75,000	\$ -	\$ 1,763	Nashua				
Amherst Street Project - Bouie Street water main replacement	Replace 260 LF of 6" Unlined CI Water main on Bouie Street		DW16-236	25,887	4/24/86	Yes	\$ 75,000	\$ -	\$ 4,183	Nashua				
Sweet Hill	New Supplemental Well required by NHDES		DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 163,831	Plaistow	Yes	\$ 28.39	\$ 4,651	Project began in 2015. Project required by NHDES to address shortage of supply.
Pennichuck Bog - Educational Program Accessway	Construct Nature Walk around Pennichuck Bog						\$ 38,000	\$ -	\$ -				\$ -	Deferred
Galman Street	Replace 8 & 6 in CI with 1225 LF of 8 inch CLDI						\$ 425,000	\$ -	\$ -				\$ -	Deferred until 2018
Amherst Mack Hall & Dodge	Replace 1525 feet of 8 A/C with CLDI Transfer services from A/C to D/I Dodge Rd.						\$ 300,000	\$ -	\$ -				\$ -	Deferred until future date in coordination with Town Storm Drain project
Milford Booster Station Replacement	Replace 25 Yr old below ground confined space booster station w/above ground station						\$ 550,000	\$ -	\$ -				\$ -	Project deferred indefinitely
Snow Station Upgrade - Add 3rd pump	Increase pumping capacity to meet existing demands and contractual obligations		DW17-183	26,101	2/2/2018	No	\$ 125,000	\$ 13,323	\$ 13,323	Nashua	Yes	\$ 29.82	\$ 397	Analysis showed that rebuilding one pump would provide initial capacity required.
City Sewer Projects - TBD	Aging infrastructure replacement in coordination with sewer replacement						\$ 400,000	\$ -	\$ -				\$ -	
Warren Street	Replaced 300 LF of 4 inch CI with 8 in DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 60,000	\$ 121,151	Nashua	Yes	\$ 29.82	\$ 3,613	\$20,000 for final paving in 2018
Lowell Street	Replaced 425 LF of 6 inch CI with 6 in DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 60,000	\$ 99,065	Nashua	Yes	\$ 29.82	\$ 2,954	\$38,500 for final paving in 2018
Green Street	Replaced 330 LF of 4 inch CI with 8 in DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 27,000	\$ 27,720	Nashua	Yes	\$ 29.82	\$ 827	Including final paving
Beard Street	Replaced 350 LF of 8 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 75,000	\$ 78,412	Nashua	Yes	\$ 29.82	\$ 2,338	Including paving
Lemont Street	Replaced 320 LF of 2 inch CI with 4 in PVC		DW17-183	26,101	2/2/2018	No	\$ -	\$ 30,250	\$ 73,389	Nashua	Yes	\$ 29.82	\$ 2,188	\$17,000 for final paving in 2018
Proctor Street	Replaced 130 LF of 2 & 1.5 inch CI with 4 inch PVC		DW17-183	26,101	2/2/2018	No	\$ -	\$ 51,000	\$ 63,829	Nashua	Yes	\$ 29.82	\$ 1,903	Excludes final paving
Gillis Street	Replaced 1,290 LF of 4 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 71,987	Nashua	Yes	\$ 29.82	\$ 2,147	Project moved in Nov 2017 filing
Temple Street	Replaced 375 LF of 8 inch DIPCL and 8 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 151,093	\$ 148,873	Nashua	Yes	\$ 29.82	\$ 4,439	Including final paving
Mulvaney Street	Replaced 280 LF of 2 inch CI with 4 inch PVC		DW17-183	26,101	2/2/2018	No	\$ -	\$ 106,300	\$ 88,957	Nashua	Yes	\$ 29.82	\$ 2,653	Excludes final paving
24" watermain from Manchester Street to Tinker Road	Add 1800 LF of 24 inch CLDI on Manchester Street Easement to Tinker Road						\$ 500,000	\$ -	\$ -				\$ -	Deferred until 2018
Water main looping	Close loop on 101A end of main to beyond Truitt and loop onto Truitt 1200 LF						\$ 300,000	\$ -	\$ -				\$ -	Deferred until 2018
Water main looping	Old Nashua Rd. RR Crossing @ Route 101A		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 8,334	Amherst	Yes	\$ 30.30	\$ 253	
2017 Main Street Area Water Main Replacement - Phase I	Fowell - Zellwood - Pratt replace 1720 LF of 6 in CI with 8 in CLDI						\$ 400,000	\$ -	\$ -				\$ -	Part of Project deferred until 2018
Buchanan Avenue	Replaced 540 LF of 6 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ 84,752	\$ 96,913	Nashua	Yes	\$ 29.82	\$ 2,863	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Circle Ave. - Main Replacement	Replaced 400 LF of 2 inch Steel with 4 inch PVC		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 21,195	Nashua	Yes	\$ 29.82	\$ 632	
Fowell Street	Replaced 900 LF of 6 inch CI with 175 LF of 4 inch and 725 LF of 8 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 192,179	Nashua	Yes	\$ 29.82	\$ 5,731	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Zellwood Avenue	Replaced 375 LF of 6 inch CI with 4 in PVC		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 51,142	Nashua	Yes	\$ 29.82	\$ 1,525	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Pratt Street	Replaced 710 LF of 6 inch CI with 12 inch DIPCL		DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 146,106	Nashua	Yes	\$ 29.82	\$ 4,357	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
2017 Main Street Area Water Main Replacement - Phase II	Aging infrastructure replacement						\$ 320,000	\$ -	\$ -				\$ -	
Lincoln Street	Replaced 790 LF of 6 inch CI with 8 in DIPCL		DW17-183	26,101	2/2/2018		\$ -	\$ 152,407	\$ 168,144	Nashua	Yes	\$ 29.82	\$ 5,014	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Nut Street	Replaced 100 LF of 1 inch and 500 LF of 4 inch CI with 100 LF of 4 inch and 500 LF of 8 inch DIPCL		DW17-183	26,101	2/2/2018		\$ -	\$ 120,440	\$ 109,004	Nashua	Yes	\$ 29.82	\$ 3,251	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Kandev Street	Replace unlined cast iron leads to side streets ahead of City paving						\$ 175,000	\$ -	\$ -				\$ -	Project deferred to 2017
Factory Street	Replace 12 & 8 in CI with 640 LF of 16 in CLDI 640 LF						\$ 250,000	\$ -	\$ -				\$ -	Project deferred to 2018
Route 101 Widening, Bedford	NHDOT Project													
Route 101 Widening, Bedford	Relocate water main on Route 101		DW17-183	26,101	2/2/2018	No	\$ -	\$ 46,200	\$ 45,074	Bedford	Yes	\$ 23.19	\$ 1,066	NHDOT project that was added in Spring of 2017
Route 101 Widening, Bedford	Relocate water main along Nashua Road		DW17-183	26,101	2/2/2018	No	\$ -	\$ 43,100	\$ 43,740	Bedford	Yes	\$ 23.19	\$ 1,014	NHDOT project that was added in Spring of 2017
Route 101 Widening, Bedford	Relocate water main on Bell Hall Road		DW17-183	26,101	2/2/2018	No	\$ -	\$ 15,400	\$ 53,951	Bedford	Yes	\$ 23.19	\$ 1,251	NHDOT project that was added in Spring of 2017

Route 101 Widening, Bedford	Relocate Service to 3 Nashua Road	1702840	DW17-183	26,101	2/2/2018	No		\$	67,400	\$	116,205	Bedford	Yes	\$	23.19	\$	2,695	NHDOT project that was added in Spring of 2017. Partial reimbursement from NHDOT of \$26,010.89			
Route 122 @ Nathan Lord Lane Water Main Relocation	Water Main Relocation to accommodate Town of Amherst Storm Drain installation	1715666	DW17-183	26,101	2/2/2018	No	\$	-	\$	54,630	\$	59,558	Amherst	Yes	\$	30.30	\$	1,805	Town of Amherst Storm Drain project added in Fall of 2017		
Howard St. Emergency Alarm Replacement -	Howard St. Emergency Alarm Replacement -	1600371, 1601379											Yes	\$	29.82	\$	3,186	Emergency project to replace failed 2" steel water main late in 2017.			
Trimbale Devices - Used for field locating Assets via GIS program	Upgrade to iPad device driven units	1703027	DW17-183	26,101	2/2/2018	No	\$	72,000	\$	68,623	\$	47,336	Merrimack	No							
Engineering Replacement Vehicles (2)	Replace 2 Vehicles	1702831, 1702832	DW14-130	25,734	11/7/2014	Yes	\$	64,000	Pd 2014 Bonds	\$	-		Merrimack	No					P&I and property taxes recovered in DW16-806 Step Increase		
Complete PWW Core System Hydraulic Model	Distribution Model Phase 2		Deferred. No Bond sought. No QCPAC sought.				\$	25,000	\$	-									Project underway, will not be used and useful in 2017		
PWW-PEU Interconnection - DW Highway to River	DW Highway to Merrimack River Booster station		Deferred. No Bond sought. No QCPAC sought.				\$	311,500	\$	-									Deferred to 2018 due to timing of final NHDES permitting		
WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting		Deferred. No Bond sought. No QCPAC sought.				\$	80,000	\$	-									Deferred, staff time not available to complete in 2017		
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW14-130	25,735	11/7/2014	Partial			Pd 2014 Bonds			Derry	Yes	\$	33.21	\$	-		P&I and property taxes recovered in DW16-806 Step Increase		
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	Monthly 60, 61, 62, 63	DW17-183	26,101	2/2/2018	No	\$	60,000		\$	38,000	\$	41,386	Derry	Yes	\$	33.23	\$	1,375		
Booster/Well/Chem Feed pump replacements	Replace VFD on Twin Ridge Well	1701888	DW17-183	26,101	2/2/2018	No				\$	2,089	\$	2,089	Plaistow	Yes	\$	-	28.39	\$	59	Budgeted under Booster/Well/Chem Feed pump replacement
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		Deferred. No Bond sought. No QCPAC sought.				\$	15,000	\$	-									Budget place holder. No treatment system installs/replacement YTD		
Misc. Structural Improvements	Misc. Structural Improvements		Deferred. No Bond sought. No QCPAC sought.				\$	20,000	\$	-									Budget place holder. No structural improvements YTD		
Harris Dam Spillway Reconstruction	Complete Harris Dam Spillway Reconstruction	1701987								\$	6,018	Nashua	Yes	\$	29.82	\$	179				
Replace Vehicle #62	Replace 11 year old truck with 107,863 miles		DW17-183	26,101	2/2/2018	No	\$	60,000		\$	45,000								A new vehicle was purchased and this vehicle was retained and kept in service. #99 was retired.		
Replace vehicle #204	Replace 7 year old truck with 104,875 miles	1800462	DW17-183	26,101	2/2/2018	No	\$	35,000		\$	35,000	\$	27,323	Nashua	No				Retired #49		
Replace Vehicle #63	Replace 6 year old truck with 175,260 miles	1800481	DW17-183	26,101	2/2/2018	No	\$	60,000		\$	45,000	\$	42,678	Nashua	No				Change from beginning of budget year as to type of vehicle being replaced. #204 retired.		
Replace Vehicle #44	Replace 7 year old truck with 110,249 miles		DW17-183	26,101	2/2/2018	No	\$	35,000		\$	35,000								Retired #63		
New Vehicle #119	Replace 8 year old truck with over 130,000 miles	1800479								\$	42,678	Nashua	No						Retired #44		
Replace Vehicle #99	New Water Supply Vehicle, no replacement	1704173	DW17-183	26,101	2/2/2018	No	\$	-	\$	63,038	\$	62,282	Nashua	No					No vehicle retired.		
Replace Vehicle #46	Replace 11 year old truck with over 140,000 miles	1800480	DW17-183	26,101	2/2/2018	No					\$	27,323	Nashua	No					Retired #99		
Install overhead crane and door-WTP process area	Add utility body to vehicle #46	1703002	DW17-183	26,101	2/2/2018	No					\$	2,071	Nashua	No					No vehicle retired.		
Merrimack River Station pump/motor rebuild	Install overhead crane and door-WTP process area	1701887, 1719861	DW17-183	26,101	2/2/2018	No	\$	75,000	\$	75,000	\$	45,731	Nashua	Yes	\$	29.82	\$	1,364	Design cost for WTP crane and door. Door is used and useful.		
Misc. equipment purchases	Merrimack River Station pump/motor rebuild		DW17-183	26,101	2/2/2018	No	\$	75,000	\$	25,000									Project deferred until 2018		
Misc. equipment purchases	WTP misc. equipment purchases						\$	25,000	\$	-											
Misc. equipment purchases	Purchase New Electric Multi-Meter	1715547	DW17-183	26,101	2/2/2018	No				\$	1,500	\$	1,500	Nashua	No					Budgeted under WTP Misc equipment purchased	
THM precursor control at Bon Terrain Tank	Install mixer in Bon Terrain Tank	1703024	DW17-183	26,101	2/2/2018	No				\$	2,600	\$	2,600	Amherst	Yes	\$	30.30	\$	79	Budgeted under WTP Misc equipment purchased	
Replace VFD on Sludge Chopper Pump at WTP	Replace VFD on Sludge Chopper Pump at WTP	1707190	DW17-183	26,101	2/2/2018	No				\$	3,503	\$	3,503	Nashua	Yes	\$	29.82	\$	104	Budgeted under WTP Misc equipment purchased	
WTP - Replace 30" IP Discharge Meter	WTP - Replace 30" IP Discharge Meter	1701885	DW17-183	26,101	2/2/2018	No				\$	17,177	\$	17,177	Nashua	Yes	\$	29.82	\$	512	Budgeted under WTP Misc equipment purchased	
Purchase new lab equipment	Purchase new lab equipment		Deferred. No Bond sought. No QCPAC sought.				\$	15,000	\$	-											
Purchase new lab equipment	Hanna Titration	1707187	DW17-183	26,101	2/2/2018	No				\$	5,900	\$	5,900	Nashua	No					Budgeted under Purchase new lab equipment	
WTP structural/HVAC	Replaced Compressor on A/C Unit FWPS	1708347	DW17-183	26,101	2/2/2018	No	\$	10,000	\$	5,568	\$	5,568	Nashua	Yes	\$	29.82	\$	166		Budgeted under Purchase new lab equipment	
Misc Security upgrades for remote facilities	Misc. Fencing/Security Projects		Deferred. No Bond sought. No QCPAC sought.				\$	25,000	\$	-										Budget place holder. No Misc. Fencing/Security Projects YTD	
Complete Fencing around WTP for Security	Perimeter fencing at WTP	1706963	DW17-183	26,101	2/2/2018	No	\$	80,000	\$	5,588	\$	5,588	Nashua	Yes	\$	29.82	\$	167		Main Gate opening mechanism replaced. Fencing deferred	
Replace Clarifier (2)Vacuum Blowers and Actuators	Replace Clarifier (2)Vacuum Blowers and Actuators		Deferred. No Bond sought. No QCPAC sought.				\$	25,000	\$	-									Deferred		
Misc. SCADA Electrical upgrades	Misc. SCADA Electrical		Deferred. No Bond sought. No QCPAC sought.				\$	30,000	\$	-										Budget Place Holder. See below for actual projects	
Misc. SCADA Electrical upgrades	Valleyfield - Install Cellular Communication	1701886	DW17-183	26,101	2/2/2018	No	\$	-	\$	5,000	\$	3,249	Plaistow	Yes	\$	28.39	\$	92		Budgeted under Misc. SCADA Electrical upgrades	
Misc. SCADA Electrical upgrades	Install Cellular Communication, Cabot Preserve	1716549	DW17-183	26,101	2/2/2018	No				\$	2,642	Bedford	Yes	\$	23.19	\$	61			Project added to allow remote monitoring of water system	
Hi-Lo Generator	Hi-Lo Generator	1701899	DW17-183	26,101	2/2/2018	No				\$	47,332	Derry	Yes	\$	33.23	\$	1,573			Permanent standby generator added on site at this Community Water System.	
Armory Street Booster Pump VFD replacements	Replace failed VFD's on Armory Street Booster Pumps	1719862	DW17-183	26,101	2/2/2018	No	\$	-	\$	23,500	\$	-	Nashua	Yes	\$	29.82	\$	-		Budgeted under Misc. SCADA Electrical upgrades	
Misc. SCADA Electrical upgrades	Replace all SCADA Computers and Upgrade System	1701889	DW17-183	26,101	2/2/2018	No	\$	-	\$	43,000	\$	19,990	Nashua	Yes	\$	29.82	\$	596		Unbudgeted. Secure upgrades required hardware replacement	
Well Rehabilitation (3)	Well Rehabilitation		Deferred. No Bond sought. No QCPAC sought.				\$	60,000	\$	-										Budget place holder. No Well Rehabilitation Projects YTD	
WTP Closed Circuit Camera replacement/improvements	Closed Circuit Camera replacement/improvements		Deferred. No Bond sought. No QCPAC sought.				\$	60,000	\$	-										Deferred	
WTP - Replace storefront glass, renovate WTP reception	Replace storefront glass, renovate WTP reception		Deferred. No Bond sought. No QCPAC sought.				\$	50,000	\$	-										Deferred	
Office renovation-conference room	Office renovation-conference room		Deferred. No Bond sought. No QCPAC sought.				\$	50,000	\$	-										Deferred	
Water Supply - Watershed Public Education	Fertilization / Pesticide - Phase 1		Deferred. No Bond sought. No QCPAC sought.				\$	20,000	\$	-										Deferred	
Stormwater BMP Notifications and Community Education	Stormwater BMP Notifications and Community Education		Deferred. No Bond sought. No QCPAC sought.				\$	12,000	\$	-										Will not be completed until 2018	
St. Joseph's Land Purchase	Watershed protection	1503675	DW17-183	26,101	2/2/2018	No				\$	69,790	Nashua	Yes	\$	29.82	\$	2,081			Will not be completed until 2018	
Secure reception area	Office Security for Front Reception Desk	1708425	DW17-183	26,101	2/2/2018	No	\$	10,000	\$	20,990	\$	18,824	Merrimack	No						Project started in 2015. Land purchased from local hospital. Land adjacent to Supply Pond.	
Adjustable Desk Tops	Accommodate back issues	1713759	DW17-183	26,101	2/2/2018	No	\$	-	\$	6,088	\$	6,088	Merrimack	No						Original estimate did not include bullet proof glass and other security features	
Asset Management - Phase 3	Asset Management 2016 Carry over	1600061	DW17-183	26,101	2/2/2018	No	\$	200,000	\$	200,000	\$	161,590	Merrimack	Yes	\$	28.17	\$	4,552			
Conversion to R.A.M. Fixed Assets carry-over	Conversion to R.A.M. Fixed Assets carry-over	1707349	DW17-183	26,101	2/2/2018	No	\$	11,000	\$	11,000	\$	6,929	Merrimack	No	\$	-	\$	-			
Firewall	Firewall replacement	1702081	DW17-183	26,101	2/2/2018	No	\$	50,000	\$	36,426	\$	28,228	Merrimack	No							
Asset Management - Phase 4	Continue progress on Asset Management implementation	1700300	DW17-183	26,101	2/2/2018	No	\$	736,000	\$	350,000	\$	492,133	Various	Yes	\$	28.85	\$	14,198		Reduced level of work than budgeted due to staff time diverted to PFOA response	
Click Mobile Upgrade	Upgrade ClickMobile to work on iPads	1707189	DW17-183	26,101	2/2/2018	No	\$	150,000	\$	5,400										2016 Work completed. 2017 work deferred until 2018	
Click Mobile Upgrade	Purchase iPads for ClickMobile Platform	1702223	DW17-183	26,101	2/2/2018	No	\$	-	\$	5,160	\$										

Total Projected 2017 PWW Capital Expenditures - \$ 9,729,000 \$ 4,163,760 \$ 5,291,409 Projected Property Tax Expenses - \$ 122,079

Amherst \$ 2,136
Bedford \$ 6,088
Derry \$ 2,948
Merrimack \$ 11,368
Nashua \$ 79,032
Plaistow \$ 4,803

1- Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	NHPUC Chart of Account #	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (I)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Replace Forman Truck	Existing Truck has been a safety and maintenance problem		DSRR 0.1			\$ 90,000	341				Merrimack	No	\$ 28.17	\$ -	
10 New Services	Single Family, Owner Build, New Homes		DW17-183			\$ 46,000	333				Various	Yes	\$ 29.13	\$ 1,340	
20 Renewed Services	Replacement of failed services		DW17-183			\$ 92,000	333				Various	Yes	\$ 29.13	\$ 2,680	
10 Hydrants	Replacement of non functional hydrants		DW17-183			\$ 50,000	335				Various	Yes	\$ 29.13	\$ 1,457	
10 Valve Replacements	Replacement of Failed Gate Valves		DW17-183			\$ 30,000	331				Various	Yes	\$ 29.13	\$ 874	
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers (280)		DW17-183			\$ 50,000	334				Various	Yes	\$ 29.13	\$ 1,457	
480 New Meters (growth) 5/8"-2" (CORE & CWS)	New meters for new customers, including PFOA		DW17-183			\$ 114,000	334				Various	Yes	\$ 29.13	\$ 3,321	
2,355 New Meters for Lead Meter exchanges (PWW-CORE & CWS) 5/8"-6"	Replace High lead brass meter with new no lead brass meter		DW17-183			\$ 532,000	334				Various	Yes	\$ 29.13	\$ 15,497	
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate		DW17-183			\$ 10,000	343				Merrimack	No	\$ 29.13	\$ -	
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles		DW17-183			\$ 60,000	341				Merrimack	No	\$ 28.17	\$ -	
1 Service Truck - New	Service Truck for 1 new ops employees		DSRR 0.1			\$ 35,000	341				Merrimack	No	\$ 28.17	\$ -	
Replacement of Meter Supervisor Truck (#14)	Replace 7 year old pick up with 167,000+ miles with small SUV		DW17-183			\$ 28,000	341				Merrimack	No	\$ 28.17	\$ -	
Replace Valve/vac trailer unit	Existing unit has reach the end of its usable life		DW17-183			\$ 65,000	343				Merrimack	No	\$ 28.17	\$ -	
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment		DSRR 0.1			\$ 39,000	347				Merrimack	No	\$ 28.17	\$ -	
Pipe Saws (3)	Ongoing small equipment replacement - run rate		DW17-183			\$ 6,000	343				Merrimack	No	\$ 28.17	\$ -	
Metal Detectors (6)	Ongoing small equipment replacement - run rate		DW17-183			\$ 7,000	343				Merrimack	No	\$ 28.17	\$ -	
Add Air Conditioning to Mechanics Bay	Security Project		DW17-183			\$ 52,000	304				Merrimack	No	\$ 28.17	\$ -	
Four trench boxes	Four trench boxes		DW17-183			\$ 20,000	343				Merrimack	No	\$ 28.17	\$ -	
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW		DW17-183			\$ 85,000	331				Bedford	Yes	\$ 23.16	\$ 1,969	
Elm St	Replace 1570 LF of 8 & 6 inch CI with 12 inch DIPCL		DW17-183			\$ 436,000	331				Nashua	Yes	\$ 29.82	\$ 13,002	
Monroe Street	Replace 485 LF of 4 inch (HDPE,CI) with 8 inch DIPCL		DW17-183			\$ 131,000	331				Nashua	Yes	\$ 29.82	\$ 3,906	
West Pearl Street	Replace 325 LF of 8 inch CI with 8 inch DIPCL		DW17-183			\$ 109,000	331				Nashua	Yes	\$ 29.82	\$ 3,250	
Gillis St	Residual paving from prior year main replacement		DW17-183			\$ 143,000	331				Nashua	Yes	\$ 29.82	\$ 4,264	
Orange St (Concord St to Lock St)	Residual paving from prior year main replacement		DW17-183			\$ 96,000	331				Nashua	Yes	\$ 29.82	\$ 2,863	
Buchanan St	Residual paving from prior year main replacement		DW17-183			\$ 36,600	331				Nashua	Yes	\$ 29.82	\$ 1,091	
Lincoln Ave	Residual paving from prior year main replacement		DW17-183			\$ 52,300	331				Nashua	Yes	\$ 29.82	\$ 1,560	
Nutt St	Residual paving from prior year main replacement		DW17-183			\$ 39,600	331				Nashua	Yes	\$ 29.82	\$ 1,181	
Circle Ave	Residual paving from prior year main replacement		DW17-183			\$ 11,000	331				Nashua	Yes	\$ 29.82	\$ 328	
Pratt St	Residual paving from prior year main replacement		DW17-183			\$ 47,000	331				Nashua	Yes	\$ 29.82	\$ 1,402	
Zellwood Ave	Residual paving from prior year main replacement		DW17-183			\$ 25,000	331				Nashua	Yes	\$ 29.82	\$ 746	
Faxon St	Residual paving from prior year main replacement		DW17-183			\$ 6,000	331				Nashua	Yes	\$ 29.82	\$ 179	
Fifield St	Residual paving from prior year main replacement		DW17-183			\$ 4,400	331				Nashua	Yes	\$ 29.82	\$ 131	
Fowell Ave	Residual paving from prior year main replacement		DW17-183			\$ 59,400	331				Nashua	Yes	\$ 29.82	\$ 1,771	
Terrace Street	Residual paving from prior year main replacement		DW17-183			\$ 5,200	331				Nashua	Yes	\$ 29.82	\$ 155	
Beard St	Residual paving from prior year main replacement		DW17-183			\$ 16,100	331				Nashua	Yes	\$ 29.82	\$ 480	
Green St	Residual paving from prior year main replacement		DW17-183			\$ 3,100	331				Nashua	Yes	\$ 29.82	\$ 92	
Warren St	Residual paving from prior year main replacement		DW17-183			\$ 11,000	331				Nashua	Yes	\$ 29.82	\$ 328	
Lowell St	Residual paving from prior year main replacement		DW17-183			\$ 23,000	331				Nashua	Yes	\$ 29.82	\$ 686	
Lemon St	Residual paving from prior year main replacement		DW17-183			\$ 4,400	331				Nashua	Yes	\$ 29.82	\$ 131	
Mulvanity St- Emergency Replacement	Residual paving from prior year main replacement		DW17-183			\$ 51,700	331				Nashua	Yes	\$ 29.82	\$ 1,542	
Asset Management	Asset Management		DW17-183			\$ 300,000	347				Various	Yes	\$ 29.13	\$ 8,739	
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL		DW17-183			\$ 655,000	331				Nashua	Yes	\$ 29.82	\$ 19,532	
Ritter Street	Replace 500LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 223,000	331				Nashua	Yes	\$ 29.82	\$ 6,650	
Woodward Street	Replace 300 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 131,000	331				Nashua	Yes	\$ 29.82	\$ 3,906	
Factory Street	Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL		DW17-183			\$ 642,000	331				Nashua	Yes	\$ 29.82	\$ 19,144	
Pennichuck Street	Replace 100 LF of 12 inch CI with 12 inch DIPCL		DW17-183			\$ 53,000	331				Nashua	Yes	\$ 29.82	\$ 1,580	
Fossa Avenue	Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL		DW17-183			\$ 80,000	331				Nashua	Yes	\$ 29.82	\$ 2,386	
Russell Avenue	Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL		DW17-183			\$ 290,000	331				Nashua	Yes	\$ 29.82	\$ 8,648	
Taylor Street (Main St to Fifield)	Replace 790 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 258,000	331				Nashua	Yes	\$ 29.82	\$ 7,694	
Burnett Street	Replace 535 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 238,000	331				Nashua	Yes	\$ 29.82	\$ 7,097	
Field Street	Replace 325 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 87,000	331				Nashua	Yes	\$ 29.82	\$ 2,594	
Fernwood Street	Replace 450 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 116,000	331				Nashua	Yes	\$ 29.82	\$ 3,459	
Revere Street	Replace 760 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 239,000	331				Nashua	Yes	\$ 29.82	\$ 7,127	
Stevens Street	Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF of 4 inch DIPCL		DW17-183			\$ 293,000	331				Nashua	Yes	\$ 29.82	\$ 8,737	
Evergreen Street	Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL		DW17-183			\$ 66,000	331				Nashua	Yes	\$ 29.82	\$ 1,968	
Morton Street	Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL		DW17-183			\$ 114,000	331				Nashua	Yes	\$ 29.82	\$ 3,399	
Park Avenue	Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF of 4 inch DIPCL		DW17-183			\$ 132,000	331				Nashua	Yes	\$ 29.82	\$ 3,936	
Coburn Woods (all side streets)	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL		DW17-183			\$ 1,024,400	331				Nashua	Yes	\$ 29.82	\$ 30,548	
Northwest Water Main Improvements			DW17-183				331				Nashua	Yes	\$ 29.82	\$ -	
Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.		DW17-183			\$ 600,000	331				Nashua	Yes	\$ 29.82	\$ 17,892	
Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop		DW17-183			\$ 500,000	331				Nashua	Yes	\$ 29.82	\$ 14,910	
Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL		DW17-183			\$ 475,000	331				Nashua	Yes	\$ 29.82	\$ 14,165	
Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DI		DW17-183			\$ 1,415,200	331				Nashua	Yes	\$ 29.82	\$ 42,201	
Outside GIS Consulting Services	Outside GIS Consulting Services		DW17-183			\$ 73,000	347				Various	No	\$ 29.13	\$ -	
Water Modeling Consulting	Water Modeling Consulting		DW17-183			\$ 50,000	347				Various	Yes	\$ 29.13	\$ 379	
Trimble R2 Units	Trimble R2 Units		DW17-183			\$ 13,000	347				Various	No	\$ 29.13	\$ -	
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment		DW17-183			\$ 5,000	307				Various	No	\$ 29.13	\$ -	
Replace Jeep with Pickup	Replace 2006 Jeep with 152,407 miles with Pickup		DW17-183			\$ 30,000	341				Merrimack	No	\$ 28.17	\$ -	
Replace Ranger Pickup	Replace 2005 Ranger Pickup with 186,885 miles		DW17-183			\$ 30,000	341				Merrimack	No	\$ 28.17	\$ -	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW17-183			\$ 60,000	311				Various	Yes	\$ 29.13	\$ 1,748	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW17-183			\$ 15,000	320				Various	Yes	\$ 29.13	\$ 437	
Misc. Structural Improvements	Misc. Structural Improvements		DW17-183			\$ 20,000	304				Various	Yes	\$ 29.13	\$ 583	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW17-183			\$ 20,000	344				Various	Yes	\$ 29.13	\$ 583	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW17-183			\$ 30,000	346				Various	Yes	\$ 29.13	\$ 874	
Well Rehabilitation	Well Rehabilitation		DW17-183			\$ 50,000	307				Various	Yes	\$ 29.13	\$ 1,457	
WTP Structural/HVAC	WTP Structural/HVAC		DW17-183			\$ 10,000	320				Nashua	Yes	\$ 29.82	\$ 298	

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	NHPUC Chart of Account #	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Purchase new lab equipment	Purchase new lab equipment		DW17-183			\$ 20,000	320				Nashua	No	\$ 29.82	\$ -	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW17-183			\$ 10,000	304				Various	Yes	\$ 29.82	\$ 298	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000	341				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000	341				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000	341				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000	341				Nashua	No	\$ 29.82	\$ -	
WTP Perimeter Fence	WTP Perimeter Fence		DW17-183			\$ 80,000	304				Merrimack	Yes	\$ 28.17	\$ 2,254	
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering		DSRR 0.1			\$ 90,000	305				Merrimack	No	\$ 28.17	\$ -	Not Eligible for 2018 QCPAC as this is engineering only
WTP Camera system upgrade	Existing Camera system is outdated		DW17-183			\$ 50,000	347				Nashua	Yes	\$ 29.13	\$ 1,457	
Dredging feasibility study	Dredging feasibility study		DSRR 0.1			\$ 31,500	305				Various	No	\$ 29.13	\$ -	Study is not QCPAC Qualified
Sourcewater Protection Study	Sourcewater Protection Study		DSRR 0.1			\$ 15,000	305				Various	No	\$ 29.13	\$ -	Study is not QCPAC Qualified
Aquatic Vegetation Assessment and Management	Aquatic Vegetation Assessment and Management		DSRR 0.1			\$ 7,500	305				Various	No	\$ 29.13	\$ -	Study is not QCPAC Qualified
Website Upgrades	Improved Customer Service Experience		DW17-183			\$ 36,000	347				Merrimack	No	\$ 28.17	\$ -	
SIEM Appliance	Aggregate Real-time monitoring of system alerts and logs		DW17-183			\$ 26,000	347				Merrimack	No	\$ 28.17	\$ -	
AD Change Auditor	Needed to track changes to Authentication Server		DW17-183			\$ 4,000	347				Merrimack	No	\$ 28.17	\$ -	
File Server Replacement	Replace older hardware		DW17-183			\$ 13,000	347				Merrimack	No	\$ 28.17	\$ -	
Storage Upgrade	Replace non-supported hardware and increase speed		DW17-183			\$ 70,000	347				Merrimack	No	\$ 28.17	\$ -	
Munis.FER Enhancements	Needed as Business process change		DW17-183			\$ 64,000	347				Merrimack	No	\$ 28.17	\$ -	
Click Mobile Application Changes	Needed as Business process change		DW17-183			\$ 30,000	347				Merrimack	No	\$ 28.17	\$ -	
ClickMobile Move to iPads	Move to a more functional device		DW17-183			\$ 140,000	347				Merrimack	No	\$ 28.17	\$ -	
Implement Customer Balances over the phone	Improved Customer Service Experience		DW17-183			\$ 4,000	347				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Hardware	Run Rate replacements		DW17-183			\$ 15,000	347				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Software	Run Rate replacements		DW17-183			\$ 12,000	347				Merrimack	No	\$ 28.17	\$ -	
LIMS upgrade	Allow for Electronic Data Collection in the Field		DW17-183			\$ 11,000	347				Merrimack	No	\$ 28.17	\$ -	
Physical Server for Pearl			DW17-183			\$ 12,000	347				Merrimack	No	\$ 28.17	\$ -	
Corporate Job Scheduler	Centralized nightly Job management and notification		DW17-183			\$ 4,000	347				Merrimack	No	\$ 28.17	\$ -	
Consulting	Consulting		DW17-183			\$ 32,000					Merrimack	No	\$ 28.17	\$ -	
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.		DW17-183			\$ 4,000	347				Merrimack	No	\$ 28.17	\$ -	
Additional Computers	Additional Computers		DW17-183			\$ 4,000	347				Merrimack	No	\$ 28.17	\$ -	
Pennichuck Water Works Projected 2018 Total Capital Expenditure Budget -						\$ 12,054,400	Projected Property Tax Expense associated with QCPAC projects -							\$ 314,360	

1. Tax rate is the sum of the local community rate plus the Statewide Utility
tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	NHPUC Chart of Account #	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	333	Various	Yes	\$ 29.13	\$ 1,340
20 Renewed Services	Replacement of failed services	\$ 92,000	333	Various	Yes	\$ 29.13	\$ 2,680
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	335	Various	Yes	\$ 29.13	\$ 1,457
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	331	Various	Yes	\$ 29.13	\$ 874
Replace failed radio meter readers	Replace out of warranty failed radio meter readers (280)	\$ 50,000	334	Various	Yes	\$ 29.13	\$ 1,457
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 62,000	334	Various	Yes	\$ 29.13	\$ 1,806
1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	\$ 259,000	334	Various	Yes	\$ 29.13	\$ 7,545
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	334	Various	Yes	\$ 29.13	\$ 787
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	343	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	343	Merrimack	No	\$ 28.17	\$ -
Service Truck replacement (#4)	Replace 2011 Pickup Truck with 160,000+ projected miles	\$ 60,000	341	Merrimack	No	\$ 28.17	\$ -
Meter service van replacement (#72)	Replace 2009 Meter Van with 158,000+ projected miles	\$ 35,000	341	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (2)	Ongoing small equipment replacement	\$ 4,000	311	Merrimack	No	\$ 28.17	\$ -
Tapping Machine replacements (2)	Tapping Machine replacements (2)	\$ 4,000	343	Merrimack	No	\$ 28.17	\$ -
Trimble units for Meter Reading (4 units)	Replace remaining CE meter reading equipment	\$ 13,000	347	Merrimack	No	\$ 28.17	\$ -
Replace 2850 meter reading radios	Complete with PT's, Replace aging radios	\$ 270,000	334	Various	No	\$ 29.13	\$ -
Elm St	Residual paving from prior year main replacement	\$ 22,000	331	Nashua	Yes	\$ 29.82	\$ 656
Monroe Street	Residual paving from prior year main replacement	\$ 10,000	331	Nashua	Yes	\$ 29.82	\$ 298
West Pearl Street	Residual paving from prior year main replacement	\$ 10,000	331	Nashua	Yes	\$ 29.82	\$ 298
Gilman Street	Residual paving from prior year main replacement	\$ 180,000	331	Nashua	Yes	\$ 29.82	\$ 5,368
Ritter Street	Residual paving from prior year main replacement	\$ 61,200	331	Nashua	Yes	\$ 29.82	\$ 1,825
Woodward Street	Residual paving from prior year main replacement	\$ 36,200	331	Nashua	Yes	\$ 29.82	\$ 1,079
Factory Street	Residual paving from prior year main replacement	\$ 155,600	331	Nashua	Yes	\$ 29.82	\$ 4,640
Pennichuck Street	Residual paving from prior year main replacement	\$ 13,200	331	Nashua	Yes	\$ 29.82	\$ 394
Fossa Avenue	Residual paving from prior year main replacement	\$ 33,400	331	Nashua	Yes	\$ 29.82	\$ 996
Russell Avenue	Residual paving from prior year main replacement	\$ 52,700	331	Nashua	Yes	\$ 29.82	\$ 1,572
Taylor Street (Main St to Fifield)	Residual paving from prior year main replacement	\$ 86,500	331	Nashua	Yes	\$ 29.82	\$ 2,579
Burnett Street	Residual paving from prior year main replacement	\$ 65,500	331	Nashua	Yes	\$ 29.82	\$ 1,953
Field Street	Residual paving from prior year main replacement	\$ 33,500	331	Nashua	Yes	\$ 29.82	\$ 999
Fernwood Street	Residual paving from prior year main replacement	\$ 45,000	331	Nashua	Yes	\$ 29.82	\$ 1,342
Revere Street	Residual paving from prior year main replacement	\$ 80,100	331	Nashua	Yes	\$ 29.82	\$ 2,389
Stevens Street	Residual paving from prior year main replacement	\$ 102,100	331	Nashua	Yes	\$ 29.82	\$ 3,045
Evergreen Street	Residual paving from prior year main replacement	\$ 26,000	331	Nashua	Yes	\$ 29.82	\$ 775
Morton Street	Residual paving from prior year main replacement	\$ 45,000	331	Nashua	Yes	\$ 29.82	\$ 1,342
Park Avenue	Residual paving from prior year main replacement	\$ 38,000	331	Nashua	Yes	\$ 29.82	\$ 1,133
Northwest Water Main Improvements	Residual paving from prior year main replacement	\$ 35,000	331	Nashua	Yes	\$ 29.82	\$ 1,044
Lake Street	Residual paving from prior year main replacement	\$ 330,000	331	Nashua	Yes	\$ 29.82	\$ 9,841
Coburn Woods (all side streets)	Residual paving from prior year main replacement	\$ 175,700	331	Nashua	Yes	\$ 29.82	\$ 5,239
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch	\$ 384,300	331	Nashua	Yes	\$ 29.82	\$ 11,460
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL	\$ 88,300	331	Nashua	Yes	\$ 29.82	\$ 2,633
Ash Street	Replace 510 LF of 6 inch CI with 8 inch DIPCL	\$ 174,100	331	Nashua	Yes	\$ 29.82	\$ 5,192
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL	\$ 142,800	331	Nashua	Yes	\$ 29.82	\$ 4,258
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL	\$ 39,100	331	Nashua	Yes	\$ 29.82	\$ 1,166
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL	\$ 228,300	331	Nashua	Yes	\$ 29.82	\$ 6,808
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL	\$ 84,200	331	Nashua	Yes	\$ 29.82	\$ 2,511
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	\$ 5,500,000	306	Merrimack	Yes	\$ 29.13	\$ 160,215
Twin Ridge Station Improvements	Twin Ridge Station Improvements	\$ 330,000	346	Plaistow	Yes	\$ 33.12	\$ 10,930
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 24,000	347	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	347	Merrimack	No	\$ 28.17	\$ -

Project Name/Description	Project Description	Approved Budgeted Amount	NHPUC Chart of Account #	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	307	Various	No	\$ 29.13	\$ -
Replace SUV	Replace SUV	\$ 30,000	341	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	341	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	311	Various	Yes	\$ 29.13	\$ 1,748
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	320	Various	Yes	\$ 29.13	\$ 437
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	304	Various	Yes	\$ 29.13	\$ 583
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	344	Various	Yes	\$ 29.13	\$ 583
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	346	Various	Yes	\$ 29.13	\$ 874
Well Rehabilitation	Well Rehabilitation	\$ 50,000	307	Various	Yes	\$ 29.13	\$ 1,457
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	304	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	320	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	304	Various	Yes	\$ 29.13	\$ 291
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	341	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	341	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	341	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	341	Nashua	No	\$ 29.82	\$ -
Bowers Dam Spillway reconstruction	Bowers Dam Spillway reconstruction	\$ 900,000	305	Various	Yes	\$ 29.13	\$ 26,217
Carbon media changeout-filters 1 & 3	Carbon media changeout-filters 1 & 3	\$ 550,000	320	Nashua	Yes	\$ 29.82	\$ 16,401
Desktop PC Replacements	Desktop Replacements	\$ 80,000	347	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	347	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	347	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other Miscellaneous IT Projects - Run Rate	\$ 275,000	347	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2019 Total Capital Expenditure Budget -		\$ 12,002,800	Projected Property Tax Expense associated with QCPAC projects -				\$ 320,811

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 29.13	\$ 1,340
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 29.13	\$ 2,680
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 29.13	\$ 874
Replace failed radio meter readers	Replace out of warrantee failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 65,000	Various	Yes	\$ 29.13	\$ 1,893
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 29.13	\$ 787
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Pick Up replacement (#20)	Replace 2008 with projected 136,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Pick Up replacement (#95)	Replace 2008 with projected 130,000+ miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter Van replacement (#27)	Replace 2011 with projected 135,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Reading SUV replacement (#21)	Replace 2011 with projected 140,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (3)	Mud Pump Replacements (3)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Radio Replacements (2850)	Complete with PT's, Replace aging radios	\$ 270,000	Various	Yes	\$ 29.13	\$ 7,865
Brook Street	Residual paving from prior year main replacement	\$ 128,700	Nashua	Yes	\$ 29.82	\$ 3,838
Hamilton Street	Residual paving from prior year main replacement	\$ 40,900	Nashua	Yes	\$ 29.82	\$ 1,220
Ash Street	Residual paving from prior year main replacement	\$ 58,300	Nashua	Yes	\$ 29.82	\$ 1,739
Burritt Street	Residual paving from prior year main replacement	\$ 47,800	Nashua	Yes	\$ 29.82	\$ 1,425
Burritt Street	Residual paving from prior year main replacement	\$ 18,100	Nashua	Yes	\$ 29.82	\$ 540
Verona Street	Residual paving from prior year main replacement	\$ 76,500	Nashua	Yes	\$ 29.82	\$ 2,281
Sarasota Ave	Residual paving from prior year main replacement	\$ 28,200	Nashua	Yes	\$ 29.82	\$ 841
Fields Grove Park Crossing (Chestnut to Lawndale)	Add 750 LF of 16 inch HDPE (stream crossing)	\$ 506,000	Nashua	Yes	\$ 29.82	\$ 15,089
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL	\$ 191,500	Nashua	Yes	\$ 29.82	\$ 5,711
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL	\$ 329,500	Nashua	Yes	\$ 29.82	\$ 9,826
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL	\$ 73,000	Nashua	Yes	\$ 29.82	\$ 2,177
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL	\$ 95,200	Nashua	Yes	\$ 29.82	\$ 2,839
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL	\$ 91,800	Nashua	Yes	\$ 29.82	\$ 2,737
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL	\$ 44,300	Nashua	Yes	\$ 29.82	\$ 1,321
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL	\$ 87,400	Nashua	Yes	\$ 29.82	\$ 2,606
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL	\$ 124,200	Nashua	Yes	\$ 29.82	\$ 3,704
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL	\$ 102,300	Nashua	Yes	\$ 29.82	\$ 3,051
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	\$ 272,300	Nashua	Yes	\$ 29.82	\$ 8,120
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL	\$ 878,700	Nashua	Yes	\$ 29.82	\$ 26,203
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL	\$ 497,200	Nashua	Yes	\$ 29.82	\$ 14,827
Taylor Road (Lynn St to	Replace 725 LF of 8 inch CI with 12 inch DIPCL	\$ 332,500	Nashua	Yes	\$ 29.82	\$ 9,915
Temple St (south to Gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL	\$ 415,600	Nashua	Yes	\$ 29.82	\$ 12,393
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL	\$ 137,400	Nashua	Yes	\$ 29.82	\$ 4,097
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement	\$ 3,080,000	Nashua	Yes	\$ 29.82	\$ 91,846
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 18,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 29.13	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 29.13	\$ 1,748
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 29.13	\$ 437
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 29.13	\$ 583

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 29.13	\$ 583
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 29.13	\$ 874
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 29.82	\$ 298
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Work Order and Asset Management (Synergen upgrade)	Upgrade WAM to new infrastructure and interface	\$ 90,000	Merrimack	Yes	\$ 28.17	\$ 2,535
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other IT Miscellaneous Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -		\$ 9,953,400	Projected Property Tax Expense associated with QCPAC projects -			\$ 271,909

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Pennichuck Water Works, Inc.

DW 18-022

2017 QCPAC Capital Expenditures with General Ledger Account Numbers

5/30/2018

QCPAC Filing

Exhibit 3

Pennichuck Water Works Inc
Depreciation Asset List
For the Period January 1, 2017 to December 31, 2017
By Project
All Projects Submitted for QCPAC

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000674	347110-2000-001	1502439	Munis - Enhancements - SDS Replacement	6/2/2017	7,000000	SL	\$18,700.00	\$0.00	\$18,700.00	\$1,335.71	\$1,335.71	\$17,364.29
200-00001116	303100-2000-001	1503675	St. Joseph's Land Purchase	10/1/2017	0,000000	NO	\$69,790.16	\$0.00	\$69,790.16	\$0.00	\$0.00	\$69,790.16
200-00001832	307100-2000-001	1503914	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$363.75	\$0.00	\$363.75	\$6.06	\$6.06	\$357.69
200-00001834	307100-2000-001	1503914	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$363.75	\$0.00	\$363.75	\$6.06	\$6.06	\$357.69
200-00001833	307100-2000-001	1503914	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$452.00	\$0.00	\$452.00	\$7.53	\$7.53	\$444.47
200-00001831	307100-2000-001	1503914	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$24,573.24	\$0.00	\$24,573.24	\$409.55	\$409.55	\$24,163.69
200-00000256	347110-2000-001	1600061	Smart Board - Engineering (Dawn)	3/1/2017	7,000000	SL	\$7,178.90	\$0.00	\$7,178.90	\$669.71	\$669.71	\$6,509.19
200-00001127	347110-2000-001	1600061	Asset Management Risk & Criticality	10/1/2017	7,000000	SL	\$13,921.10	\$0.00	\$13,921.10	\$994.36	\$994.36	\$12,926.74
200-00000258	347110-2000-001	1600061	Hydraulic Model - Asset Management	3/1/2017	7,000000	SL	\$140,490.00	\$0.00	\$140,490.00	\$10,035.00	\$10,035.00	\$130,455.00
200-00000679	331002-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	63,670000	SL	\$23,400.00	\$2,340.00	\$21,060.00	\$165.38	\$165.38	\$20,894.62
200-00000625	331200-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$80.00	\$8.00	\$72.00	\$0.58	\$0.58	\$71.42
200-00000627	331200-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$108.00	\$10.80	\$97.20	\$0.78	\$0.78	\$96.42
200-00000635	331200-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$426.63	\$42.66	\$383.97	\$3.07	\$3.07	\$380.90
200-00000638	331200-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$627.76	\$62.78	\$564.98	\$4.52	\$4.52	\$560.46
200-00000681	331200-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$78,280.42	\$7,828.04	\$70,452.38	\$563.62	\$563.62	\$69,888.76
200-00000649	331250-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$2,250.00	\$225.00	\$2,025.00	\$16.20	\$16.20	\$2,008.80
200-00000642	335000-2000-001	1600371	Howard St. Emergency Main Replacement -	6/2/2017	44,670000	SL	\$850.00	\$85.00	\$765.00	\$8.56	\$8.56	\$756.44
200-00000620	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$22.86	\$2.29	\$20.57	\$0.16	\$0.16	\$20.41
200-00000629	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$180.50	\$18.05	\$162.45	\$1.30	\$1.30	\$161.15
200-00000632	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$247.18	\$24.72	\$222.46	\$1.78	\$1.78	\$220.68
200-00000641	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$783.88	\$78.39	\$705.49	\$5.64	\$5.64	\$699.85
200-00000646	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$1,153.45	\$115.35	\$1,038.10	\$8.30	\$8.30	\$1,029.80
200-00000654	331200-2000-001	1600381	Temple St, Nashua - Nashua Water Main Im	6/2/2017	62,500000	SL	\$3,135.30	\$313.53	\$2,821.77	\$22.57	\$22.57	\$2,799.20
200-00000683	309200-2000-001	1601365	Raw Water Transmission Main	6/2/2017	66,670000	SL	\$176,829.14	\$0.00	\$176,829.14	\$1,326.15	\$1,326.15	\$175,502.99
200-00000619	331200-2000-001	1601379	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$9.00	\$0.90	\$8.10	\$0.06	\$0.06	\$8.04
200-00000622	331200-2000-001	1601379	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$32.93	\$3.29	\$29.64	\$0.24	\$0.24	\$29.40
200-00000623	331200-2000-001	1601379	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$48.46	\$4.85	\$43.61	\$0.35	\$0.35	\$43.26
200-00000624	331200-2000-001	1601379	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$71.87	\$7.19	\$64.68	\$0.52	\$0.52	\$64.16
200-00000639	331200-2000-001	1601379	Howard St. Emergency Main Replacement -	6/2/2017	62,500000	SL	\$653.28	\$65.33	\$587.95	\$4.70	\$4.70	\$583.25
200-00001822	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$64.00	\$0.00	\$64.00	\$1.07	\$1.07	\$62.93
200-00001824	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$135.67	\$0.00	\$135.67	\$2.26	\$2.26	\$133.41
200-00001823	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$587.50	\$0.00	\$587.50	\$9.79	\$9.79	\$577.71
200-00001821	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$887.18	\$0.00	\$887.18	\$14.79	\$14.79	\$872.39
200-00001819	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$1,305.45	\$0.00	\$1,305.45	\$21.76	\$21.76	\$1,283.69
200-00001817	307100-2000-001	1602428	Sweet Hill Well #3	12/1/2017	30,000000	SL	\$68,501.55	\$0.00	\$68,501.55	\$1,141.69	\$1,141.69	\$67,359.86
200-00000658	347110-2000-001	1614048	PDF Converter Software	6/2/2017	7,000000	SL	\$3,994.00	\$0.00	\$3,994.00	\$285.29	\$285.29	\$3,708.71
200-00000842	331200-2000-001	1617684	Gillis Street - Water Main Improvements	7/1/2017	62,500000	SL	\$54,789.00	\$5,478.90	\$49,310.10	\$394.48	\$394.48	\$48,915.62
200-00000832	331250-2000-001	1617684	Gillis Street - Water Main Improvements	7/1/2017	62,500000	SL	\$5,380.00	\$538.00	\$4,842.00	\$38.74	\$38.74	\$4,803.26
200-00000834	333200-2000-001	1617684	Gillis Street - Water Main Improvements	7/1/2017	42,750000	SL	\$7,289.00	\$728.90	\$6,560.10	\$76.73	\$76.73	\$6,483.37
200-00000824	335000-2000-001	1617684	Gillis Street - Water Main Improvements	7/1/2017	44,670000	SL	\$857.00	\$85.70	\$771.30	\$8.63	\$8.63	\$762.67

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-0000839	347110-2000-001	1617689	LT06 Tape Drive #2	7/1/2017	7.000000	SL	\$19,395.00	\$0.00	\$19,395.00	\$1,385.36	\$1,385.36	\$18,009.64
200-00001027	347110-2000-001	1700300	Asset Management - Project Management	9/1/2017	7.000000	SL	\$127.00	\$0.00	\$127.00	\$9.07	\$9.07	\$117.93
200-00001792	347110-2000-001	1700300	GIS Mapping	12/1/2017	7.000000	SL	\$253.33	\$0.00	\$253.33	\$18.10	\$18.10	\$235.23
200-00000427	347110-2000-001	1700300	GIS Mapping - Asset Management	4/1/2017	7.000000	SL	\$263.26	\$0.00	\$263.26	\$18.80	\$18.80	\$244.46
200-00000566	347110-2000-001	1700300	Hydraulic Model - Asset Management	5/2/2017	7.000000	SL	\$310.00	\$0.00	\$310.00	\$22.14	\$22.14	\$287.86
200-00001028	347110-2000-001	1700300	GeoNexus Mobile - Asset Management	9/1/2017	7.000000	SL	\$370.00	\$0.00	\$370.00	\$26.43	\$26.43	\$343.57
200-00000573	347110-2000-001	1700300	Asset Management - Project Management	5/2/2017	7.000000	SL	\$525.00	\$0.00	\$525.00	\$37.50	\$37.50	\$487.50
200-00000919	347110-2000-001	1700300	GeoNexus Mobile - Asset Management	8/1/2017	7.000000	SL	\$555.00	\$0.00	\$555.00	\$39.64	\$39.64	\$515.36
200-00001181	347110-2000-001	1700300	Rangefinders (2)	11/1/2017	7.000000	SL	\$828.42	\$0.00	\$828.42	\$59.17	\$59.17	\$769.25
200-00001795	347110-2000-001	1700300	GIS Mapping	12/1/2017	7.000000	SL	\$1,120.51	\$0.00	\$1,120.51	\$80.04	\$80.04	\$1,040.47
200-00001793	347110-2000-001	1700300	GIS Mapping	12/1/2017	7.000000	SL	\$1,652.24	\$0.00	\$1,652.24	\$118.02	\$118.02	\$1,534.22
200-00000647	347110-2000-001	1700300	GeoNexus Mobile - Asset Management	6/2/2017	7.000000	SL	\$1,850.00	\$0.00	\$1,850.00	\$132.14	\$132.14	\$1,717.86
200-00001148	347110-2000-001	1700300	Hydraulic Model - Asset Management	10/1/2017	7.000000	SL	\$1,860.00	\$0.00	\$1,860.00	\$132.86	\$132.86	\$1,727.14
200-00000648	347110-2000-001	1700300	GIS Website - Asset Management	6/2/2017	7.000000	SL	\$1,935.00	\$0.00	\$1,935.00	\$138.21	\$138.21	\$1,796.79
200-00001800	347110-2000-001	1700300	Asset Management Project Manag	12/1/2017	7.000000	SL	\$2,250.00	\$0.00	\$2,250.00	\$160.71	\$160.71	\$2,089.29
200-00000429	347110-2000-001	1700300	GIS Website - Asset Management	4/1/2017	7.000000	SL	\$712.78	\$0.00	\$712.78	\$50.91	\$50.91	\$661.87
200-00001794	347110-2000-001	1700300	GIS Mapping	12/1/2017	7.000000	SL	\$4,038.13	\$0.00	\$4,038.13	\$288.44	\$288.44	\$3,749.69
200-00001029	347110-2000-001	1700300	Hydraulic Model - Asset Management	9/1/2017	7.000000	SL	\$4,245.00	\$0.00	\$4,245.00	\$303.21	\$303.21	\$3,941.79
200-00000831	347110-2000-001	1700300	Servcer Software and 20 Cals - Asset Man	7/1/2017	7.000000	SL	\$4,788.42	\$0.00	\$4,788.42	\$342.03	\$342.03	\$4,446.39
200-00001796	347110-2000-001	1700300	Asset Management GIS Mapping	12/1/2017	7.000000	SL	\$4,823.19	\$0.00	\$4,823.19	\$344.51	\$344.51	\$4,478.68
200-00001802	347110-2000-001	1700300	Asset Mgt. Hydraulic Mode	12/1/2017	7.000000	SL	\$4,928.34	\$0.00	\$4,928.34	\$352.02	\$352.02	\$4,576.32
200-00000431	347110-2000-001	1700300	Asset Management - Project Management	4/1/2017	7.000000	SL	\$5,060.00	\$0.00	\$5,060.00	\$361.43	\$361.43	\$4,698.57
200-00001179	347110-2000-001	1700300	Project Management	11/1/2017	7.000000	SL	\$5,400.00	\$0.00	\$5,400.00	\$385.71	\$385.71	\$5,014.29
200-00001797	347110-2000-001	1700300	InfoMaster LCCA	12/1/2017	7.000000	SL	\$6,000.00	\$0.00	\$6,000.00	\$428.57	\$428.57	\$5,571.43
200-00000430	347110-2000-001	1700300	Hydraulic Model - Asset Management	4/1/2017	7.000000	SL	\$6,200.00	\$0.00	\$6,200.00	\$442.86	\$442.86	\$5,757.14
200-00000920	347110-2000-001	1700300	Hydraulic Model - Asset Management	8/1/2017	7.000000	SL	\$6,200.00	\$0.00	\$6,200.00	\$442.86	\$442.86	\$5,757.14
200-00001182	347110-2000-001	1700300	Hydraulic Model	11/1/2017	7.000000	SL	\$9,061.37	\$0.00	\$9,061.37	\$647.24	\$647.24	\$8,414.13
200-00001149	347110-2000-001	1700300	GIS Mapping	10/1/2017	7.000000	SL	\$10,188.00	\$0.00	\$10,188.00	\$727.71	\$727.71	\$9,460.29
200-00001801	347110-2000-001	1700300	Asset Mgt. Risk & Criticality	12/1/2017	7.000000	SL	\$10,552.50	\$0.00	\$10,552.50	\$753.75	\$753.75	\$9,798.75
200-00001180	347110-2000-001	1700300	Risk & Criticality	11/1/2017	7.000000	SL	\$14,288.63	\$0.00	\$14,288.63	\$1,020.62	\$1,020.62	\$13,268.01
200-00000567	347110-2000-001	1700300	GIS Mapping - Asset Management	5/2/2017	7.000000	SL	\$18,073.17	\$0.00	\$18,073.17	\$1,290.94	\$1,290.94	\$16,782.23
200-00001799	347110-2000-001	1700300	Asset Management GIS Mapping	12/1/2017	7.000000	SL	\$26,672.61	\$0.00	\$26,672.61	\$1,905.19	\$1,905.19	\$24,767.42
200-00000841	347110-2000-001	1700300	GIS Mapping - Asset Management	7/1/2017	7.000000	SL	\$28,754.99	\$0.00	\$28,754.99	\$2,053.93	\$2,053.93	\$26,701.06
200-00000677	347110-2000-001	1700300	GIS Mapping - Asset Management	6/2/2017	7.000000	SL	\$29,543.83	\$0.00	\$29,543.83	\$2,110.27	\$2,110.27	\$27,433.56
200-00001798	347110-2000-001	1700300	Asset Mgt. InfoMaster LCCA	12/1/2017	7.000000	SL	\$30,000.00	\$0.00	\$30,000.00	\$2,142.86	\$2,142.86	\$27,857.14
200-00000921	347110-2000-001	1700300	GIS Mapping - Asset Management	8/1/2017	7.000000	SL	\$32,549.66	\$0.00	\$32,549.66	\$2,324.98	\$2,324.98	\$30,224.68
200-00001130	347110-2000-001	1700300	Asset Mng. Risk & Criticality	10/1/2017	7.000000	SL	\$32,995.00	\$0.00	\$32,995.00	\$2,356.79	\$2,356.79	\$30,638.21
200-00001174	347110-2000-001	1700300	GIS Mapping	11/1/2017	7.000000	SL	\$33,084.71	\$0.00	\$33,084.71	\$2,363.19	\$2,363.19	\$30,721.52
200-00001147	347110-2000-001	1700300	GIS Mapping	10/1/2017	7.000000	SL	\$33,733.78	\$0.00	\$33,733.78	\$2,409.56	\$2,409.56	\$31,324.22
200-00001026	347110-2000-001	1700300	GIS Mapping - Asset Management	9/1/2017	7.000000	SL	\$36,840.60	\$0.00	\$36,840.60	\$2,631.47	\$2,631.47	\$34,209.13
200-00000426	347110-2000-001	1700300	GIS Mapping - Asset Management	4/1/2017	7.000000	SL	\$79,498.57	\$0.00	\$79,498.57	\$5,678.47	\$5,678.47	\$73,820.10
200-00000670	331002-2000-001	1700310	Brook St, Nashua - 2015 Nashua Water Mai	6/2/2017	63.670000	SL	\$9,844.00	\$984.40	\$8,859.60	\$69.57	\$69.57	\$8,790.03
200-00000660	331002-2000-001	1700315	Ash Street: Nashua - 2015 Water Main	6/2/2017	63.670000	SL	\$4,778.30	\$477.83	\$4,300.47	\$33.77	\$33.77	\$4,266.70
200-00001123	331002-2000-001	1700315	Ash St, Nashua - 2015 Nashua Water Main	10/1/2017	63.670000	SL	\$17,900.00	\$1,790.00	\$16,110.00	\$126.51	\$126.51	\$15,983.49
200-00001827	307100-2000-001	1701490	Sweet Hill Well #3	12/1/2017	30.000000	SL	\$698.50	\$0.00	\$698.50	\$11.64	\$11.64	\$686.86
200-00001826	307100-2000-001	1701490	Sweet Hill Well #3	12/1/2017	30.000000	SL	\$1,430.58	\$0.00	\$1,430.58	\$23.84	\$23.84	\$1,406.74
200-00001825	307100-2000-001	1701490	Sweet Hill Well #3	12/1/2017	30.000000	SL	\$2,105.03	\$0.00	\$2,105.03	\$35.08	\$35.08	\$2,069.95
200-00001820	307100-2000-001	1701490	Sweet Hill Well #3	12/1/2017	30.000000	SL	\$50,100.67	\$0.00	\$50,100.67	\$835.01	\$835.01	\$49,265.66
200-00001830	307210-2000-001	1701490	Sweet Hill Well #3	12/1/2017	30.000000	SL	\$10,103.00	\$0.00	\$10,103.00	\$168.38	\$168.38	\$9,934.62
200-00001828	334000-2000-001	1701490	Sweet Hill Well #3	12/1/2017	20.920000	SL	\$306.28	\$0.00	\$306.28	\$7.32	\$7.32	\$298.96

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001829	334000-2000-001	1701490	Sweet Hill Well #3	12/1/2017	20.920000	SL	\$1,853.24	\$0.00	\$1,853.24	\$44.29	\$44.29	\$1,808.95
200-00000568	334000-2000-001	1701885	WTP - Replace 30" IP Discharge Meter	5/2/2017	20.920000	SL	\$17,176.87	\$1,717.69	\$15,459.18	\$369.48	\$369.48	\$15,089.70
200-00001774	346000-2000-001	1701886	Valleyfield - Install Cellular Comm	12/1/2017	19.000000	SL	\$3,249.04	\$0.00	\$3,249.04	\$85.50	\$85.50	\$3,163.54
200-00001473	304800-2000-001	1701887	WTP - Install Overhead Door	12/1/2017	40.670000	SL	\$9,209.50	\$0.00	\$9,209.50	\$113.22	\$113.22	\$9,096.28
200-00000569	346000-2000-001	1701888	Twin Ridge - Replace VFD Well #8	5/2/2017	19.000000	SL	\$2,089.15	\$0.00	\$2,089.15	\$54.98	\$54.98	\$2,034.17
200-00000959	346000-2000-001	1701889	WTP - Replace all SCADA Computers and Up	9/1/2017	19.000000	SL	\$19,990.00	\$0.00	\$19,990.00	\$526.05	\$526.05	\$19,463.95
200-00000851	331200-2000-001	1701891	2017 Rte. 101 Widening, Bedford (2017)	8/1/2017	62.500000	SL	\$10,785.84	\$1,078.58	\$9,707.26	\$77.66	\$77.66	\$9,629.60
200-00001853	331200-2000-001	1701891	Rte. 101 Widening, Bedford - 2017	12/1/2017	62.500000	SL	\$35,187.71	\$3,518.77	\$31,668.94	\$253.35	\$253.35	\$31,415.59
200-00001808	310000-2000-001	1701899	Hi-Lo Generator	12/1/2017	22.000000	SL	\$47,331.72	\$0.00	\$47,331.72	\$1,075.72	\$1,075.72	\$46,256.00
200-00000664	305000-2000-001	1701987	Harris Dam Spillway Reconstruction (2017	6/2/2017	55.830000	SL	\$6,018.00	\$601.80	\$5,416.20	\$48.51	\$48.51	\$5,367.69
200-00000668	331002-2000-001	1701988	Mulberry St, Nashua - 2014 Water Main Im	6/2/2017	63.670000	SL	\$6,840.00	\$684.00	\$6,156.00	\$48.34	\$48.34	\$6,107.66
200-00000661	331002-2000-001	1701989	Park St Main Replacement, paving (2017 c	6/2/2017	63.670000	SL	\$4,907.99	\$490.80	\$4,417.19	\$34.69	\$34.69	\$4,382.50
200-00001910	304701-2000-001	1701990	DW Highway - Operations Building	12/1/2017	40.670000	SL	\$29,094.37	\$0.00	\$29,094.37	\$357.69	\$357.69	\$28,736.68
200-00001915	346000-2000-001	1701990	DW Highway - Operations Building	12/1/2017	40.670000	SL	\$7,463.14	\$0.00	\$7,463.14	\$91.75	\$91.75	\$7,371.39
200-00001916	348000-2000-001	1701990	DW Highway - Operations Building	12/1/2017	25.000000	SL	\$28,582.42	\$0.00	\$28,582.42	\$571.65	\$571.65	\$28,010.77
200-00001458	347110-2000-001	1702081	Firewall Replacement	12/1/2017	7.000000	SL	\$28,227.51	\$0.00	\$28,227.51	\$2,016.25	\$2,016.25	\$26,211.26
200-00000631	341000-2000-001	1702097	#352 - 2016 Chevy Silverado 3500, Servi	6/2/2017	10.580000	SL	\$170.59	\$0.00	\$170.59	\$8.06	\$8.06	\$162.53
200-00000633	341000-2000-001	1702097	#352 - 2016 Chevy Silverado 3500, Servi	6/2/2017	10.580000	SL	\$251.04	\$0.00	\$251.04	\$11.86	\$11.86	\$239.18
200-00000666	341000-2000-001	1702097	#352 - 2016 Chevy Silverado 3500, Servi	6/2/2017	10.580000	SL	\$5,820.13	\$0.00	\$5,820.13	\$275.05	\$275.05	\$5,545.08
200-00000833	347110-2000-001	1702223	iPad Devices for Click Mobile	7/1/2017	7.000000	SL	\$5,159.95	\$0.00	\$5,159.95	\$368.57	\$368.57	\$4,791.38
200-00000656	347110-2000-001	1702224	InfoView Upgrade	6/2/2017	7.000000	SL	\$3,150.00	\$0.00	\$3,150.00	\$225.00	\$225.00	\$2,925.00
200-00001809	345000-2000-001	1702312	#331 - Volvo EC60E Excavator	12/1/2017	16.670000	SL	\$69,553.56	\$0.00	\$69,553.56	\$2,086.19	\$2,086.19	\$67,467.37
200-00001469	331200-2000-001	1702838	Nashua Road (Route 101 Widening)	12/1/2017	62.500000	SL	-\$457.31	-\$45.73	-\$411.58	-\$3.29	-\$3.29	-\$408.29
200-00000949	331200-2000-001	1702838	2017 Nashua Road (Route 101 Widening), B	8/1/2017	62.500000	SL	\$198.00	\$19.80	\$178.20	\$1.43	\$1.43	\$176.77
200-00000844	331200-2000-001	1702838	2017 Nashua Road (Route 101 Widening), B	8/1/2017	62.500000	SL	\$1,045.03	\$104.50	\$940.53	\$7.52	\$7.52	\$933.01
200-00000846	331200-2000-001	1702838	2017 Nashua Road (Route 101 Widening), B	8/1/2017	62.500000	SL	\$1,537.72	\$153.77	\$1,383.95	\$11.07	\$11.07	\$1,372.88
200-00000850	331200-2000-001	1702838	2017 Nashua Road (Route 101 Widening), B	8/1/2017	62.500000	SL	\$5,884.50	\$588.45	\$5,296.05	\$42.37	\$42.37	\$5,253.68
200-00001465	331200-2000-001	1702838	Nashua Road (Route 101 Widening)	12/1/2017	62.500000	SL	\$35,531.74	\$3,553.17	\$31,978.57	\$255.83	\$255.83	\$31,722.74
200-00001467	331002-2000-001	1702839	Bell Hill Road (Route 101 Widening)	12/1/2017	63.670000	SL	\$2,524.63	\$252.46	\$2,272.17	\$17.84	\$17.84	\$2,254.33
200-00001909	331200-2000-001	1702839	Bell Hill	12/1/2017	62.500000	SL	-\$3,056.92	\$0.00	-\$3,056.92	-\$24.46	-\$24.46	-\$3,032.46
200-00000950	331200-2000-001	1702839	2017 Bell Hill Road (Route 101 Widening)	8/1/2017	62.500000	SL	\$379.50	\$37.95	\$341.55	\$2.73	\$2.73	\$338.82
200-00000847	331200-2000-001	1702839	2017 Bell Hill Road (Route 101 Widening)	8/1/2017	62.500000	SL	\$2,143.25	\$214.33	\$1,928.92	\$15.43	\$15.43	\$1,913.49
200-00000848	331200-2000-001	1702839	2017 Bell Hill Road (Route 101 Widening)	8/1/2017	62.500000	SL	\$2,413.87	\$241.39	\$2,172.48	\$17.38	\$17.38	\$2,155.10
200-00000849	331200-2000-001	1702839	2017 Bell Hill Road (Route 101 Widening)	8/1/2017	62.500000	SL	\$3,153.69	\$315.37	\$2,838.32	\$22.71	\$22.71	\$2,815.61
200-00001466	331200-2000-001	1702839	Bell Hill Road (Route 101 Widening)	12/1/2017	62.500000	SL	\$46,393.15	\$4,639.32	\$41,753.83	\$334.03	\$334.03	\$41,419.80
200-00001474	333004-2000-001	1702840	Nashua Road, #3, 6" Fire Service	12/1/2017	41.000000	SL	\$10,176.62	\$1,017.66	\$9,158.96	\$111.69	\$111.69	\$9,047.27
200-00000948	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$71.50	\$7.15	\$64.35	\$0.75	\$0.75	\$63.60
200-00000951	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$836.26	\$83.63	\$752.63	\$8.80	\$8.80	\$743.83
200-00000953	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$1,230.52	\$123.05	\$1,107.47	\$12.95	\$12.95	\$1,094.52
200-00000853	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$1,620.00	\$162.00	\$1,458.00	\$17.05	\$17.05	\$1,440.95
200-00000891	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$2,485.00	\$248.50	\$2,236.50	\$26.16	\$26.16	\$2,210.34
200-00001470	333200-2000-001	1702840	Nashua Road, #3, 6" Fire Service Relocate	12/1/2017	42.750000	SL	\$38,882.62	\$3,888.26	\$34,994.36	\$409.29	\$409.29	\$34,585.07
200-00000852	333200-2000-001	1702840	2017 Nashua Road, #3 (Route 101 Widening	8/1/2017	42.750000	SL	\$60,902.58	\$6,090.26	\$54,812.32	\$641.08	\$641.08	\$54,171.24
200-00001030-001	331200-2000-001	1702841	Lincoln Avenue: Nashua - 20.5' of 6" DI	9/1/2017	62.500000	SL	\$2,142.50	\$214.25	\$1,928.25	\$15.43	\$15.43	\$1,912.82
200-00001905-001	331200-2000-001	1702841	Lincoln Avenue: Nashua - Paving	12/1/2017	62.500000	SL	\$2,430.00	\$243.00	\$2,187.00	\$17.50	\$17.50	\$2,169.50
200-00001035	331200-2000-001	1702841	Fifield Street: Nashua - 19' of 16" DI	9/1/2017	62.500000	SL	\$4,254.64	\$425.46	\$3,829.18	\$30.63	\$30.63	\$3,798.55
200-00001905	331200-2000-001	1702841	Fifield Street: Nashua - Additional Work	12/1/2017	62.500000	SL	\$18,734.60	\$1,873.46	\$16,861.14	\$134.89	\$134.89	\$16,726.25
200-00001030	331200-2000-001	1702841	Lincoln Avenue: Nashua - 793' of 8" DI	9/1/2017	62.500000	SL	\$99,386.80	\$9,938.68	\$89,448.12	\$715.58	\$715.58	\$88,732.54
200-00001032	331250-2000-001	1702841	Lincoln Avenue: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001031	331250-2000-001	1702841	Fifield Street: Nashua - 16" Butterfly	9/1/2017	62.500000	SL	\$6,000.00	\$600.00	\$5,400.00	\$43.20	\$43.20	\$5,356.80

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001031-001	331250-2000-001	1702841	Fifield Street: Nashua - 16" Butterfly	9/1/2017	62.500000	SL	\$6,000.00	\$600.00	\$5,400.00	\$43.20	\$43.20	\$5,356.80
200-00001034-001	333200-2000-001	1702841	Lincoln Avenue: Nashua - 5S Replacement	9/1/2017	42.750000	SL	\$1,810.00	\$181.00	\$1,629.00	\$19.05	\$19.05	\$1,609.95
200-00001034-002	333200-2000-001	1702841	Lincoln Avenue: Nashua - LS Replacement	9/1/2017	42.750000	SL	\$3,015.00	\$301.50	\$2,713.50	\$31.74	\$31.74	\$2,681.76
200-00001034	333200-2000-001	1702841	Lincoln Avenue: Nashua - Service Reconnect	9/1/2017	42.750000	SL	\$14,070.00	\$1,407.00	\$12,663.00	\$148.10	\$148.10	\$12,514.90
200-00001033-001	335000-2000-001	1702841	Lincoln Avenue: Nashua - 6" Hydrant Gate	9/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001033	335000-2000-001	1702841	Lincoln Avenue: Nashua - Hydrant	9/1/2017	44.670000	SL	\$8,000.00	\$800.00	\$7,200.00	\$80.59	\$80.59	\$7,119.41
200-00001840	331002-2000-001	1702842	Nutt Street: Nashua - Paving	12/1/2017	63.670000	SL	\$1,254.00	\$125.40	\$1,128.60	\$8.86	\$8.86	\$1,119.74
200-00001835	331200-2000-001	1702842	Nutt Street: Nashua - Main Replacement	12/1/2017	62.500000	SL	\$488.68	\$48.87	\$439.81	\$3.52	\$3.52	\$436.29
200-00001044-001	331200-2000-001	1702842	Nutt Street: Nashua - 1" Air Release	9/1/2017	62.500000	SL	\$1,300.00	\$130.00	\$1,170.00	\$9.36	\$9.36	\$1,160.64
200-00001044-002	331200-2000-001	1702842	Nutt Street: Nashua - 98' of 4" PVC	9/1/2017	62.500000	SL	\$4,900.00	\$490.00	\$4,410.00	\$35.28	\$35.28	\$4,374.72
200-00001044	331200-2000-001	1702842	Nutt Street: Nashua - 474' of 8" DIPCL	9/1/2017	62.500000	SL	\$73,806.52	\$7,380.65	\$66,425.87	\$531.41	\$531.41	\$65,894.46
200-00001048-005	331250-2000-001	1702842	Nutt Street: Nashua - 4" Gate Valve	9/1/2017	62.500000	SL	\$600.00	\$60.00	\$540.00	\$4.32	\$4.32	\$535.68
200-00001048-004	331250-2000-001	1702842	Faxon Street: Nashua - 6" Gate Valve	9/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001048	331250-2000-001	1702842	Faxon Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001048-001	331250-2000-001	1702842	Nutt Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001048-002	331250-2000-001	1702842	Nutt Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001048-003	331250-2000-001	1702842	Nutt Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001049-005	333200-2000-001	1702842	Buchanan Street (#14-16): Nashua - Recon	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-004	333200-2000-001	1702842	Faxon Street (#19): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049	333200-2000-001	1702842	Faxon Street (#20): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-008	333200-2000-001	1702842	Lincoln Avenue (#26): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-009	333200-2000-001	1702842	Nutt Street (#16): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-007	333200-2000-001	1702842	Nutt Street (#20): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-006	333200-2000-001	1702842	Nutt Street (#22): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-003	333200-2000-001	1702842	Nutt Street (#4): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-002	333200-2000-001	1702842	Nutt Street (#6): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-001	333200-2000-001	1702842	Nutt Street (#8-8): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001049-010	333200-2000-001	1702842	Nutt Street (#14): Nashua - Reconnect	9/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.57	\$10.57	\$893.93
200-00001050-001	335000-2000-001	1702842	Faxon Street: Nashua - 6" Hydrant Valve	9/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001050	335000-2000-001	1702842	Faxon Street: Nashua - Hydrant	9/1/2017	44.670000	SL	\$8,000.00	\$800.00	\$7,200.00	\$80.59	\$80.59	\$7,119.41
200-00001037-001	331200-2000-001	1702843	Buchanan Street: Nashua - 7.5' of 6" DI	9/1/2017	62.500000	SL	\$637.50	\$63.75	\$573.75	\$4.59	\$4.59	\$569.16
200-00001837	331200-2000-001	1702843	Buchanan Street: Nashua - Paving	12/1/2017	62.500000	SL	\$2,464.84	\$246.48	\$2,218.36	\$17.75	\$17.75	\$2,200.61
200-00001037	331200-2000-001	1702843	Buchanan Street: Nashua - 544' of 8" DI	9/1/2017	62.500000	SL	\$75,765.59	\$7,576.56	\$68,189.03	\$545.51	\$545.51	\$67,643.52
200-00001038-001	331250-2000-001	1702843	Buchanan Street: Nashua - 6" Hydrant Gte	9/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001038	331250-2000-001	1702843	Buchanan Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001038-002	331250-2000-001	1702843	Buchanan Street: Nashua - 8" Gate Valve	9/1/2017	62.500000	SL	\$1,500.00	\$150.00	\$1,350.00	\$10.80	\$10.80	\$1,339.20
200-00001039	333200-2000-001	1702843	Buchanan Street: Nashua - Reconnects	9/1/2017	42.750000	SL	\$5,345.00	\$534.50	\$4,810.50	\$56.26	\$56.26	\$4,754.24
200-00001036	335000-2000-001	1702843	Buchanan Street: Nashua - Hydrant	9/1/2017	44.670000	SL	\$8,000.00	\$800.00	\$7,200.00	\$80.59	\$80.59	\$7,119.41
200-00001136-001	331002-2000-001	1702844	Lawndale Avenue: Nashua - Trench Restor	10/1/2017	63.670000	SL	\$1,125.00	\$112.50	\$1,012.50	\$7.95	\$7.95	\$1,004.55
200-00001870	331002-2000-001	1702844	Fowell Avenue: Nashua - Paving	12/1/2017	63.670000	SL	\$3,903.00	\$390.31	\$3,512.69	\$27.59	\$27.59	\$3,485.10
200-00001136	331002-2000-001	1702844	Fowell Avenue: Nashua - Trench Restoratr	10/1/2017	63.670000	SL	\$14,250.00	\$1,425.00	\$12,825.00	\$100.72	\$100.72	\$12,724.28
200-00001868	331200-2000-001	1702844	Fowell Avenue: Nashua - Truck	12/1/2017	62.500000	SL	\$11.00	\$1.10	\$9.90	\$0.08	\$0.08	\$9.82
200-00001869	331200-2000-001	1702844	Fowell Avenue: Nashua - Overhead	12/1/2017	62.500000	SL	\$33.80	\$3.38	\$30.42	\$0.24	\$0.24	\$30.18
200-00001867	331200-2000-001	1702844	Fowell Avenue: Nashua - Main Replacement	12/1/2017	62.500000	SL	\$49.73	\$4.97	\$44.76	\$0.36	\$0.36	\$44.40
200-00001139-001	331200-2000-001	1702844	Fowell Avenue: Nashua - 6" Hydrant Gate	10/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001139-002	331200-2000-001	1702844	Fowell Avenue: Nashua - 6" Hydrant Gate	10/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001041-002	331200-2000-001	1702844	Lawndale Avenue: Nashua - 16' of 6" DI	9/1/2017	62.500000	SL	\$2,360.00	\$236.00	\$2,124.00	\$16.99	\$16.99	\$2,107.01
200-00001041-003	331200-2000-001	1702844	Lawndale Avenue: Nashua - 35' of 12" DI	9/1/2017	62.500000	SL	\$2,800.00	\$280.00	\$2,520.00	\$20.16	\$20.16	\$2,499.84
200-00001862	331200-2000-001	1702844	Fowell Avenue: Nashua - Main Replacement	12/1/2017	62.500000	SL	\$7,114.95	\$711.50	\$6,403.45	\$51.23	\$51.23	\$6,352.22
200-00001139	331200-2000-001	1702844	Fowell Avenue: Nashua - Hydrant	10/1/2017	44.670000	SL	\$8,297.50	\$829.75	\$7,467.75	\$83.58	\$83.59	\$7,384.16

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001139-003	331200-2000-001	1702844	Fowell Avenue: Nashua - Hydrant	10/1/2017	44,670000	SL	\$8,297.50	\$829.75	\$7,467.75	\$83.59	\$83.58	\$7,384.17
200-00001041-001	331200-2000-001	1702844	Fowell Avenue: Nashua - 175' of 4" PVC	9/1/2017	62.500000	SL	\$8,750.00	\$875.00	\$7,875.00	\$63.00	\$63.00	\$7,812.00
200-00001041	331200-2000-001	1702844	Fowell Avenue: Nashua - Main Replacement	9/1/2017	62.500000	SL	\$14,061.42	\$1,406.14	\$12,655.28	\$101.24	\$101.24	\$12,554.04
200-00001114	331200-2000-001	1702844	Fowell Avenue: Nashua - 707' of 6" DIPCL	10/1/2017	62.500000	SL	\$85,124.89	\$8,512.49	\$76,612.40	\$612.90	\$612.90	\$75,999.50
200-00001137-001	331250-2000-001	1702844	Fowell Avenue: Nashua - 6" Gate	10/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001137-002	331250-2000-001	1702844	Fowell Avenue: Nashua - 6" Gate	10/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001137-003	331250-2000-001	1702844	Fowell Avenue: Nashua - 6" Gate	10/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001137-004	331250-2000-001	1702844	Fowell Avenue: Nashua - 6" Gate	10/1/2017	62.500000	SL	\$800.00	\$80.00	\$720.00	\$5.76	\$5.76	\$714.24
200-00001137-005	331250-2000-001	1702844	Fowell Avenue: Nashua - 2" Air Release	10/1/2017	62.500000	SL	\$1,800.00	\$180.00	\$1,620.00	\$12.96	\$12.96	\$1,607.04
200-00001137	331250-2000-001	1702844	Lawndale Avenue: Nashua - 12" Gate	10/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00001137-006	331250-2000-001	1702844	Lawndale Avenue: Nashua - 12" Gate	10/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00001137-007	331250-2000-001	1702844	Lawndale Avenue: Nashua - 12" Gate	10/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00001137-008	331250-2000-001	1702844	Lawndale Avenue: Nashua - 12" Gate	10/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00001138-001	333200-2000-001	1702844	Fowell Avenue: Nashua - Temp Service	10/1/2017	42.750000	SL	\$1,300.00	\$130.00	\$1,170.00	\$13.68	\$13.68	\$1,156.32
200-00001138	333200-2000-001	1702844	Fowell Avenue: Nashua - Reconnections	10/1/2017	42.750000	SL	\$20,100.00	\$2,010.00	\$18,090.00	\$211.58	\$211.58	\$17,878.42
200-00001890	331002-2000-001	1702845	Zellwood Street: Nashua - Paving	12/1/2017	63.670000	SL	\$267.00	\$26.70	\$240.30	\$1.89	\$1.89	\$238.41
200-00001144	331002-2000-001	1702845	Zellwood Street: Nashua - Paving	10/1/2017	63.670000	SL	\$6,465.00	\$646.50	\$5,818.50	\$45.69	\$45.69	\$5,772.81
200-00001887-001	331200-2000-001	1702845	Zellwood Street: Nashua - Sewer Repair	12/1/2017	62.500000	SL	\$5,106.70	\$510.67	\$4,596.03	\$36.77	\$36.77	\$4,559.26
200-00001887	331200-2000-001	1702845	Zellwood Street: Nashua - Mobilization	12/1/2017	62.500000	SL	\$8,368.50	\$836.85	\$7,531.65	\$60.25	\$60.25	\$7,471.40
200-00001129	331200-2000-001	1702845	Zellwood Street: Nashua - 360' of 4" PVC	10/1/2017	62.500000	SL	\$24,709.59	\$2,470.96	\$22,238.63	\$177.91	\$177.91	\$22,060.72
200-00001145	331250-2000-001	1702845	Zellwood Street: Nashua - 4" DI Gate	10/1/2017	62.500000	SL	\$1,200.00	\$120.00	\$1,080.00	\$8.64	\$8.64	\$1,071.36
200-00001146-003	333200-2000-001	1702845	Zellwood Street (#3): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001146	333200-2000-001	1702845	Zellwood Street (#5): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001146-002	333200-2000-001	1702845	Zellwood Street (#6): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001146-001	333200-2000-001	1702845	Zellwood Street (#7): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001146-004	333200-2000-001	1702845	Zellwood Street (#10): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.57	\$10.57	\$893.93
200-00001140	331002-2000-001	1702846	Pratt Street: Nashua - Trench Restoratio	10/1/2017	63.670000	SL	\$11,475.00	\$1,147.50	\$10,327.50	\$81.10	\$81.10	\$10,246.40
200-00001471	331200-2000-001	1702846	Pratt Street: Nashua - Paving	12/1/2017	62.500000	SL	\$2,720.25	\$272.03	\$2,448.22	\$19.59	\$19.59	\$2,428.63
200-00001042	331200-2000-001	1702846	Pratt Street: Nashua - Water Main Replac	9/1/2017	62.500000	SL	\$32,328.76	\$3,232.88	\$29,095.88	\$232.77	\$232.77	\$28,863.11
200-00001128	331200-2000-001	1702846	Pratt Street: Nashua - 717' of 12" DIPCL	10/1/2017	62.500000	SL	\$73,821.59	\$7,380.66	\$66,440.93	\$531.53	\$531.53	\$65,909.40
200-00001141	331250-2000-001	1702846	Pratt Street: Nashua - 12" DI Gate Valve	10/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00001142	333200-2000-001	1702846	Pratt Street (#10): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-008	333200-2000-001	1702846	Pratt Street (#12-14): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-010	333200-2000-001	1702846	Pratt Street (#15): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-003	333200-2000-001	1702846	Pratt Street (#18): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-002	333200-2000-001	1702846	Pratt Street (#20): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-012	333200-2000-001	1702846	Pratt Street (#22): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-006	333200-2000-001	1702846	Pratt Street (#25): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-011	333200-2000-001	1702846	Pratt Street (#3): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-009	333200-2000-001	1702846	Pratt Street (#4-6): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-007	333200-2000-001	1702846	Pratt Street (#5A): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-005	333200-2000-001	1702846	Pratt Street (#7): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-004	333200-2000-001	1702846	Pratt Street (#9): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001142-013	333200-2000-001	1702846	Pratt Street (#21): Nashua - Reconnect	10/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.57	\$10.57	\$893.93
200-00001142-001	333200-2000-001	1702846	Pratt Street: Nashua - Temp Service	10/1/2017	42.750000	SL	\$1,300.00	\$130.00	\$1,170.00	\$13.68	\$13.68	\$1,156.32
200-00001143-001	335000-2000-001	1702846	Pratt Street: Nashua - 6" Hydrant Gate	10/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001143	335000-2000-001	1702846	Pratt Street: Nashua - Hydrant (New)	10/1/2017	44.670000	SL	\$8,595.00	\$859.50	\$7,735.50	\$86.58	\$86.58	\$7,648.92
200-00001883	331002-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	63.670000	SL	\$4,930.00	\$493.00	\$4,437.00	\$34.84	\$34.84	\$4,402.16
200-00001881	331200-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$99.00	\$9.90	\$89.10	\$0.71	\$0.71	\$88.39
200-00001882	331200-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$401.88	\$40.19	\$361.69	\$2.89	\$2.89	\$358.80

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001880	331200-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$591.33	\$59.13	\$532.20	\$4.26	\$4.26	\$527.94
200-00001866	331200-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$72,528.46	\$7,252.85	\$65,275.61	\$522.20	\$522.20	\$64,753.41
200-00001884	331250-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$18,600.00	\$1,860.00	\$16,740.00	\$133.92	\$133.92	\$16,606.08
200-00001885	333200-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	42.750000	SL	\$13,250.00	\$1,325.00	\$11,925.00	\$139.47	\$139.47	\$11,785.53
200-00001886	335000-2000-001	1702870	Warren St. - 2017 City Sewer Projects	12/1/2017	44.670000	SL	\$10,750.00	\$1,075.00	\$9,675.00	\$108.29	\$108.29	\$9,566.71
200-00001849	331200-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$115.50	\$1.13	\$114.37	\$0.91	\$0.91	\$113.46
200-00001850	331200-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$351.35	\$3.45	\$347.90	\$2.78	\$2.78	\$345.12
200-00001848	331200-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$517.00	\$5.07	\$511.93	\$4.10	\$4.10	\$507.83
200-00001852	331200-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	42.750000	SL	\$2,500.00	\$24.53	\$2,475.47	\$28.95	\$28.95	\$2,446.52
200-00001839	331200-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$23,486.21	\$2,348.62	\$21,137.59	\$169.10	\$169.10	\$20,968.49
200-00001851	331250-2000-001	1702872	Green St. - 2017 City Sewer Projects	12/1/2017	63.670000	SL	\$750.00	\$7.36	\$742.64	\$5.83	\$5.83	\$736.81
200-00001836	331200-2000-001	1702873	Beard St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$1,244.99	\$124.50	\$1,120.49	\$8.96	\$8.96	\$1,111.53
200-00001043	331200-2000-001	1702873	Beard St. - Main Street Area Water	9/1/2017	62.500000	SL	\$63,277.31	\$6,327.73	\$56,949.58	\$455.60	\$455.60	\$56,493.98
200-00001045	331250-2000-001	1702873	Beard St. - Main Street Area Water	9/1/2017	62.500000	SL	\$2,950.00	\$295.00	\$2,655.00	\$21.24	\$21.24	\$2,633.76
200-00001046	333200-2000-001	1702873	Beard St. - Main Street Area Water	9/1/2017	42.750000	SL	\$8,000.00	\$800.00	\$7,200.00	\$84.21	\$84.21	\$7,115.79
200-00001047	335000-2000-001	1702873	Beard St. - Main Street Area Water	9/1/2017	44.670000	SL	\$2,940.00	\$294.00	\$2,646.00	\$29.62	\$29.62	\$2,616.38
200-00001183	331002-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	63.670000	SL	\$7,658.50	\$765.85	\$6,892.65	\$54.13	\$54.13	\$6,838.52
200-00001188	331200-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	62.500000	SL	\$82.50	\$8.25	\$74.25	\$0.59	\$0.59	\$73.66
200-00001187	331200-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	62.500000	SL	\$232.98	\$23.30	\$209.68	\$1.68	\$1.68	\$208.00
200-00001186	331200-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	62.500000	SL	\$348.82	\$34.88	\$313.94	\$2.51	\$2.51	\$311.43
200-00001175	331200-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	62.500000	SL	\$73,919.86	\$7,391.99	\$66,527.87	\$532.22	\$532.22	\$65,995.65
200-00001184	333200-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	42.750000	SL	\$13,850.00	\$1,385.00	\$12,465.00	\$145.79	\$145.79	\$12,319.21
200-00001185	335000-2000-001	1702874	Lowell St. - 2017 City Sewer Projects -	11/1/2017	44.670000	SL	\$2,972.50	\$297.25	\$2,675.25	\$29.94	\$29.94	\$2,645.31
200-00001783	331002-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	63.670000	SL	\$5,151.00	\$515.10	\$4,635.90	\$36.41	\$36.41	\$4,599.49
200-00001782	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$59.72	\$5.97	\$53.75	\$0.43	\$0.43	\$53.32
200-00001780	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$95.00	\$9.50	\$85.50	\$0.68	\$0.68	\$84.82
200-00001779	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$319.50	\$31.95	\$287.55	\$2.30	\$2.30	\$285.25
200-00001781	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$674.43	\$67.44	\$606.99	\$4.86	\$4.86	\$602.13
200-00001778	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$992.39	\$99.24	\$893.15	\$7.15	\$7.15	\$886.00
200-00001776	331200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	62.500000	SL	\$51,097.38	\$5,109.74	\$45,987.64	\$367.90	\$367.90	\$45,619.74
200-00001784	333200-2000-001	1702875	Lemon St. - 2017 City Sewer Projects	12/1/2017	42.750000	SL	\$15,000.00	\$1,500.00	\$13,500.00	\$157.89	\$157.89	\$13,342.11
200-00000672	311210-2000-001	1702918	Rebuild Snow Station Low Lift Pump #2 (c	6/2/2017	22.750000	SL	\$13,323.00	\$0.00	\$13,323.00	\$292.81	\$292.81	\$13,030.19
200-00001889-001	331200-2000-001	1702928	Amherst St., Nashua - Water Main Replace	12/1/2017	62.500000	SL	\$156,428.00	\$15,642.80	\$140,785.20	\$1,126.28	\$1,126.28	\$139,658.92
200-00001838-002	331200-2000-001	1702930	Bruce St, Nashua - Water Main Replacemen	12/1/2017	62.500000	SL	\$4,183.42	\$418.34	\$3,765.08	\$30.12	\$30.12	\$3,734.96
200-00001777	331200-2000-001	1702931	Berkshire St., Nashua - Water Main Repla	12/1/2017	62.500000	SL	\$6,057.83	\$605.78	\$5,452.05	\$43.62	\$43.62	\$5,408.43
200-00001907	331200-2000-001	1702932	Terrace St. Main Replace	12/1/2017	62.500000	SL	\$1,763.44	\$176.34	\$1,587.10	\$12.70	\$12.70	\$1,574.40
200-00000650	341000-2000-001	1703002	#115 - Replace Vehicle #46 (2017 carryov	6/2/2017	10.580000	SL	\$2,071.07	\$0.00	\$2,071.07	\$97.88	\$97.88	\$1,973.19
200-00000741	304500-2000-001	1703024	Install Mixer in Bon Terrain Tank	6/3/2017	45.830000	SL	\$2,600.00	\$260.00	\$2,340.00	\$25.53	\$25.53	\$2,314.47
200-00000570-003	347110-2000-001	1703027	iPad - Engineering Trimble1	5/2/2017	7.000000	SL	\$359.99	\$0.00	\$359.99	\$25.71	\$25.71	\$334.28
200-00000570-004	347110-2000-001	1703027	iPad - Engineering Trimble2	5/2/2017	7.000000	SL	\$359.99	\$0.00	\$359.99	\$25.71	\$25.71	\$334.28
200-00000570-008	347110-2000-001	1703027	RAM Mounts for iPads/Trimble Eng (5)	5/2/2017	7.000000	SL	\$439.17	\$0.00	\$439.17	\$31.37	\$31.37	\$407.80
200-00000570-005	347110-2000-001	1703027	Leica - Range Finder - Engineering	5/2/2017	7.000000	SL	\$499.00	\$0.00	\$499.00	\$35.64	\$35.64	\$463.36
200-00000570-006	347110-2000-001	1703027	Leica - Range Finder - Engineering	5/2/2017	7.000000	SL	\$499.00	\$0.00	\$499.00	\$35.64	\$35.64	\$463.36
200-00000570-007	347110-2000-001	1703027	Leica - Range Finder - Engineering	5/2/2017	7.000000	SL	\$499.00	\$0.00	\$499.00	\$35.64	\$35.64	\$463.36
200-00000836	347110-2000-001	1703027	GPS Units - Trimble Devices	7/1/2017	7.000000	SL	\$11,691.44	\$0.00	\$11,691.44	\$835.10	\$835.10	\$10,856.34
200-00000570-001	347110-2000-001	1703027	Trimble R2 Centimeter RTK Rover - S/N:56	5/2/2017	7.000000	SL	\$16,494.17	\$0.00	\$16,494.17	\$1,178.15	\$1,178.15	\$15,316.02
200-00000570-002	347110-2000-001	1703027	Trimble R2 Centimeter RTK Rover - S/N:56	5/2/2017	7.000000	SL	\$16,494.17	\$0.00	\$16,494.17	\$1,178.15	\$1,178.15	\$15,316.02
200-00001815	331002-2000-001	1703639	Tolles St - (Canal to Whitney) Paving	12/1/2017	63.670000	SL	\$17,233.20	\$1,723.32	\$15,509.88	\$121.80	\$121.80	\$15,388.08
200-00001859	331002-2000-001	1703640	Temple St, Nashua - Water Main Improveme	12/1/2017	63.670000	SL	\$4,284.00	\$428.40	\$3,855.60	\$30.28	\$30.28	\$3,825.32
200-00001857	331200-2000-001	1703640	Temple St, Nashua - Water Main Improveme	12/1/2017	62.500000	SL	\$22.00	\$2.20	\$19.80	\$0.16	\$0.16	\$19.64

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001858	331200-2000-001	1703640	Temple St, Nashua - Water Main Improve	12/1/2017	62.500000	SL	\$55.77	\$5.58	\$50.19	\$0.40	\$0.40	\$49.79
200-00001856	331200-2000-001	1703640	Temple St, Nashua - Water Main Improve	12/1/2017	62.500000	SL	\$82.06	\$8.21	\$73.85	\$0.59	\$0.59	\$73.26
200-00000571	331200-2000-001	1703640	Temple St Nashua - Water Main Improve	5/2/2017	62.500000	SL	\$51,925.74	\$5,192.57	\$46,733.17	\$373.87	\$373.87	\$46,359.30
200-00001855	331200-2000-001	1703640	Temple St, Nashua - Water Main Improve	12/1/2017	62.500000	SL	\$72,680.11	\$7,268.01	\$65,412.10	\$523.30	\$523.30	\$64,888.80
200-00001860	331250-2000-001	1703640	Temple St, Nashua - Water Main Improve	12/1/2017	62.500000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.40	\$14.40	\$1,785.60
200-00000572	331250-2000-001	1703640	Temple St Nashua - Water Main Imprv gate	5/2/2017	62.500000	SL	\$7,750.00	\$775.00	\$6,975.00	\$55.80	\$55.80	\$6,919.20
200-00001861	335000-2000-001	1703640	Temple St, Nashua - Water Main Improve	12/1/2017	44.670000	SL	\$4,550.00	\$455.00	\$4,095.00	\$45.84	\$45.84	\$4,049.16
200-00001810	331200-2000-001	1703641	2016 Misc. Water Main Improve, - Gillis	12/1/2017	62.500000	SL	\$1,399.63	\$139.96	\$1,259.67	\$10.08	\$10.08	\$1,249.59
200-00000829	331200-2000-001	1703641	Gillis Street - Water Main Improvements	7/1/2017	62.500000	SL	\$2,272.08	\$227.21	\$2,044.87	\$16.36	\$16.36	\$2,028.51
200-00001115	331002-2000-001	1703642	Worcester St Area Main Impr. - Scripture	10/1/2017	63.670000	SL	\$2,466.18	\$246.62	\$2,219.56	\$17.43	\$17.43	\$2,202.13
200-00001125	331002-2000-001	1703643	Chestnut St, Phase I 2015 Nashua Impr.	10/1/2017	63.670000	SL	\$65,117.76	\$6,500.00	\$58,617.76	\$460.32	\$460.32	\$58,157.44
200-00001771	331002-2000-001	1703643	Chestnut St, Phase I 2015 Paving	12/1/2017	63.670000	SL	\$66,571.31	\$6,657.13	\$59,914.18	\$470.51	\$470.51	\$59,443.67
200-00001124	331002-2000-001	1703644	Lovell St, Nashua - 2015 Nashua Water Ma	10/1/2017	63.670000	SL	\$82,060.00	\$8,206.00	\$73,854.00	\$579.97	\$579.97	\$73,274.03
200-00000669	331200-2000-001	1703646	Old Nashua Rd. RR Crossing (2017 carryov	6/2/2017	62.500000	SL	\$8,333.88	\$833.39	\$7,500.49	\$60.00	\$60.00	\$7,440.49
200-00000843	341000-2000-001	1704173	#116 Ford F-350 - Replace Vehicle #44	7/1/2017	10.580000	SL	\$62,282.34	\$0.00	\$62,282.34	\$2,943.40	\$2,943.40	\$59,338.94
200-00000837	347110-2000-001	1704175	Website Update	7/1/2017	7.000000	SL	\$13,250.00	\$0.00	\$13,250.00	\$946.43	\$946.43	\$12,303.57
200-00000662	304800-2000-001	1706963	Replace WTP Access Gate Mechanism	6/2/2017	40.670000	SL	\$5,587.50	\$558.75	\$5,028.75	\$61.82	\$61.82	\$4,966.93
200-00001812	347110-2000-001	1707186	ISO 27001 Equivalency Project	12/1/2017	7.000000	SL	\$31,554.77	\$0.00	\$31,554.77	\$2,253.91	\$2,253.91	\$29,300.86
200-00000667	344000-2000-001	1707187	Hanna Titrator	6/2/2017	20.000000	SL	\$5,900.00	\$0.00	\$5,900.00	\$147.50	\$147.50	\$5,752.50
200-00000657	311210-2000-001	1707190	Replace Sludge Chopper - Pump VFD	6/2/2017	22.750000	SL	\$3,503.28	\$350.33	\$3,152.95	\$69.30	\$69.30	\$3,083.65
200-00000663	347110-2000-001	1707208	Backflow Data Collection	6/2/2017	7.000000	SL	\$5,400.00	\$0.00	\$5,400.00	\$385.71	\$385.71	\$5,014.29
200-00000896	341000-2000-001	1707209	#346 2017 Chevy Express Cargo Van - Repl	8/1/2017	10.580000	SL	\$579.45	\$0.00	\$579.45	\$27.38	\$27.38	\$552.07
200-00000897	341000-2000-001	1707209	#346 2017 Chevy Express Cargo Van - Repl	8/1/2017	10.580000	SL	\$852.63	\$0.00	\$852.63	\$40.29	\$40.29	\$812.34
200-00000898	341000-2000-001	1707209	#346 2017 Chevy Express Cargo Van - Repl	8/1/2017	10.580000	SL	\$30,602.15	\$0.00	\$30,602.15	\$1,446.23	\$1,446.23	\$29,155.92
200-00001896	331002-2000-001	1707322	Proctor Street: Nashua - Paving	12/1/2017	63.670000	SL	\$15,634.00	\$1,563.40	\$14,070.60	\$110.50	\$110.50	\$13,960.10
200-00001893	331200-2000-001	1707322	Proctor Street: Nashua - Backhoe	12/1/2017	62.500000	SL	\$275.50	\$27.55	\$247.95	\$1.98	\$1.98	\$245.97
200-00001888-001	331200-2000-001	1707322	Proctor Street: Nashua - 3' of 8" DIPCL	12/1/2017	62.500000	SL	\$340.00	\$34.00	\$306.00	\$2.45	\$2.45	\$303.55
200-00001892	331200-2000-001	1707322	Proctor Street: Nashua - Truck	12/1/2017	62.500000	SL	\$396.75	\$39.67	\$357.08	\$2.86	\$2.86	\$354.22
200-00001895	331200-2000-001	1707322	Proctor Street: Nashua - Inventory	12/1/2017	62.500000	SL	\$620.36	\$62.04	\$558.32	\$4.47	\$4.47	\$553.85
200-00001894	331200-2000-001	1707322	Proctor Street: Nashua - Overhead	12/1/2017	62.500000	SL	\$1,682.96	\$168.30	\$1,514.66	\$12.12	\$12.12	\$1,502.54
200-00001891	331200-2000-001	1707322	Proctor Street: Nashua - Labor	12/1/2017	62.500000	SL	\$2,476.40	\$247.64	\$2,228.76	\$17.83	\$17.83	\$2,210.93
200-00001888	331200-2000-001	1707322	Proctor Street: Nashua - 129' of 4" PVC	12/1/2017	62.500000	SL	\$27,862.96	\$2,786.30	\$25,076.66	\$200.61	\$200.61	\$24,876.05
200-00001897	331250-2000-001	1707322	Proctor Street: Nashua - 4" Gate Valve	12/1/2017	62.500000	SL	\$600.00	\$60.00	\$540.00	\$4.32	\$4.32	\$535.68
200-00001897-001	331250-2000-001	1707322	Proctor Street: Nashua - 2" Air Release	12/1/2017	62.500000	SL	\$1,800.00	\$180.00	\$1,620.00	\$12.96	\$12.96	\$1,607.04
200-00001898	333200-2000-001	1707322	Proctor Street: Nashua - Service Replace	12/1/2017	42.750000	SL	\$1,000.00	\$100.00	\$900.00	\$10.53	\$10.53	\$889.47
200-00001898-001	333200-2000-001	1707322	Proctor Street: Nashua - Service Reconne	12/1/2017	42.750000	SL	\$2,000.00	\$200.00	\$1,800.00	\$21.05	\$21.05	\$1,778.95
200-00001899	335000-2000-000	1707322	Proctor Street: Nashua - Hydrant	12/1/2017	44.670000	SL	\$8,340.00	\$834.00	\$7,506.00	\$84.02	\$84.02	\$7,421.98
200-00001899-001	335000-2000-001	1707322	Proctor Street: Nashua - 6" Hydrant Gate	12/1/2017	44.670000	SL	\$800.00	\$80.00	\$720.00	\$8.06	\$8.06	\$711.94
200-00001877	331002-2000-001	1707323	Mulvanity Street: Nashua - Paving	12/1/2017	63.670000	SL	\$31,266.00	\$3,126.60	\$28,139.40	\$220.98	\$220.98	\$27,918.42
200-00001874	331200-2000-001	1707323	Mulvanity Street: Nashua - Boom Truck	12/1/2017	62.500000	SL	\$49.00	\$4.90	\$44.10	\$0.35	\$0.35	\$43.75
200-00001873	331200-2000-001	1707323	Mulvanity Street: Nashua - Backhoe	12/1/2017	62.500000	SL	\$342.00	\$34.20	\$307.80	\$2.46	\$2.46	\$305.34
200-00001872	331200-2000-001	1707323	Mulvanity Street: Nashua - Truck	12/1/2017	62.500000	SL	\$654.75	\$65.47	\$589.28	\$4.71	\$4.71	\$584.57
200-00001876	331200-2000-001	1707323	Mulvanity St, Nashua Main Replacement	12/1/2017	62.500000	SL	\$800.36	\$80.04	\$720.32	\$5.76	\$5.76	\$714.56
200-00001875	331200-2000-001	1707323	Mulvanity Street: Nashua - Overhead	12/1/2017	62.500000	SL	\$1,808.26	\$180.83	\$1,627.43	\$13.02	\$13.02	\$1,614.41
200-00001871	331200-2000-001	1707323	Mulvanity Street: Nashua - Labor	12/1/2017	62.500000	SL	\$2,660.77	\$266.08	\$2,394.69	\$19.16	\$19.16	\$2,375.53
200-00001865	331200-2000-001	1707323	Mulvanity Street: Nashua - 287' of 4" PVC	12/1/2017	62.500000	SL	\$42,276.06	\$4,227.61	\$38,048.45	\$304.39	\$304.39	\$37,744.06
200-00001878	331250-2000-001	1707323	Mulvanity St: Nashua - 4" Gate Valve	12/1/2017	62.500000	SL	\$600.00	\$60.00	\$540.00	\$4.32	\$4.32	\$535.68
200-00001878-001	331250-2000-001	1707323	Mulvanity St: Nashua - 2" Air Release	12/1/2017	62.500000	SL	\$1,800.00	\$180.00	\$1,620.00	\$12.96	\$12.96	\$1,607.04
200-00001879	333200-2000-001	1707323	Mulvanity Street: Nashua - Service Repla	12/1/2017	42.750000	SL	\$1,000.00	\$100.00	\$900.00	\$10.53	\$10.53	\$889.47
200-00001879-002	333200-2000-001	1707323	Mulvanity Street: Nashua - Service Repla	12/1/2017	42.750000	SL	\$2,700.00	\$270.00	\$2,430.00	\$28.42	\$28.42	\$2,401.58

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001879-001	333200-2000-001	1707323	Mulvanity Street: Nashua - Service Recon	12/1/2017	42.750000	SL	\$3,000.00	\$300.00	\$2,700.00	\$31.58	\$31.58	\$2,668.42
200-00001772	347110-2000-001	1707349	BNA Replacement - Fixed Asset Software	12/1/2017	7.000000	SL	\$6,928.97	\$0.00	\$6,928.97	\$494.93	\$494.93	\$6,434.04
200-00000665	304800-2000-001	1708347	Repair compressor on A/C Unit, FWPS	6/2/2017	40.670000	SL	\$5,568.38	\$0.00	\$5,568.38	\$68.46	\$68.46	\$5,499.92
200-00001112	343000-2000-001	1708348	Metal Detectors	10/1/2017	15.000000	SL	\$6,360.00	\$0.00	\$6,360.00	\$212.00	\$212.00	\$6,148.00
200-00001161	341000-2000-001	1708349	#363 - Heavy Dump Truck Replacement (#86	11/1/2017	10.580000	SL	\$345.29	\$0.00	\$345.29	\$16.32	\$16.32	\$328.97
200-00001160	341000-2000-001	1708349	#363 - Heavy Dump Truck Replacement (#86	11/1/2017	10.580000	SL	\$508.08	\$0.00	\$508.08	\$24.01	\$24.01	\$484.07
200-00001334	341000-2000-001	1708349	#363 - Heavy Dump Truck Replacement (#86	12/1/2017	0.000000	NO	\$0.00	-\$517.20	\$517.20	\$24.44	\$24.44	\$492.76
200-00001162	341000-2000-001	1708349	#363 - Heavy Dump Truck Replacement	11/1/2017	10.580000	SL	\$17,500.00	\$0.00	\$17,500.00	\$827.03	\$827.03	\$16,672.97
200-00001159	341000-2000-001	1708349	#363 - Heavy Dump Truck Replacement (#86	11/1/2017	10.580000	SL	\$83,822.20	\$0.00	\$83,822.20	\$3,936.91	\$3,936.91	\$79,885.29
200-00001165	341000-2000-001	1708350	#362 - Medium Duty Dump Truck Replacemen	11/1/2017	10.580000	SL	\$173.87	\$0.00	\$173.87	\$8.22	\$8.22	\$165.65
200-00001164	341000-2000-001	1708350	#362 - Medium Duty Dump Truck Replacemen	11/1/2017	10.580000	SL	\$255.84	\$0.00	\$255.84	\$12.09	\$12.09	\$243.75
200-00001166	341000-2000-001	1708350	#362 - Medium Duty Dump Truck Replacemen	11/1/2017	10.580000	SL	\$16,000.00	\$0.00	\$16,000.00	\$756.14	\$756.14	\$15,243.86
200-00001163	341000-2000-001	1708350	#362 - Medium Duty Dump Truck Replacemen	11/1/2017	10.580000	SL	\$73,730.40	\$0.00	\$73,730.40	\$3,484.42	\$3,484.42	\$70,245.98
200-00001084	304950-2000-001	1708425	Secure Reception Area - Office Lobby Rem	10/1/2017	4.750000	SL	\$18,823.81	\$0.00	\$18,823.81	\$1,981.45	\$1,981.45	\$16,842.36
200-00000918	347110-2000-001	1708487	MRX Unit for NC Meter Reading	8/1/2017	7.000000	SL	\$8,190.00	\$0.00	\$8,190.00	\$585.00	\$585.00	\$7,605.00
200-00001908	347110-2000-001	1713734	GPS - Trimble Units	12/1/2017	7.000000	SL	\$1,179.38	\$0.00	\$1,179.38	\$84.24	\$84.24	\$1,095.14
200-00001040	347110-2000-001	1713734	GPS - Trimble Units	9/1/2017	7.000000	SL	\$20,108.05	\$0.00	\$20,108.05	\$1,436.29	\$1,436.29	\$18,671.76
200-00001085	340100-2000-001	1713759	Adjustable Desktops	10/1/2017	12.330000	SL	\$6,088.00	\$0.00	\$6,088.00	\$246.88	\$246.88	\$5,841.12
200-00001170	341000-2000-001	1715542	Truck #47 Replacement	11/1/2017	10.580000	SL	\$27.50	\$0.00	\$27.50	\$1.30	\$1.30	\$26.20
200-00001169	341000-2000-001	1715542	Truck #47 Replacement	11/1/2017	10.580000	SL	\$1,633.81	\$0.00	\$1,633.81	\$77.21	\$77.21	\$1,556.60
200-00001168	341000-2000-001	1715542	Truck #47 Replacement	11/1/2017	10.580000	SL	\$2,404.08	\$0.00	\$2,404.08	\$113.61	\$113.61	\$2,290.47
200-00001167	341000-2000-001	1715542	Truck #47 Replacement	11/1/2017	10.580000	SL	\$43,823.29	\$0.00	\$43,823.29	\$2,071.04	\$2,071.04	\$41,752.25
200-00001775	344000-2000-001	1715547	Purchase New Electric Multi-Meter	12/1/2017	20.000000	SL	\$1,499.97	\$0.00	\$1,499.97	\$37.50	\$37.50	\$1,462.47
200-00001904-001	331200-2000-001	1715613	Circle Avenue: Nashua - 28' of 4" DIPCL	12/1/2017	62.500000	SL	\$1,680.00	\$168.00	\$1,512.00	\$12.10	\$12.10	\$1,499.90
200-00001904	331200-2000-001	1715613	Circle Avenue: Nashua - 146' of 4" PVC	12/1/2017	62.500000	SL	\$14,600.01	\$1,460.00	\$13,140.01	\$105.12	\$105.12	\$13,034.89
200-00001911	331250-2000-001	1715613	Circle Avenue: Nashua - 4" DI Gate	12/1/2017	62.500000	SL	\$600.00	\$60.00	\$540.00	\$4.32	\$4.32	\$535.68
200-00001911-001	331250-2000-001	1715613	Circle Avenue: Nashua - 1" Air Release	12/1/2017	62.500000	SL	\$1,300.00	\$130.00	\$1,170.00	\$9.36	\$9.36	\$1,160.64
200-00001912-002	333200-2000-001	1715613	Circle Avenue (#): Nashua - Reconnect	12/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001912-001	333200-2000-001	1715613	Circle Avenue (#1): Nashua - Reconnect	12/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001912	333200-2000-001	1715613	Circle Avenue (#2): Nashua - Reconnect	12/1/2017	42.750000	SL	\$1,005.00	\$100.50	\$904.50	\$10.58	\$10.58	\$893.92
200-00001864	331200-2000-001	1715666	Route 122 Main pipe Relocation	12/1/2017	62.500000	SL	\$59,557.93	\$0.00	\$59,557.93	\$476.46	\$476.46	\$59,081.47
200-00001813	347110-2000-001	1716547	Network Infrastructure	12/1/2017	7.000000	SL	\$113,423.70	\$0.00	\$113,423.70	\$8,101.69	\$8,101.69	\$105,322.01
200-00001472	346000-2000-001	1716549	Install Cellular Communication, Cabot Pr	12/1/2017	19.000000	SL	\$2,642.34	\$0.00	\$2,642.34	\$69.54	\$69.54	\$2,572.80
200-00001122	331002-2000-001	1718679	Worcester St. Area Main - Gorman St	10/1/2017	63.670000	SL	\$400.00	\$40.00	\$360.00	\$2.83	\$2.83	\$357.17
200-00001120	331002-2000-001	1718680	Worcester St. Area Main Worcester St.	10/1/2017	63.670000	SL	\$3,020.00	\$302.00	\$2,718.00	\$21.34	\$21.34	\$2,696.66
200-00001119	331002-2000-001	1718681	Worcester St. Area Main - Shedd's Ave	10/1/2017	63.670000	SL	\$2,000.00	\$200.00	\$1,800.00	\$14.14	\$14.14	\$1,785.86
200-00001118	331002-2000-001	1718682	Worcester St. Area Main - Howard St	10/1/2017	63.670000	SL	\$2,800.00	\$280.00	\$2,520.00	\$19.79	\$19.79	\$2,500.21
200-00001121	331002-2000-001	1718683	Worcester St. Area Main - Hoyts Lane	10/1/2017	63.670000	SL	\$1,000.00	\$100.00	\$900.00	\$7.07	\$7.07	\$892.93
200-00001126	331002-2000-001	1718684	Rochette St. Main Replacement - Carryove	10/1/2017	63.670000	SL	\$11,330.00	\$1,133.00	\$10,197.00	\$80.08	\$80.08	\$10,116.92
200-00001117	331002-2000-001	1718685	Marquis Ave. Main Replacement - Carryove	10/1/2017	63.670000	SL	\$8,710.00	\$871.00	\$7,839.00	\$61.56	\$61.56	\$7,777.44
200-00001773	304800-2000-001	1719861	WTP - Overhead Door	12/1/2017	40.670000	SL	\$36,521.50	\$0.00	\$36,521.50	\$449.00	\$449.00	\$36,072.50
200-00001807	341000-2000-001	1720997	Dump Body Installation	12/1/2017	10.580000	SL	\$15,740.00	\$0.00	\$15,740.00	\$743.86	\$743.86	\$14,996.14
200-00001459	343000-2000-001	1800440	Pipe Saws (5)	12/1/2017	15.000000	SL	\$9,383.72	\$0.00	\$9,383.72	\$312.79	\$312.79	\$9,070.93
200-00001464	341000-2000-001	1800462	Vehicle #118 - Replace Vehicle #49	12/1/2017	10.580000	SL	\$27,323.00	\$0.00	\$27,323.00	\$1,291.26	\$1,291.26	\$26,031.74
200-00001463	341000-2000-001	1800479	Vehicle #119 - Replace Vehicle #44	12/1/2017	10.580000	SL	\$42,678.00	\$0.00	\$42,678.00	\$2,016.92	\$2,016.92	\$40,661.08
200-00001462	341000-2000-001	1800480	Vehicle #354 - Replace Vehicle #99	12/1/2017	10.580000	SL	\$27,323.00	\$0.00	\$27,323.00	\$1,291.26	\$1,291.26	\$26,031.74
200-00001461	341000-2000-001	1800481	Vehicle #211 - Replace Vehicle #204	12/1/2017	10.580000	SL	\$42,678.00	\$0.00	\$42,678.00	\$2,016.92	\$2,016.92	\$40,661.08
200-00000780	333250-2000-001	1X Revenue	1" Developer Installed Services - Paid	7/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000781	333250-2000-001	1X Revenue	1" Developer Installed Services - Paid	7/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000782	333250-2000-001	1X Revenue	1" Developer Installed Services - Paid	7/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001718	333250-2000-001	1X Revenue	PWW Developer Installed Services - Paid	12/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000527	333250-2000-001	1X Revenue	Schwinn Dr (#35): Nashua - 1 Developer I	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000514	333250-2000-001	1X Revenue	Schwinn Dr (#43): Nashua - 1 Developer I	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000525	333250-2000-001	1X Revenue	Serenity Ln (#12): Nashua - 1 Developer	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000523	333250-2000-001	1X Revenue	Serenity Ln (#4): Nashua - 1 Developer I	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000524	333250-2000-001	1X Revenue	Serenity Ln (#8): Nashua - 1 Developer I	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000515	333250-2000-001	1X Revenue	Timber Ridge Dr (#177): Milford - 1 Deve	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000516	333250-2000-001	1X Revenue	Timber Ridge Dr (#196): Milford - 1 Deve	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00000528	333250-2000-001	1X Revenue	Trailside Dr (#22): Amherst - 1 Develop	5/1/2017	42.750000	SL	\$595.61	\$0.00	\$595.61	\$6.97	\$6.97	\$588.64
200-00001922	333250-2000-001	1X Revenue	1" Developer Installed Services - Paid	12/1/2017	42.750000	SL	\$6,974.76	\$0.00	\$6,974.76	\$81.58	\$81.58	\$6,893.18
200-00000563	311210-2000-001	Routine	Booster Pump #2 Replaced	5/1/2017	22.750000	SL	\$1,012.50	\$101.25	\$911.25	\$20.03	\$20.03	\$891.22
200-00000845	311210-2000-001	Routine	elec pumps chem	7/1/2017	22.750000	SL	\$1,326.98	\$0.00	\$1,326.98	\$29.16	\$29.16	\$1,297.82
200-00000565	311210-2000-001	Routine	Booster Pump #1 Replaced	5/1/2017	22.750000	SL	\$1,556.60	\$155.66	\$1,400.94	\$30.79	\$30.79	\$1,370.15
200-00000743	311210-2000-001	Routine	Redfield Replace Boost Pump #1	6/5/2017	22.750000	SL	\$1,959.20	\$195.92	\$1,763.28	\$38.75	\$38.75	\$1,724.53
200-00000742	311210-2000-001	Routine	WTP Boiler Recirc. Pump	6/5/2017	22.750000	SL	\$1,995.00	\$199.50	\$1,795.50	\$39.46	\$39.46	\$1,756.04
200-00000900	311210-2000-001	Routine	Booster Pump: Rebuild Amherst	8/1/2017	22.750000	SL	\$2,267.05	\$0.00	\$2,267.05	\$49.83	\$49.83	\$2,217.22
200-00000981	311210-2000-001	Routine	Rebuild Pump #1, Founders Village	9/1/2017	22.750000	SL	\$2,895.00	\$0.00	\$2,895.00	\$63.63	\$63.63	\$2,831.37
200-00001093	311210-2000-001	Routine	Replace Armory VFD	10/1/2017	22.750000	SL	\$3,816.47	\$381.64	\$3,434.83	\$75.49	\$75.49	\$3,359.34
200-00001918	311210-2000-001	Routine	Rebuild Pump Motor	12/1/2017	22.750000	SL	\$17,440.00	\$0.00	\$17,440.00	\$383.30	\$383.30	\$17,056.70
200-00001918-001	311210-2000-001	Routine	Rebuild Booster Pump #1	12/1/2017	22.750000	SL	\$3,995.00	\$0.00	\$3,995.00	\$87.80	\$87.80	\$3,907.20
200-00001918-002	311210-2000-001	Routine	Rebuild Booster Pump #1	12/1/2017	22.750000	SL	\$1,795.00	\$0.00	\$1,795.00	\$39.45	\$39.45	\$1,755.55
200-00001333	311230-2000-001	Routine	Chemical Feed Pump	11/1/2017	22.750000	SL	\$1,326.98	\$132.70	\$1,194.28	\$26.25	\$26.25	\$1,168.03
200-00001052	331003-2000-001	Routine	Amherst St (#): Nashua - Paving: Gates	9/1/2017	63.670000	SL	\$3,440.73	\$344.07	\$3,096.66	\$24.32	\$24.32	\$3,072.34
200-00000574	331003-2000-001	Routine	Bowers St (#): Nashua - Paving: Gates	6/1/2017	63.670000	SL	\$4,002.12	\$400.21	\$3,601.91	\$28.29	\$28.29	\$3,573.62
200-00000958	331252-2000-001	Routine	Dist. Mains - Gate	8/1/2017	62.500000	SL	\$2,056.76	\$205.68	\$1,851.08	\$14.81	\$14.81	\$1,836.27
200-00001110	331254-2000-001	Routine	Amherst St (#): Nashua - Butterfly Val	10/1/2017	62.500000	SL	\$973.08	\$97.31	\$875.77	\$7.01	\$7.01	\$868.76
200-00001051	331254-2000-001	Routine	Amherst Street: Nashua - 16" Butterfly V	9/1/2017	62.500000	SL	\$42,649.38	\$4,264.94	\$38,384.44	\$307.08	\$307.08	\$38,077.36
200-00000513	333004-2000-001	Routine	Cunningham Drive (#20): Derry - Paving	5/1/2017	41.000000	SL	\$408.49	\$40.85	\$367.64	\$4.48	\$4.48	\$363.16
200-00000894	333004-2000-001	Routine	Jewell Ln (#6): Nashua - Paving: Servi	8/1/2017	41.000000	SL	\$1,606.10	\$160.61	\$1,445.49	\$17.63	\$17.63	\$1,427.86
200-00000612	333004-2000-001	Routine	Mulvanity Street: (#6-8): Nashua -Paving	6/1/2017	41.000000	SL	\$2,292.84	\$229.28	\$2,063.56	\$25.17	\$25.17	\$2,038.39
200-00000893	333004-2000-001	Routine	Abbott St (#4): Nashua - Paving: Servi	8/1/2017	41.000000	SL	\$2,752.52	\$275.25	\$2,477.27	\$30.21	\$30.21	\$2,447.06
200-00001710	333004-2000-001	Routine	Nagle St (#73): Nashua - Paving: Servi	12/1/2017	41.000000	SL	\$3,183.24	\$318.32	\$2,864.92	\$34.94	\$34.94	\$2,829.98
200-00000618	333004-2000-001	Routine	Major Dr (#53-67): Nashua - Paving: Se	6/1/2017	41.000000	SL	\$3,516.77	\$351.68	\$3,165.09	\$38.60	\$38.60	\$3,126.49
200-00000617	333004-2000-001	Routine	Cox St (#73): Nashua - Paving: Service	6/1/2017	41.000000	SL	\$3,778.79	\$377.88	\$3,400.91	\$41.47	\$41.47	\$3,359.44
200-00000614	333004-2000-001	Routine	Major Dr (#21-35): Nashua - Paving: Se	6/1/2017	41.000000	SL	\$3,862.63	\$386.26	\$3,476.37	\$42.39	\$42.39	\$3,433.98
200-00000778	333004-2000-001	Routine	Jake Rd (#7): Londonderry - Paving: Se	7/1/2017	41.000000	SL	\$3,959.13	\$395.91	\$3,563.22	\$43.45	\$43.45	\$3,519.77
200-00000895	333004-2000-001	Routine	Deerhaven Dr (#12): Nashua - Paving: S	8/1/2017	41.000000	SL	\$4,193.66	\$419.37	\$3,774.29	\$46.03	\$46.03	\$3,728.26
200-00000616	333004-2000-001	Routine	Major Dr (#22-36): Nashua - Paving: Se	6/1/2017	41.000000	SL	\$4,211.71	\$421.17	\$3,790.54	\$46.23	\$46.23	\$3,744.31
200-00000613	333004-2000-001	Routine	Leslie Ln (#4): Nashua - Paving: Servi	6/1/2017	41.000000	SL	\$5,190.50	\$519.05	\$4,671.45	\$56.97	\$56.97	\$4,614.48
200-00000615	333004-2000-001	Routine	Major Dr (#37-51): Nashua - Paving: Se	6/1/2017	41.000000	SL	\$7,852.09	\$785.21	\$7,066.88	\$86.18	\$86.18	\$6,980.70
200-00001092	333100-2000-001	Routine	Middle Dunstable Rd (#29): Nashua - 1"	10/1/2017	42.750000	SL	\$81.84	\$0.00	\$81.84	\$0.96	\$0.96	\$80.88
200-00001080	333100-2000-001	Routine	Middle Dunstable Rd (#29): Nashua - 1"	9/1/2017	42.750000	SL	\$2,865.72	\$0.00	\$2,865.72	\$33.52	\$33.52	\$2,832.20
200-00001252	333100-2000-001	Routine	1" CT Boston Post Rd (#304): Amherst	11/1/2017	42.750000	SL	\$3,500.00	\$0.00	\$3,500.00	\$40.94	\$40.94	\$3,459.06
200-00000768	333100-2000-001	Routine	Beverlee Dr (#10): Nashua - 1" New Ser	7/1/2017	42.750000	SL	\$7,460.00	\$0.00	\$7,460.00	\$87.25	\$87.25	\$7,372.75
200-00000892	333100-2000-001	Routine	Holbrook Rd (#49): Bedford - 1" New Se	8/1/2017	42.750000	SL	\$15,740.00	\$0.00	\$15,740.00	\$184.09	\$184.09	\$15,555.91
200-00001708	333200-2000-001	Routine	Coburn Woods (#69): Nashua - 1" Renew	12/1/2017	42.750000	SL	\$123.82	\$12.38	\$111.44	\$1.30	\$1.30	\$110.14
200-00000611	333200-2000-001	Routine	Raymond Street (#31): Nashua - 1" CT	6/1/2017	42.750000	SL	\$138.72	\$13.87	\$124.85	\$1.46	\$1.46	\$123.39
200-00000512	333200-2000-001	Routine	Major Dr (#22-36): Nashua - 2" Renewed	5/1/2017	42.750000	SL	\$252.31	\$25.23	\$227.08	\$2.66	\$2.66	\$224.42
200-00001707	333200-2000-001	Routine	New Searles Rd (#37): Nashua - 1" Rene	12/1/2017	42.750000	SL	\$501.98	\$50.20	\$451.78	\$5.28	\$5.28	\$446.50
200-00000610	333200-2000-001	Routine	Worcester St (#17-19): Nashua - 1" Ren	6/1/2017	42.750000	SL	\$628.47	\$62.85	\$565.62	\$6.62	\$6.62	\$559.00

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000511	333200-2000-001	Routine	Evergreen St (#2): Nashua - 1" Renewed	5/1/2017	42.750000	SL	\$984.59	\$98.46	\$886.13	\$10.36	\$10.36	\$875.77
200-00000890	333200-2000-001	Routine	Gaffney St (#7): Nashua - 1" Renewed S	8/1/2017	42.750000	SL	\$1,319.00	\$131.90	\$1,187.10	\$13.88	\$13.88	\$1,173.22
200-00001201	333200-2000-001	Routine	1" CT Pine St (#142): Nashua	11/1/2017	42.750000	SL	\$1,503.25	\$150.32	\$1,352.93	\$15.82	\$15.82	\$1,337.11
200-00001205	333200-2000-001	Routine	1" CT Gilman St (#103): Nashua	11/1/2017	42.750000	SL	\$1,607.68	\$160.77	\$1,446.91	\$16.92	\$16.92	\$1,429.99
200-00000609	333200-2000-001	Routine	Nagle St (#73): Nashua - 1" Renewed Se	6/1/2017	42.750000	SL	\$1,716.59	\$171.66	\$1,544.93	\$18.07	\$18.07	\$1,526.86
200-00001202	333200-2000-001	Routine	1" CT New Searles Rd (#37): Nashua	11/1/2017	42.750000	SL	\$2,131.39	\$213.14	\$1,918.25	\$22.44	\$22.44	\$1,895.81
200-00001206	333200-2000-001	Routine	Lake Street (#135): Nashua - 1" CT	11/1/2017	42.750000	SL	\$2,172.79	\$217.28	\$1,955.51	\$22.87	\$22.87	\$1,932.64
200-00000607	333200-2000-001	Routine	Fordham (#17): Nashua - 1" Renewed Se	6/1/2017	42.750000	SL	\$2,231.30	\$223.13	\$2,008.17	\$23.49	\$23.49	\$1,984.68
200-00000510	333200-2000-001	Routine	Deerhaven Dr (#12): Nashua - 1" Renewe	5/1/2017	42.750000	SL	\$2,339.04	\$233.90	\$2,105.14	\$24.62	\$24.62	\$2,080.52
200-00001207	333200-2000-001	Routine	1" CT Monza Rd (#19): Nashua	11/1/2017	42.750000	SL	\$2,429.53	\$242.95	\$2,186.58	\$25.57	\$25.57	\$2,161.01
200-00001709	333200-2000-001	Routine	Conant Rd (#25): Nashua - 1" Renewed S	12/1/2017	42.750000	SL	\$2,962.01	\$296.20	\$2,665.81	\$31.18	\$31.18	\$2,634.63
200-00001204	333200-2000-001	Routine	1" CT Coburn Woods (#69): Nashua	11/1/2017	42.750000	SL	\$3,456.36	\$345.64	\$3,110.72	\$36.38	\$36.38	\$3,074.34
200-00000608	333200-2000-001	Routine	Raymond St (#31): Nashua - 1" CT	6/1/2017	42.750000	SL	\$3,479.90	\$347.99	\$3,131.91	\$36.63	\$36.63	\$3,095.28
200-00001203	333200-2000-001	Routine	Langholm Drive (#47): Nashua - 1" CT	11/1/2017	42.750000	SL	\$4,004.96	\$400.50	\$3,604.46	\$42.16	\$42.16	\$3,562.30
200-00000889	333200-2000-001	Routine	Fawn Ln (#106): Nashua - 1" Renewed Se	8/1/2017	42.750000	SL	\$4,074.79	\$407.48	\$3,667.31	\$42.89	\$42.89	\$3,624.42
200-00001091	333200-2000-001	Routine	Eastman Dr (#6): Derry - 1" Renewed Se	10/1/2017	42.750000	SL	\$4,247.73	\$427.78	\$3,819.95	\$44.68	\$44.68	\$3,775.27
200-00000887	333200-2000-001	Routine	New Searies Rd (#33): Nashua - 1" Rene	8/1/2017	42.750000	SL	\$4,820.09	\$482.01	\$4,338.08	\$50.74	\$50.74	\$4,287.34
200-00000888	333200-2000-001	Routine	Eastman Drive (#1): Derry - 1" PE	8/1/2017	42.750000	SL	\$6,519.08	\$651.91	\$5,867.17	\$68.62	\$68.62	\$5,798.55
200-00000455	334000-2000-001	Routine	5/8" New Meter: Merrimack 6 Dunstable C	5/1/2017	20.920000	SL	\$145.15	\$14.52	\$130.63	\$3.12	\$3.12	\$127.51
200-00000456	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000457	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00000458	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$268.00	\$26.80	\$241.20	\$5.76	\$5.76	\$235.44
200-00000459	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 3 Pendant	5/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000460	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 84-21 Cro	5/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000461	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 85-19 Cro	5/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000462	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 86-17 Cro	5/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000463	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 87-15 Cro	5/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000464	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$144.65	\$14.47	\$130.18	\$3.11	\$3.11	\$127.07
200-00000465	334000-2000-001	Routine	1.5" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$488.33	\$48.83	\$439.50	\$10.50	\$10.50	\$429.00
200-00000466	334000-2000-001	Routine	5/8" New Meter: Amherst 4 Pauls Way Se	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000467	334000-2000-001	Routine	5/8" New Meter: Amherst 8 Eastern Avenu	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000468	334000-2000-001	Routine	5/8" New Meter: Amherst 10 Eastern Aven	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000469	334000-2000-001	Routine	5/8" New Meter: Amherst 12 Eastern Aven	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000470	334000-2000-001	Routine	5/8" New Meter: Amherst 95 Route 101A	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000471	334000-2000-001	Routine	5/8" New Meter: Amherst 108 Route 101A	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000472	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 863 West H	5/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000473	334000-2000-001	Routine	5/8" New Meter: Badger Hill Lot 176-Tim	5/1/2017	20.920000	SL	\$152.73	\$15.27	\$137.46	\$3.29	\$3.29	\$134.17
200-00000474	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000475	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	5/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000476	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 84-22 Trail	5/1/2017	20.920000	SL	\$152.73	\$15.27	\$137.46	\$3.29	\$3.29	\$134.17
200-00000477	334000-2000-001	Routine	1" New Meter: Northwest High Pressure Sy	5/1/2017	20.920000	SL	\$345.88	\$34.59	\$311.29	\$7.44	\$7.44	\$303.85
200-00000478	334000-2000-001	Routine	5/8" New Meter	5/1/2017	20.920000	SL	\$11,694.86	\$1,169.49	\$10,525.37	\$251.56	\$251.56	\$10,273.81
200-00000479	334000-2000-001	Routine	3/4" New Meter	5/1/2017	20.920000	SL	\$437.09	\$43.71	\$393.38	\$9.40	\$9.40	\$383.98
200-00000480	334000-2000-001	Routine	1" New Meter	5/1/2017	20.920000	SL	\$629.64	\$62.96	\$566.68	\$13.54	\$13.54	\$553.14
200-00000481	334000-2000-001	Routine	1.5" New Meter	5/1/2017	20.920000	SL	\$7,225.13	\$722.51	\$6,502.62	\$155.42	\$155.42	\$6,347.20
200-00000482	334000-2000-001	Routine	2" New Meter	5/1/2017	20.920000	SL	\$2,284.13	\$228.41	\$2,055.72	\$49.13	\$49.13	\$2,006.59
200-00000483	334000-2000-001	Routine	5/8" New Meter: Amherst 5 Pauls Way Se	5/1/2017	20.920000	SL	\$82.98	\$8.30	\$74.68	\$1.78	\$1.78	\$72.90
200-00000484	334000-2000-001	Routine	3/4" New Meter: Fifield High Pressure Sy	5/1/2017	20.920000	SL	\$219.23	\$21.92	\$197.31	\$4.72	\$4.72	\$192.59
200-00000485	334000-2000-001	Routine	5/8" New Meter	5/1/2017	20.920000	SL	\$13,490.76	\$1,349.08	\$12,141.68	\$290.19	\$290.19	\$11,851.49
200-00000577	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 45-4 Founde	6/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000578	334000-2000-001	Routine	5/8" New Meter: Amherst	6/1/2017	20.920000	SL	\$209.03	\$20.90	\$188.13	\$4.50	\$4.50	\$183.63
200-00000579	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 83-22 Cro	6/1/2017	20.920000	SL	\$216.38	\$21.64	\$194.74	\$4.65	\$4.65	\$190.09
200-00000580	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 4 Abbott S	6/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000581	334000-2000-001	Routine	5/8" New Meter: Badger Hill Lot 170-Tim	6/1/2017	20.920000	SL	\$238.41	\$23.84	\$214.57	\$5.13	\$5.13	\$209.44
200-00000582	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 4 Pendant	6/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000583	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 24 Twelfth	6/1/2017	20.920000	SL	\$181.11	\$18.11	\$163.00	\$3.90	\$3.90	\$159.10
200-00000584	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 255 Pine S	6/1/2017	20.920000	SL	\$146.01	\$14.60	\$131.41	\$3.14	\$3.14	\$128.27
200-00000585	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	6/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00000586	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	6/1/2017	20.920000	SL	\$139.50	\$13.95	\$125.55	\$3.00	\$3.00	\$122.55
200-00000587	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 6 Sacred H	6/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00000588	334000-2000-001	Routine	5/8" New Meter: Pww	6/1/2017	20.920000	SL	\$10,747.62	\$1,074.76	\$9,672.86	\$231.19	\$231.19	\$9,441.67
200-00000589	334000-2000-001	Routine	3/4" New Meter: Pww	6/1/2017	20.920000	SL	\$466.58	\$46.66	\$419.92	\$10.04	\$10.04	\$409.88
200-00000590	334000-2000-001	Routine	1" New Meter: Pww	6/1/2017	20.920000	SL	\$4,256.19	\$425.62	\$3,830.57	\$91.55	\$91.55	\$3,739.02
200-00000591	334000-2000-001	Routine	1.5" New Meter: Pww	6/1/2017	20.920000	SL	\$644.54	\$64.45	\$580.09	\$13.86	\$13.86	\$566.23
200-00000592	334000-2000-001	Routine	2" New Meter: Pww	6/1/2017	20.920000	SL	\$700.57	\$70.06	\$630.51	\$15.07	\$15.07	\$615.44
200-00000593	334000-2000-001	Routine	5/8" New Meter: Pww	6/1/2017	20.920000	SL	\$10,432.19	\$1,043.22	\$9,388.97	\$224.40	\$224.40	\$9,164.57
200-00000744	334000-2000-001	Routine	1" New Meter: Fifield Tank 45 Simon Str	7/1/2017	20.920000	SL	\$284.23	\$28.42	\$255.81	\$6.11	\$6.11	\$249.70
200-00000746	334000-2000-001	Routine	1.5" New Meter: Fifield Tank 45 Simon S	7/1/2017	20.920000	SL	\$621.73	\$62.17	\$559.56	\$13.37	\$13.37	\$546.19
200-00000748	334000-2000-001	Routine	4" New Meter: Fifield Tank 45 Simon Str	7/1/2017	20.920000	SL	\$3,658.50	\$365.85	\$3,292.65	\$78.70	\$78.70	\$3,213.95
200-00000750	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 22 Twelfth	7/1/2017	20.920000	SL	\$207.32	\$20.73	\$186.59	\$4.46	\$4.46	\$182.13
200-00000751	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 26 Twelfth	7/1/2017	20.920000	SL	\$285.79	\$28.58	\$257.21	\$6.15	\$6.15	\$251.06
200-00000754	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 102-22 Du	7/1/2017	20.920000	SL	\$146.01	\$14.60	\$131.41	\$3.14	\$3.14	\$128.27
200-00000756	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	7/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000757	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	7/1/2017	20.920000	SL	\$160.08	\$16.01	\$144.07	\$3.44	\$3.44	\$140.63
200-00000760	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 86-18 Trail	7/1/2017	20.920000	SL	\$237.17	\$23.72	\$213.45	\$5.10	\$5.10	\$208.35
200-00000762	334000-2000-001	Routine	5/8" New Meter: Merrimack 63 Bowers Lan	7/1/2017	20.920000	SL	\$160.08	\$16.01	\$144.07	\$3.44	\$3.44	\$140.63
200-00000764	334000-2000-001	Routine	5/8" New Meter: Powder Hill 49 Holbrook	7/1/2017	20.920000	SL	\$209.03	\$20.90	\$188.13	\$4.50	\$4.50	\$183.63
200-00000766	334000-2000-001	Routine	5/8" New Meter: Beauview High Pressure S	7/1/2017	20.920000	SL	\$146.01	\$14.60	\$131.41	\$3.14	\$3.14	\$128.27
200-00000769	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 38 Caldwell	7/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00000771	334000-2000-001	Routine	5/8" New Meter: Pww	7/1/2017	20.920000	SL	\$5,306.02	\$530.60	\$4,775.42	\$114.14	\$114.14	\$4,661.28
200-00000773	334000-2000-001	Routine	3/4" New Meter: Pww	7/1/2017	20.920000	SL	\$467.94	\$46.79	\$421.15	\$10.07	\$10.07	\$411.08
200-00000774	334000-2000-001	Routine	1" New Meter: Pww	7/1/2017	20.920000	SL	\$3,188.37	\$318.84	\$2,869.53	\$68.58	\$68.58	\$2,800.95
200-00000775	334000-2000-001	Routine	1.5" New Meter: Pww	7/1/2017	20.920000	SL	\$613.03	\$61.30	\$551.73	\$13.19	\$13.19	\$538.54
200-00000776	334000-2000-001	Routine	2" New Meter: Pww	7/1/2017	20.920000	SL	\$798.69	\$79.87	\$718.82	\$17.18	\$17.18	\$701.64
200-00000777	334000-2000-001	Routine	5/8" New Meter: Pww	7/1/2017	20.920000	SL	\$7,634.38	\$763.44	\$6,870.94	\$164.22	\$164.22	\$6,706.72
200-00000855	334000-2000-001	Routine	5/8" New Meter: Badger Hill Lot 174-Tim	8/1/2017	20.920000	SL	\$237.17	\$23.72	\$213.45	\$5.10	\$5.10	\$208.35
200-00000856	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 99-16 Dun	8/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00000857	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 100-18 Du	8/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000858	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 106-19 Du	8/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00000859	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 101-20 Du	8/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00000860	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 104-23 Du	8/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00000861	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 103-24 Du	8/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00000862	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 19 Adelaide	8/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000863	334000-2000-001	Routine	5/8" New Meter: Badger Hill Lot 164-163	8/1/2017	20.920000	SL	\$268.00	\$26.80	\$241.20	\$5.76	\$5.76	\$235.44
200-00000864	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	8/1/2017	20.920000	SL	\$184.78	\$18.48	\$166.30	\$3.97	\$3.97	\$162.33
200-00000865	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	8/1/2017	20.920000	SL	\$324.01	\$32.40	\$291.61	\$6.97	\$6.97	\$284.64
200-00000866	334000-2000-001	Routine	1" New Meter: Fifield Tank 25 Fairway S	8/1/2017	20.920000	SL	\$368.80	\$36.88	\$331.92	\$7.93	\$7.93	\$323.99
200-00000867	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 55 Bowers	8/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00000868	334000-2000-001	Routine	5/8" New Meter: Pww	8/1/2017	20.920000	SL	\$7,430.47	\$743.05	\$6,687.42	\$159.83	\$159.83	\$6,527.59
200-00000869	334000-2000-001	Routine	3/4" New Meter: Pww	8/1/2017	20.920000	SL	\$979.12	\$97.91	\$881.21	\$21.06	\$21.06	\$860.15

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000870	334000-2000-001	Routine	1" New Meter: Pww	8/1/2017	20.920000	SL	\$1,906.04	\$190.60	\$1,715.44	\$41.00	\$41.00	\$1,674.44
200-00000871	334000-2000-001	Routine	1.5" New Meter: Pww	8/1/2017	20.920000	SL	\$3,953.76	\$395.38	\$3,558.38	\$85.05	\$85.05	\$3,473.33
200-00000872	334000-2000-001	Routine	3" New Meter: Pww	8/1/2017	20.920000	SL	\$608.96	\$60.90	\$548.06	\$13.10	\$13.10	\$534.96
200-00000873	334000-2000-001	Routine	5/8" New Meter: Pww	8/1/2017	20.920000	SL	\$8,191.41	\$819.14	\$7,372.27	\$176.20	\$176.20	\$7,196.07
200-00001053	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 17 Adelaïd	9/1/2017	20.920000	SL	\$262.39	\$26.24	\$236.15	\$5.64	\$5.64	\$230.51
200-00001054	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 28 Twelfth	9/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001055	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 108-15 Du	9/1/2017	20.920000	SL	\$237.17	\$23.72	\$213.45	\$5.10	\$5.10	\$208.35
200-00001056	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 87-16 Trail	9/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001057	334000-2000-001	Routine	5/8" New Meter: Amherst 370 Boston Post	9/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001058	334000-2000-001	Routine	5/8" New Meter: Amherst 24 Trailside Dr	9/1/2017	20.920000	SL	\$184.78	\$18.48	\$166.30	\$3.97	\$3.97	\$162.33
200-00001059	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	9/1/2017	20.920000	SL	\$284.78	\$28.48	\$256.30	\$6.13	\$6.13	\$250.17
200-00001060	334000-2000-001	Routine	1" New Meter: Fifield Tank 38 Broad Str	9/1/2017	20.920000	SL	\$293.21	\$29.32	\$263.89	\$6.31	\$6.31	\$257.58
200-00001061	334000-2000-001	Routine	5/8" New Meter: Pww	9/1/2017	20.920000	SL	\$28,099.90	\$2,809.99	\$25,289.91	\$604.44	\$604.44	\$24,685.47
200-00001062	334000-2000-001	Routine	3/4" New Meter: Pww	9/1/2017	20.920000	SL	\$1,097.59	\$109.76	\$987.83	\$23.61	\$23.61	\$964.22
200-00001063	334000-2000-001	Routine	1" New Meter: Pww	9/1/2017	20.920000	SL	\$934.90	\$93.49	\$841.41	\$20.11	\$20.11	\$821.30
200-00001064	334000-2000-001	Routine	1.5" New Meter: Pww	9/1/2017	20.920000	SL	\$1,956.00	\$195.60	\$1,760.40	\$42.07	\$42.07	\$1,718.33
200-00001065	334000-2000-001	Routine	2" New Meter: Pww	9/1/2017	20.920000	SL	\$858.34	\$85.83	\$772.51	\$18.46	\$18.46	\$754.05
200-00001066	334000-2000-001	Routine	1" New Meter: Northwest High Pressure Sy	9/1/2017	20.920000	SL	\$315.07	\$31.51	\$283.56	\$6.78	\$6.78	\$276.78
200-00001067	334000-2000-001	Routine	5/8" New Meter: Fifield High Pressure Sy	9/1/2017	20.920000	SL	\$153.63	\$15.36	\$138.27	\$3.30	\$3.30	\$134.97
200-00001082	334000-2000-001	Routine	5/8" New Meter (correction)	9/1/2017	20.920000	SL	-\$33.66	-\$3.37	-\$30.29	-\$0.72	-\$0.72	-\$29.57
200-00001094	334000-2000-001	Routine	5/8" New Meter: Amherst	10/1/2017	20.920000	SL	\$176.24	\$17.62	\$158.62	\$3.79	\$3.79	\$154.83
200-00001095	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 107-17 Du	10/1/2017	20.920000	SL	\$144.65	\$14.46	\$130.19	\$3.11	\$3.11	\$127.08
200-00001096	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	10/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001097	334000-2000-001	Routine	1" New Meter: Fifield Tank 32A Perham S	10/1/2017	20.920000	SL	\$332.85	\$33.28	\$299.57	\$7.16	\$7.16	\$292.41
200-00001098	334000-2000-001	Routine	0-1" New Meter: Fifield Tank 32B Perha	10/1/2017	20.920000	SL	\$332.85	\$33.28	\$299.57	\$7.16	\$7.16	\$292.41
200-00001099	334000-2000-001	Routine	5/8" New Meter: Amherst 26 Trailside Dr	10/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001100	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	10/1/2017	20.920000	SL	\$159.33	\$15.93	\$143.40	\$3.43	\$3.43	\$139.97
200-00001101	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	10/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001102	334000-2000-001	Routine	5/8" New Meter: Pww	10/1/2017	20.920000	SL	\$29,648.28	\$2,964.83	\$26,683.45	\$637.75	\$637.75	\$26,045.70
200-00001103	334000-2000-001	Routine	3/4" New Meter: Pww	10/1/2017	20.920000	SL	\$1,563.75	\$156.38	\$1,407.37	\$33.64	\$33.64	\$1,373.73
200-00001104	334000-2000-001	Routine	1" New Meter: Pww	10/1/2017	20.920000	SL	\$429.26	\$42.93	\$386.33	\$9.23	\$9.23	\$377.10
200-00001105	334000-2000-001	Routine	2" New Meter: Pww	10/1/2017	20.920000	SL	\$829.64	\$82.96	\$746.68	\$17.85	\$17.85	\$728.83
200-00001106	334000-2000-001	Routine	6" New Meter: Pww	10/1/2017	20.920000	SL	\$2,123.04	\$212.30	\$1,910.74	\$45.67	\$45.67	\$1,865.07
200-00001199	334000-2000-001	Routine	1" New Meter: Fifield Tank 25 Fairway S	11/1/2017	20.920000	SL	\$348.61	\$34.86	\$313.75	\$7.50	\$7.50	\$306.25
200-00001216	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 15 Bennett	11/1/2017	20.920000	SL	\$145.15	\$14.52	\$130.63	\$3.12	\$3.12	\$127.51
200-00001217	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 17 Bennett	11/1/2017	20.920000	SL	\$207.32	\$20.73	\$186.59	\$4.46	\$4.46	\$182.13
200-00001218	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 19 Bennett	11/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001219	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 21 Bennett	11/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001220	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 23 Bennett	11/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001221	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 25 Bennett	11/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001222	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 27 Bennett	11/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001223	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 29 Bennett	11/1/2017	20.920000	SL	\$176.24	\$17.62	\$158.62	\$3.79	\$3.79	\$154.83
200-00001235	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$258.27	\$25.83	\$232.44	\$5.56	\$5.56	\$226.88
200-00001236	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$169.88	\$16.99	\$152.89	\$3.65	\$3.65	\$149.24
200-00001237	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$169.88	\$16.99	\$152.89	\$3.65	\$3.65	\$149.24
200-00001238	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 35-8 Trails	11/1/2017	20.920000	SL	\$214.46	\$21.45	\$193.01	\$4.61	\$4.61	\$188.40
200-00001239	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$169.88	\$16.99	\$152.89	\$3.65	\$3.65	\$149.24
200-00001240	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 34 Russell	11/1/2017	20.920000	SL	\$190.92	\$19.09	\$171.83	\$4.11	\$4.11	\$167.72
200-00001242	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 77-3 Vale C	11/1/2017	20.920000	SL	\$214.46	\$21.45	\$193.01	\$4.61	\$4.61	\$188.40
200-00001243	334000-2000-001	Routine	5/8" New Meter: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$207.32	\$20.73	\$186.59	\$4.46	\$4.46	\$182.13

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001245	334000-2000-001	Routine	5/8" New Meter: Beauview High Pressure S	11/1/2017	20.920000	SL	\$144.65	\$14.47	\$130.18	\$3.11	\$3.11	\$127.07
200-00001247	334000-2000-001	Routine	5/8" New Meter: Little Pond 13 Bell Hill	11/1/2017	20.920000	SL	\$145.15	\$14.52	\$130.63	\$3.12	\$3.12	\$127.51
200-00001249	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	11/1/2017	20.920000	SL	\$144.65	\$14.47	\$130.18	\$3.11	\$3.11	\$127.07
200-00001251	334000-2000-001	Routine	1.5" New Meter: Fifield Tank 48 Charlot	11/1/2017	20.920000	SL	\$582.87	\$58.29	\$524.58	\$12.54	\$12.54	\$512.04
200-00001253	334000-2000-001	Routine	1" New Meter: Northwest High Pressure Sy	11/1/2017	20.920000	SL	\$296.84	\$29.68	\$267.16	\$6.39	\$6.39	\$260.77
200-00001254	334000-2000-001	Routine	5/8" New Meter: Northwest High Pressure	11/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001255	334000-2000-001	Routine	5/8" New Meter: Pww	11/1/2017	20.920000	SL	\$34,136.96	\$3,413.70	\$30,723.26	\$734.30	\$734.30	\$29,988.96
200-00001256	334000-2000-001	Routine	3/4" New Meter: Pww	11/1/2017	20.920000	SL	\$248.72	\$24.87	\$223.85	\$5.35	\$5.35	\$218.50
200-00001257	334000-2000-001	Routine	1" New Meter: Pww	11/1/2017	20.920000	SL	\$506.79	\$50.68	\$456.11	\$10.90	\$10.90	\$445.21
200-00001258	334000-2000-001	Routine	2" New Meter: Pww	11/1/2017	20.920000	SL	\$1,686.07	\$168.61	\$1,517.46	\$36.27	\$36.27	\$1,481.19
200-00001259	334000-2000-001	Routine	3/4" New Meter: Northwest High Pressure	11/1/2017	20.920000	SL	\$230.49	\$23.05	\$207.44	\$4.96	\$4.96	\$202.48
200-00001681	334000-2000-001	Routine	5/8" New Meter: Merrimack Lot 105-21 Du	12/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001682	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 34A Perham	12/1/2017	20.920000	SL	\$285.59	\$28.56	\$257.03	\$6.14	\$6.14	\$250.89
200-00001683	334000-2000-001	Routine	5/8" New Meter: Fifield Tank 34B Perham	12/1/2017	20.920000	SL	\$285.59	\$28.56	\$257.03	\$6.14	\$6.14	\$250.89
200-00001684	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 66-3 Trails	12/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001685	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 71-13 Trail	12/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001686	334000-2000-001	Routine	5/8" New Meter: Amherst Lot 79-6 Vale C	12/1/2017	20.920000	SL	\$175.49	\$17.55	\$157.94	\$3.77	\$3.77	\$154.17
200-00001687	334000-2000-001	Routine	5/8" New Meter: Southwest High Pressure	12/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001688	334000-2000-001	Routine	5/8" New Meter: Badger Hill Lot 162-155	12/1/2017	20.920000	SL	\$177.52	\$17.75	\$159.77	\$3.82	\$3.82	\$155.95
200-00001689	334000-2000-001	Routine	3/4" New Meter: Amherst 304 Boston Post	12/1/2017	20.920000	SL	\$206.33	\$20.63	\$185.70	\$4.44	\$4.44	\$181.26
200-00001690	334000-2000-001	Routine	3/4" New Meter: Fifield Tank Lot Bldg E	12/1/2017	20.920000	SL	\$250.75	\$25.08	\$225.67	\$5.39	\$5.39	\$220.28
200-00001691	334000-2000-001	Routine	5/8" New Meter: Pww	12/1/2017	20.920000	SL	\$29,601.19	\$2,960.12	\$26,641.07	\$636.74	\$636.74	\$26,004.33
200-00001692	334000-2000-001	Routine	3/4" New Meter: Pww	12/1/2017	20.920000	SL	\$248.72	\$24.87	\$223.85	\$5.35	\$5.35	\$218.50
200-00001693	334000-2000-001	Routine	2" New Meter: Fifield Tank Lot Bldg A-9	12/1/2017	20.920000	SL	\$1,566.43	\$156.64	\$1,409.79	\$33.69	\$33.69	\$1,376.10
200-00001694	334000-2000-001	Routine	2" New Meter: Fifield Tank Lot Bldg D-3	12/1/2017	20.920000	SL	\$1,566.43	\$156.64	\$1,409.79	\$33.69	\$33.69	\$1,376.10
200-00000486	334100-2000-001	Routine	Neptune Radios: Merrimack 6 Dunstable C	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000487	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000488	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000489	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000490	334100-2000-001	Routine	Neptune Radios: Fifield Tank 3 Pendant	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000491	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 84-21 Cro	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000492	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 85-19 Cro	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000493	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 86-17 Cro	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000494	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 87-15 Cro	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000495	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000496	334100-2000-001	Routine	Neptune Radios: Amherst 4 Pauls Way Se	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000497	334100-2000-001	Routine	Neptune Radios: Amherst 8 Eastern Avenu	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000498	334100-2000-001	Routine	Neptune Radios: Amherst 10 Eastern Aven	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000499	334100-2000-001	Routine	Neptune Radios: Amherst 12 Eastern Aven	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000500	334100-2000-001	Routine	Neptune Radios: Amherst 95 Route 101A	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000501	334100-2000-001	Routine	Neptune Radios: Amherst	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000502	334100-2000-001	Routine	Neptune Radios: Fifield Tank 863 West H	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000503	334100-2000-001	Routine	Neptune Radios: Fifield Tank 134 Haines	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000504	334100-2000-001	Routine	Neptune Radios: Badger Hill Lot 176-Tim	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000505	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000506	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000507	334100-2000-001	Routine	Neptune Radios: Amherst Lot 84-22 Trail	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000508	334100-2000-001	Routine	Neptune Radios: Northwest High Pressure	5/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000509	334100-2000-001	Routine	Neptune Radio Replacements	5/1/2017	20.920000	SL	\$1,877.80	\$0.00	\$1,877.80	\$44.88	\$44.88	\$1,832.92
200-00000594	334100-2000-001	Routine	Neptune Radios: Amherst Lot 45-4 Founde	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000595	334100-2000-001	Routine	Neptune Radios: Amherst	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000596	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 83-22 Cro	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000597	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000598	334100-2000-001	Routine	Neptune Radios: Fifield Tank 4 Abbott S	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000599	334100-2000-001	Routine	Neptune Radios: Badger Hill Lot 170-Tim	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000600	334100-2000-001	Routine	Neptune Radios: Fifield Tank 4 Pendant	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000601	334100-2000-001	Routine	Neptune Radios: Fifield Tank 24 Twelfth	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000602	334100-2000-001	Routine	Neptune Radios: Fifield Tank 255 Pine S	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000603	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000604	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000605	334100-2000-001	Routine	Neptune Radios: Fifield Tank 6 Sacred H	6/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000606	334100-2000-001	Routine	Neptune Radio Replacements:Pww	6/1/2017	20.920000	SL	\$1,155.06	\$0.00	\$1,155.06	\$27.61	\$27.61	\$1,127.45
200-00000745	334100-2000-001	Routine	Neptune Radios: Fifield Tank 45 Simon S	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000747	334100-2000-001	Routine	Neptune Radios: Fifield Tank 45 Simon S	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000749	334100-2000-001	Routine	Neptune Radios: Fifield Tank 45 Simon S	7/1/2017	20.920000	SL	\$187.78	\$0.00	\$187.78	\$4.49	\$4.49	\$183.29
200-00000752	334100-2000-001	Routine	Neptune Radios: Fifield Tank 22 Twelfth	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000753	334100-2000-001	Routine	Neptune Radios: Fifield Tank 26 Twelfth	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000755	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 102-22 Du	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000758	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000759	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000761	334100-2000-001	Routine	Neptune Radios: Amherst Lot 86-18 Trail	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000763	334100-2000-001	Routine	Neptune Radios: Merrimack 63 Bowers Lan	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000765	334100-2000-001	Routine	Neptune Radios: Powder Hill 49 Holbrook	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000767	334100-2000-001	Routine	Neptune Radios: Beauview High Pressure S	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000770	334100-2000-001	Routine	Neptune Radios: Fifield Tank 38 Caldwell	7/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000772	334100-2000-001	Routine	Neptune Radio Replacements:Pww	7/1/2017	20.920000	SL	\$1,315.51	\$0.00	\$1,315.51	\$31.44	\$31.44	\$1,284.07
200-00000874	334100-2000-001	Routine	Neptune Radios: Badger Hill Lot 174-Tim	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000875	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 99-16 Dun	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000876	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 100-18 Du	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000877	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 106-19 Du	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000878	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 101-20 Du	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000879	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 104-23 Du	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000880	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 103-24 Du	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000881	334100-2000-001	Routine	Neptune Radios: Fifield Tank 19 Adelaide	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000882	334100-2000-001	Routine	Neptune Radios: Badger Hill Lot 164-163	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000883	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000884	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000885	334100-2000-001	Routine	Neptune Radios: Fifield Tank 25 Fairway	8/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00000886	334100-2000-001	Routine	Neptune Radio Replacements:Pww	8/1/2017	20.920000	SL	\$2,018.53	\$0.00	\$2,018.53	\$48.24	\$48.24	\$1,970.29
200-00001068	334100-2000-001	Routine	Neptune Radios: Fifield Tank 17 Adelaide	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001069	334100-2000-001	Routine	Neptune Radios: Fifield Tank 28 Twelfth	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001070	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 108-15 Du	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001071	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 107-17 Du	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001072	334100-2000-001	Routine	Neptune Radios: Amherst Lot 87-16 Trail	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001073	334100-2000-001	Routine	Neptune Radios: Amherst 370 Boston Post	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001074	334100-2000-001	Routine	Neptune Radios: Amherst 24 Trailside Dr	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001075	334100-2000-001	Routine	Neptune Radios: Northwest High Pressure	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001076	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001077	334100-2000-001	Routine	Neptune Radios: Fifield Tank 38 Broad S	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001078	334100-2000-001	Routine	Neptune Radio Replacements:Pww	9/1/2017	20.920000	SL	\$1,268.99	\$0.00	\$1,268.99	\$30.33	\$30.33	\$1,238.66

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00001079	334100-2000-001	Routine	Neptune Radios: Fifield Tank 38 Broad S	9/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001086	334100-2000-001	Routine	Neptune Radios: Fifield Tank 32B Perham	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001087	334100-2000-001	Routine	Neptune Radios: Amherst 26 Trailside Dr	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001088	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001089	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001090	334100-2000-001	Routine	Neptune Radio Replacements:Pww Do Not Us	10/1/2017	20.920000	SL	\$1,739.40	\$0.00	\$1,739.40	\$41.57	\$41.57	\$1,697.83
200-00001107	334100-2000-001	Routine	Neptune Radios: Amherst 9D Fieldstone D	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001108	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001109	334100-2000-001	Routine	Neptune Radios: Fifield Tank 32A Perham	10/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001189	334100-2000-001	Routine	Neptune Radios: Fifield Tank 25 Fairway	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001191	334100-2000-001	Routine	Neptune Radios: Amherst Lot 35-8 Trails	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001192	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001193	334100-2000-001	Routine	Neptune Radios: Amherst Lot 77-3 Vale C	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001194	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001195	334100-2000-001	Routine	Neptune Radios: Northwest High Pressure	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001196	334100-2000-001	Routine	Neptune Radios: Northwest High Pressure	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001197	334100-2000-001	Routine	Neptune Radio Replacements:Pww Do Not Us	11/1/2017	20.920000	SL	\$1,408.35	\$0.00	\$1,408.35	\$33.66	\$33.66	\$1,374.69
200-00001198	334100-2000-001	Routine	Neptune Radios: Northwest High Pressure	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001224	334100-2000-001	Routine	Neptune Radios: Fifield Tank 15 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001225	334100-2000-001	Routine	Neptune Radios: Fifield Tank 17 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001226	334100-2000-001	Routine	Neptune Radios: Fifield Tank 19 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001227	334100-2000-001	Routine	Neptune Radios: Fifield Tank 21 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001228	334100-2000-001	Routine	Neptune Radios: Fifield Tank 23 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001229	334100-2000-001	Routine	Neptune Radios: Fifield Tank 25 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001230	334100-2000-001	Routine	Neptune Radios: Fifield Tank 27 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001231	334100-2000-001	Routine	Neptune Radios: Fifield Tank 29 Bennett	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001232	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001233	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001234	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001241	334100-2000-001	Routine	Neptune Radios: Fifield Tank 34 Russell	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001244	334100-2000-001	Routine	Neptune Radios: High Pine Pressure Syste	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001246	334100-2000-001	Routine	Neptune Radios: Beauview High Pressure S	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001248	334100-2000-001	Routine	Neptune Radios: Little Pond 13 Bell Hil	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001250	334100-2000-001	Routine	Neptune Radios: Fifield Tank 48 Chariot	11/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001695	334100-2000-001	Routine	Neptune Radios: Merrimack Lot 105-21 Du	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001696	334100-2000-001	Routine	Neptune Radios: Fifield Tank 34A Perham	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001697	334100-2000-001	Routine	Neptune Radios: Fifield Tank 34B Perham	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001698	334100-2000-001	Routine	Neptune Radios: Amherst Lot 66-3 Trails	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001699	334100-2000-001	Routine	Neptune Radios: Amherst Lot 71-13 Trail	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001700	334100-2000-001	Routine	Neptune Radios: Amherst Lot 79-6 Vale C	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001701	334100-2000-001	Routine	Neptune Radios: Southwest High Pressure	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001702	334100-2000-001	Routine	Neptune Radios: Badger Hill Lot 162-155	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001703	334100-2000-001	Routine	Neptune Radios: Amherst 304 Boston Post	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001704	334100-2000-001	Routine	Neptune Radios: Fifield Tank Lot Bldg E	12/1/2017	20.920000	SL	\$93.89	\$0.00	\$93.89	\$2.24	\$2.24	\$91.65
200-00001705	334100-2000-001	Routine	Neptune Radio Replacements:Pww	12/1/2017	20.920000	SL	\$1,220.57	\$0.00	\$1,220.57	\$29.17	\$29.17	\$1,191.40
200-00001706	334100-2000-001	Routine	Neptune Radios: Fifield Tank Lot Bldg A	12/1/2017	20.920000	SL	\$187.78	\$0.00	\$187.78	\$4.49	\$4.49	\$183.29
200-00000564	335000-2000-001	Routine	Spitbrook Rd (#): Nashua - New Hydran	5/1/2017	44.670000	SL	\$606.93	\$0.00	\$0.00	\$6.11	\$0.00	\$0.00
200-00001190	335000-2000-001	Routine	Hydrant Roy St (#15): Nashua	11/1/2017	44.670000	SL	\$3,047.52	\$304.75	\$2,742.77	\$30.70	\$30.70	\$2,712.07
200-00000454	335000-2000-001	Routine	Tirrell Rd (#): Bedford - New Hydrant	5/1/2017	44.670000	SL	\$4,277.16	\$427.72	\$3,849.44	\$43.09	\$43.09	\$3,806.35
200-00001200	335000-2000-001	Routine	Hydrant Spitbrook Rd	11/1/2017	44.670000	SL	\$5,051.47	\$505.15	\$4,546.32	\$50.89	\$50.89	\$4,495.43

Asset Code	Account #	Project #	Description	Date Capitalized	Asset Life	Depn Code	Acquisition Cost	Cost of Removal	GBV	YTD Depn	Accum Depn	NBV
200-00000576	335000-2000-001	Routine	Major Dr (#38-52): Nashua - Repaired H	6/1/2017	44.670000	SL	\$5,660.38	\$839.76	\$4,820.62	\$53.96	\$53.96	\$4,766.66
							\$5,291,409	\$289,043	\$5,001,759	\$135,710	\$135,704	\$4,866,055

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
6/27/2018
Request No. Staff 3-1

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Updated Exhibit 1 to Mr. Ware's Testimony filed on March 28, 2018:

Please provide the specific detailed calculations used in deriving the following Annual Principal and Interest Payment adjustments indicated on this schedule:

- a) 2017 \$340,240
- b) 2018 784,156
- c) 2019 780,799
- d) 2020 647,483

RESPONSE:

A copy of Exhibit 1 in live excel is submitted with these data responses. The calculation of each of the Annual and Principal and Interest Payments detailed above were calculated using the PMT function of excel. The inputs into the PMT function provide the path for calculating each of the Annual Principal and Interest adjustments.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-2

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Updated Exhibit 1 to Mr. Ware's Testimony filed on March 28, 2018
(Cover Letter): Please provide the specific calculation used in determining the \$0.86 monthly increase for single family residential billings.

RESPONSE:

The average single family residential customer uses 8.58 CCF. PWW's rates, as approved in DW16-806 are as follows:

Monthly 5/8" Meter Customer Charge - \$22.58
Volumetric Charge - \$3.66 per CCF
Current Monthly Charge = $\$22.58 + 8.58 \text{ CCF} * \$3.66 / \text{CCF} = \$53.98$

Proposed 2017 QCPAC surcharge of 1.60%

Projected increase in monthly single family residential customer bill = $0.016 * \$53.98 = \0.86

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-3

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company installed 23 renewed services for an amount totaling \$100,454. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget amount of \$40,000 based on 25 renewed services. Therefore, it appears the Company installed 2 less renewed services than anticipated but at a cost which was \$60,454 more than the approved budget amount. Please explain.

RESPONSE:

The budgeted amount for 2017 service replacements was 25 services at \$80,000 (See Exh 1 of Interim QCPAC filing). The \$40,000 in Exhibit 2 was a reflection of the fact that \$31,716 of the original \$80,000 replacement budget reflected costs funded with 2014 Bond money. The 11/17 figure of \$40,000 reflected the portion of 2017 service replacements that the Company projected would be funded with the April 2018 Bond funds. In 2017, as supported by staff audit, the Company replaced 32 services, of which 9 replacements were supported by the 2014 Bond money and 23 replacements were financed from the April 2018 Bond sale. The cost of the 23 service replacements was \$100,454. The budgeted amount of service replacements each year is an estimate based on prior years' run rates and costs. Please note that the cost of a service replacement can vary from around \$2,000 for a short side, out of pavement main to stop service replacement to in excess of \$25,000 for a long side, high traffic road, paved main to stop service replacement. The final cost of service replacements in any year is a function of the number and type services that the Company replaces. Service replacements occur when a service fails, they are not planned, so there is no way to project the final number of service replacements and estimated cost other than to budget using the run rate for service replacements based on prior years' experience.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-4

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company made 5 hydrant replacements for an amount totaling \$18,643. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget amount of \$11,000 based on 10 hydrant replacements. Therefore, it appears the Company made 5 fewer hydrant replacements than anticipated but at a cost which was \$7,643 more than the approved budget amount. Please explain.

RESPONSE:

The budgeted amount for 2017 hydrant replacements was 10 replacements at \$42,000 (See Exh 1 of Interim QCPAC filing). The \$11,000 in Exhibit 2 was a reflection of the fact that \$17,197 of the original \$42,000 replacement budget reflected costs funded with 2014 Bond money. The 11/17 figure of \$11,000 reflected the portion of 2017 hydrant replacements that the Company projected would be funded with the April 2018 Bond funds. In 2017, as supported by staff audit, the Company replaced 8 hydrants, of which 3 replacements were supported by the 2014 Bond money and 5 replacements were financed from the April 2018 Bond sale. The cost of the 5 hydrant replacements was \$18,943. The budgeted amount of hydrant replacements each year is an estimate based on prior years' run rates and costs. The cost of a hydrant replacement can vary widely dependent upon location and whether there is pavement or sidewalk repair that must occur as a result of the replacement. The final cost of hydrant replacements in any year is a function of the number and type hydrants that the Company replaces. Hydrant replacements occur when a hydrant fails, they are not planned, so there is no way to project final number of hydrant replacements and estimated cost other than to budget using the run rate for hydrant replacements based on prior years' experience.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-5

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company made 3 valve replacements for an amount totaling \$53,122. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget amount of \$50,000 based on 10 valve replacements. Therefore, it appears the Company made 7 fewer valve replacements than anticipated but at a cost which was \$3,122 more than the approved budget amount. Please explain.

RESPONSE:

The budgeted amount for valve replacement was 10 replacements at \$50,000 (See Exhibit 1 of Interim QCPAC filing). At the time of the Interim QCPAC filing only one gate had been replaced and that replacement was not funded with 2014 Bond money. In 2017, as supported by staff audit, the Company replaced 3 gate valves at a total cost of \$53,112. The budgeted amount of gate valve replacements each year is an estimate based on prior years' run rates and costs. The cost of a gate valve replacement can vary widely dependent upon location and size. One of the three gate valve replacement in 2017 was a 16" valve in the middle of Amherst Street requiring night work, extensive traffic control, the use of a line stop and two digging crews resulting in the cost of that single valve replacement being \$42,649. The final cost of gate replacements in any year is a function of the number and type of gates that the Company replaces. Gate replacements occur when a gate fails, they are not planned, so there is no way to project final number of gate replacements and estimated costs for those replacement other than to budget using the run rate for replacements based on prior years' experience.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-6

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company made 1,410 leaded meter replacements for an amount totaling \$267,950. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget amount of \$247,266 based on 2,355 leaded meter replacements. Therefore, it appears the Company made 945 fewer leaded meter replacements than anticipated but at a cost which was \$20,684 more than the approved budget amount. Please explain.

RESPONSE:

The budgeted amount for 2017 leaded meter replacements was 2,355 services at \$832,000 (See Exhibit 1 of Interim QCPAC filing). The \$247,266 in Exhibit 2 was a reflection of the fact that \$90,063 of the original \$832,000 replacement budget reflected costs funded with 2014 Bond money and the fact that based on the number of replacements that occurred through November of 2017 that we were projecting fewer replacement than budgeted. The 11/17 figure of \$247,266 reflected the portion of 2017 meter replacements that the Company projected would be funded with the April 2018 Bond funds. In 2017, as supported by staff audit, the Company replaced 1,820 leaded meters, of which 410 replacements were supported by the 2014 Bond money and 1,410 replacements were financed from the April 2018 Bond sale. The cost of the 1,410 leaded meter replacements was \$267,950. The budgeted amount of leaded meter replacements each year is an estimate based on the number and size of lead meters that the Company plans to replace in the budget year. The number of meters that can be replaced is constrained by employee availability. The cost of a meter replacement varies with the size of the meter, the difficulty of the replacement and the location of the replacement. By example, a 5/8 inch meter replaced in Nashua takes about 1 hour to 1.5 hours to replace, based on travel time while a 5/8" meter replacement in Newmarket takes three hours to replace due to travel so while the cost of the new meter is the same the expense associated with labor and truck time varies widely dependent upon location. While the Company targets the number of replacements it hopes to complete at budget time the mix of locations cannot be accounted for without extensive effort so an average time for replacement is used so there is no way to project the final number of leaded meter replacements and estimated cost other than to budget using the run rate for time for a meter change out and assuming that the labor will be available to complete the budgeted number

of replacements. As detailed above the cost of replacing a 5/8" leaded meter can vary from \$150 to \$270 or more dependent upon the location of the leaded meter replacement.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-7

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company replaced 238 failed reading radios for an amount totaling \$22,802. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget amount of \$22,729 based on 280 failed reading radio replacements. Therefore, it appears the Company made 42 fewer failed reading radio replacements than anticipated but at a cost which was \$73 more than the approved budget amount. Please explain.

RESPONSE:

The budgeted amount for 2017 radio replacements was 280 radios at an estimated cost of \$28,000. The \$22,729 in Exhibit 2 was a reflection of the fact that 99 of the 337 failed radios in 2017 were funded with 2014 Bond money. The 11/17 figure of \$22,729 reflected the portion of 2017 radio replacements that the Company projected would be funded with the April 2018 Bond funds. In 2017, as supported by staff audit, the Company replaced 337 radios, of which 99 replacements were supported by the 2014 Bond money and 238 replacements were financed from the April 2018 Bond sale. The cost of the 337 service replacements was \$22,802. The budgeted amount of radio replacements is based on a 1% failure rate. The cost of a replacement varies with the location of the replacement as the travel time to the replacement location can vary from 15 minutes to over an hour (1 way). The final cost of radio replacements in any year is a function of the number and location of radios that the Company replaces. Radio replacements occur when a radio fails, they are not planned, so there is no way to project the final number and location of radio replacements and estimated cost other than to budget using the current 1% run rate for radio replacements based on prior years' experience.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-8

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The Company included an amount of \$176,829 relative to the Raw Water Transmission Main Project in its request for QCPAC recovery. Further, the schedule indicates that this project was financed by an SRF loan approved in DW 15-046. However, based on the Company's DW 17-179 Interim QCPAC filing, the Commission approved no budget amount for this particular project for 2017. Also, it appears that the principal and interest associated with the SRF Loan which financed this project is already being recovered by the Company as part of the DW 16-806 Step Adjustment.

- a) Please provide an explanation for the amounts expended on this project during 2017.
- b) Please explain and justify the inclusion of this amount in the Company's overall proposed QCPAC recovery request.

RESPONSE:

a) These charges reflect the Company's expenses associated with internal engineering labor, union labor, truck charges, direct overhead associated with engineering and labor and overhead, as well as AFDUC charges associated with the design, inspection and contractor coordination associated with this project. As explained in the Change/Addition/Deletion column (P) of exhibit 2 these expenses are not fundable with SRF funding. SRF funding will only pay for external engineering costs.

b) PWW internal staff provides full service engineering, so the Company does not engage an outside engineering firm to complete the design, inspection and coordination. PWW staff costs, inclusive of direct overhead and truck charges is about 50% that of a consulting engineering firm, hence it is much more cost effective for PWW to use its own staff to complete the engineering, rather than using an external consultant. This staff time must be compensated through the QCPAC process as it is not part of PWW's operating expenses, as the time is capitalized against the project. As such, the costs associated with capitalized labor on SRF projects must be recovered through the bonds issued each March/April.

Pennichuck Water Works, Inc.

DW 18-022

2018 QCPAC

Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-9

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company expended a total of \$306,978 on Nashua and Amherst paving projects during 2017. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a total budget of \$412,789 relative to Nashua and Amherst paving projects for 2017, resulting in a budget versus actual variance of \$(105,811). Please explain.

RESPONSE:

- a) The Company projects that paving will proceed once the City makes a determination about exactly how they want street restoration to occur. The Company projected in November of 2017 that it would have \$417,789 in paving costs associated with completed water main projects. At the time of the estimate the Company did not have final paving guidance from either the City or the Town of Amherst in regards to final paving requirement. The actual amount invested by the Company in Nashua and Amherst paving projects was \$306,978. It appears that the majority of paving variance of \$105,811 is related to the Orange Street project where the Company is still awaiting a decision from the City of Nashua regarding on how and when the paving is to be restored.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-10

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule appears to indicate that the Company expended a total of \$168,432 on the Amherst Street Area Water Main Replacement Project during 2017 which was financed by an SRF Loan approved in DW 16-236. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21-22), the Commission approved a total budget of \$856,000 relative to this project for 2017 to be financed via \$767,357 in remaining SRF debt and \$89,000 of the Company's 2018 bond financing. (See also Mr. Ware's testimony in DW 17-179, Bates 13, Lines 4-8.)

- a) Please explain why the actual amount expended for this project during 2017 appears to be \$687,568 less than the approved budget.
- b) In light of the above, please provide further explanation with regard to the Company's response to Staff Data Request 1-2, where it stated that "[a]ll SRF funds associated with the Amherst Street project were fully drawn down in 2017 . . ."

RESPONSE:

At the time of the interim QCPAC filing the Company estimated that the project costs for the portions of the Amherst Street project that were completed in 2017 would be \$856,000. In fact, the actual expenditures for the work completed on the Amherst Street project in 2017 totaled \$935,789 inclusive of internal labor and overhead.

The Company's 2018 QCPAC filing only sought to recover the principal and interest associated with the \$168,432 in costs expended on this project that were not funded with the \$1,400,000 SRF financing. These costs, for internal labor and overhead associated with the Amherst Street project, in addition to any contractor costs for this project that exceeded the available loan amount of \$1,400,000, were included as part of the 2018 QCPAC filing as it mistakenly believed that the principal and interest allowed in the Step rate granted in DW16-806 associated with the Amherst Street SRF loan of \$1,400,000 was included in the \$767,357 of funds expended on the Amherst Street project in 2017. Upon review of Schedule 5 of the 1604.08 schedules associated with the settlement in DW16-806 it was determined that the principal and interest allowed in the Step rate increase did not include the full annual principal and interest payment of \$61,400 associated with \$1,400,000 Amherst Street SRF loan. Therefore the Company needs to recover the principal and interest in the 2018 QCPAC surcharge associated with the \$767,357 in SRF debt originally sought in the interim QCPAC filing, but inadvertently dropped from the 2018 QCPAC filing.

A revised Exhibit 2 and Schedule A are attached to this data request reflecting a correction of this error.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-11

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company expended \$163,831 on the Sweet Hill new supplemental well project during 2017. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a budget of \$80,000 relative to the Sweet Hill supplemental well project for 2017, resulting in a budget versus actual variance of \$83,831. Please explain.

RESPONSE:

The \$80,000 approved by the Commission was just for the dollars to be expended on this project in 2017. The project was a multiyear project that covered the years 2015 through 2017. The project included the exploration, development, testing, permitting, and construction/connection to the Sweet Hill community water system required three years to complete for the new well to go into service (used and useful). The Company budgeted the following:

2015: \$122,400
2016: \$50,000
2017: \$80,000

Thus, the total budget was \$252,400. The final project was completed for \$163,831 which was less than the multiyear budgeted amount.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-12

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 23): The schedule indicates that the Company expended a total of \$773,383 on water main replacements in conjunction with city sewer projects during 2017. However, based on the Company's DW 17-179 Interim QCPAC filing (Bates 21), the Commission approved a total budget of \$560,643 relative to main replacements in conjunction with city sewer projects for 2017, resulting in a budget versus actual variance of \$212,740. Please provide a detailed explanation regarding this variance.

RESPONSE:

The \$212,740 difference between the interim 2017 QCPAC filing and the 2018 QCPAC filing is a combination of the following items:

1. The Company missed the inclusion of Gillis Street in the interim 2017 QCPAC filing in the amount of \$71,987.
2. Lowell Street – The final paving the Company anticipated being completed in 2018 was completed in 2017, resulting in an increase of \$39,065 over the 2017 interim QCPAC budget number of \$60,000.
3. The remaining difference of \$101,688 is a combination of expenses associated with project change orders created by field conditions that varied from the original contract and the timing of and impact of permanent pavement versus temporary pavement.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-13

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 24): The Company included an amount of \$106,838 relative to the Howard Street Emergency Main Replacement Project in its request for QCPAC recovery. However, based on the Company's DW 17-179 Interim QCPAC filing, the Commission approved no budget amount for this particular project for 2017.

- a) Please provide an explanation for the amount expended on this project during 2017.
- b) Please explain and justify the inclusion of this amount in the Company's overall proposed QCPAC recovery request.

RESPONSE:

- a) This was for the replacement of a section of 2" galvanized water main that was found to be totally corroded on the inside and heavily pitted on the exterior when this section of water main was connected to, as part of the Company's Worcester Street area water main replacement project. The replacement of this water main was added as a change order to this Worcester Street Area Water Main replacement project and the replacement was completed in 2017. This replacement project, which was added in the Spring of 2017 was missed when the 2017 interim QCPC filing was assembled.
- b) The water main in question needed to be replaced. Howard Street was going to be repaved as part of the Worcester Street Area water main replacement. Given the composition and condition of the water main it would have been imprudent not to replace this section of water main, at this time, and before pavement and restoration of the street was completed. The water main was replaced and was used and useful in 2017. The water main replacement was paid for with the funds from the April 2018 Bond proceeds.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-14

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 24): The Company included an amount of \$47,332 relative to the Hi-Lo Generator in its request for QCPAC recovery. However, based on the Company's DW 17-179 Interim QCPAC filing, the Commission approved no budget amount for this addition for 2017.

- a) Please provide an explanation for the amount expended on this addition during 2017.
- b) Please explain and justify the inclusion of this amount in the Company's overall proposed QCPAC recovery request.

RESPONSE:

- a) The \$47,332 was spent to purchase and install a propane powered automatic standby electric generator with an underground propane storage tank for the Hi-Lo Community Water System booster station and wells.
- b) The Hi-Lo Station had a temporary, trailer mounted emergency generator for backup power. The trailer mounted generator was one that was acquired with the Consumers Water acquisition in 1998. The trailer mount generator failed in the late fall of 2017 and was not repairable. The trailer mounted generator was replaced with a permanent, propane fired emergency generator, with an automatic transfer switch to insure continuity of water service through a power outage.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-15

Date of Response: 6/27/2018
Witness:

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 24): The Company included an amount of \$69,790 relative to the St. Joseph's land purchase in its request for QCPAC recovery. However, based on the Company's DW 17-179 Interim QCPAC filing, the Commission approved no budget amount for this acquisition for 2017.

- a) Please provide an explanation for the amount expended on this acquisition during 2017.
- b) Please explain and justify the inclusion of this amount in the Company's overall proposed QCPAC recovery request.

RESPONSE:

- a) The Company purchased 3 parcels of land from St. Joseph's Hospital. The Company had negotiated the purchase of these parcels in 2014 but was not able to acquire those lots at that time because the Hospital could not provide clear title to the lots. The three lots in question are located off of Manchester Street in Nashua and are located within 500' of Supply Pond. These lots were part of a 19 lot subdivision of small lots that is surrounded by land owned by Pennichuck Water Works. Pennichuck now owns (after the acquisition of the St. Joseph Hospital lots) 16 of the 19 lots. Pennichuck is continuing its efforts to acquire the remaining 3 lots from private owners, as all of this land is located within a very critical part of the watershed, adjacent to Pennichuck's primary source of supply. The Hospital finally was able to obtain clear title to the lots in 2017, and the Company was able to close on the purchase of these lots from St. Joseph Hospital for their tax appraised values, once the Hospital produced clear title to the lots.
- b) The purchase of watershed land has always been deemed prudent and recoverable in rates. The Company did not have control over when the land would be available for purchase. The Company purchased the land when it became available and borrowed the money to pay for the land and as such needs to recover the principal and interest on the purchased land as part of the current QCPAC filing.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-16

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 24): The schedule indicates that the Company expended a total of \$492,133 on Asset Management – Phase 4 during 2017. However, based on the Company’s DW 17-179 Interim QCPAC filing (Bates 22), the Commission approved a total budget of \$430,000 relative to Asset Management – Phase 4 for 2017, resulting in a budget versus actual variance of \$62,133. Please provide a detailed explanation regarding this variance.

RESPONSE:

The original 2017 budget for the Asset Management Project was estimated at \$736,000. The 11/2017 update (DW 17-179) estimated that \$430,000 based dollars spent through the end of September 2017 and projections of staff and consultant availability for the remainder of 2017. However, staff and consultant resources became available and the Company was able to advance the Asset Management further than expected in the final two months of 2017.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-17

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 1, 2017 QCPAC Capital Expenditures (Bates 24): The Company included an amount of \$113,424 relative to a network infrastructure replacement of virtual servers and network switch stack in its request for QCPAC recovery. However, based on the Company's DW 17-179 Interim QCPAC filing, the Commission approved no budget amount for these network replacements for 2017.

- a) Please provide an explanation for the amount expended on these replacements during 2017.
- b) Please explain and justify the inclusion of this amount in the Company's overall proposed QCPAC recovery request.

RESPONSE:

- a) The network infrastructure that was upgraded was either no long supported or scheduled to be unsupported by the manufacturer sometime in 2018. The network infrastructure project was part of the Company's 2018 capital expenditure plan. The network infrastructure project was swapped with a 2017 Capex project "Click Mobile Upgrade", which was moved to 2018. The Click Mobile Upgrade project was moved to 2018 from 2017 because it was determined that it could not be started and completed by the end of 2017 which would result in the project not being used and useful by the end of the 2017 fiscal year, and as a result, the debt incurred for this project could not be recovered as a part of the QCPAC until 2019. The infrastructure upgrade was pulled in from 2018, into 2017, and completed by the end of the year.
- b) The network infrastructure project needed to be completed for the reasons stated above and was moved forward one year because the original project could be completed and used and useful by the end of 2017, such that the debt incurred to complete the project could be recovered as part of the 2018 QCPAC filing.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-18

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26): The Company has budgeted \$90,000 for the replacement of a Foreman Truck during 2018. Please explain the basis for the budgeted amount.

RESPONSE:

The budget was based on quotes from Kenworth Trucks, Reading Body and Hews manufacturing. The foreman's truck will consist of the chassis for a 7-yard dump truck with a custom manufactured Reading body outfitted to handle and store inventory and field equipment. The Truck will also have a body mounted air compressor.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-19

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26): The Company indicates that it is anticipating exchanging 2,355 new meters in place of lead meters for a total budget of \$532,000 during 2018.

- a) Please provide the basis for the anticipated number of meters to be replaced.
- b) Please explain how the Company derived the budgeted amount of \$532,000.
- c) Please indicate how many more years the Company anticipates to completely replace of all of its lead meters.

RESPONSE:

- a) The basis of the Company budgeting for 2,355 leaded meters being replaced with new meters in 2018 is based upon available staff time and resources available to perform this task, in addition to the other tasks the distribution staff needs to complete in 2018.
- b) The budget is based upon 1.5 hours of labor, with direct overhead and truck time, plus the cost of a new meter.
- c) As of June 1, 2018 the Company has the following quantities and sizes of leaded brass meters that need to be replaced:

- 2,901 – 5/8 meters
- 107 – 3/4" meters
- 4 – 1" meters
- 45 – 1-1/2" meters
- 3 - 2" meters
- 12 - 3" meters
- 7 - 4" meters
- 5 - 6" meters

The Company projects that these remaining meters will be completely replaced by the end of 2020.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-20

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26): Please explain the basis used for deriving budget amounts for the following anticipated paving projects during 2018:

- a) Gillis Street \$143,000
- b) Orange Street (Concord Street to Lock Street) 96,000
- c) Fowell Avenue 59,400
- d) Mulvanity Street – Emergency Replacement 51,700

RESPONSE:

All streets require different types and lengths of restoration depending upon City of Nashua involvement and other participating utilities. Mulvanity Street represents the most expensive option, where the Company needed to replace a water main without any pavement restoration costs being shared by the City of Nashua and/or other utilities performing work at the same time.

a) Gillis Street: Restore approximately 1,175 LF of water main trench with gravels, a 1/3 share of full width base pavement and finished pavement at \$100 per linear foot plus 10% for PWW engineering, management, and inspection.

b) Orange Street: Restore approximately 662 LF of water main trench with full depth base pavement and finished pavement at \$120 per linear foot plus 10% for PWW engineering, management, and inspection.

c) Fowell Avenue: Restore approximately 900 LF of water main trench with required gravels, and shared base pavement and finished pavement with the City of Nashua at \$60 per linear foot (PWW share) plus 10% for PWW engineering, management, and inspection.

d) Mulvanity Street: Restore approximately 285 LF of water main trench with required 3 foot cutbacks, gravels, full depth base pavement and finished pavement at \$160 per linear foot plus 10% for PWW engineering, management, and inspection.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-21

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26): The Company has indicated a budget amount of \$300,000 relative to Asset Management during 2018:

- a) Please provide further explanation regarding the overall purpose of this project.
- b) Please explain the specific asset additions relative to Asset Management that the Company anticipates acquiring during 2018.
- c) Please explain the basis used for deriving the budget amount of \$300,000.
- d) There does not appear to be an Asset Management line item included in the Company's proposed 2019 budget (Bates 29-30). Please explain.
- e) There appears to be an Asset Management upgrade line item for \$90,000 included in the Company's proposed 2020 budget (Bates 33). Please explain.

RESPONSE:

a Asset Management is an integrated process of decision making, planning and control over the acquisition, use, maintenance, and disposal of capital assets to maximize their service and benefits, and to minimize their related risks and costs over the life of the asset. The purpose of the Asset Management program is to better turn data into information, transmit and share project information to and from the field, track and post direct operating expenses to assets as opposed to activities, assess/evaluate the lifecycle costs of a particular asset or class of assets, make decision on capital expenditures and maintenance activities based on how critical an asset is and the level of service a particular asset needs to deliver to stakeholders. The Company's "Asset Management" program consists of three interdependent components including a Geographical Information System ("GIS") in order to improve record dissemination of buried assets, a Computerized Management and Maintenance System ("CMMS") to plan and track work and associated costs to specific Company assets, and finally a means to convert our operations from a paper work order system to an electronic work order system otherwise known as DPaC (Data Presentation and Collection).

The Asset Management program has and will facilitate asset data extraction and analysis to enable the conversion of operational and financial data to useful decision making information. Armed with asset-specific information, the Company's ability to predict and plan for the replacement of aging infrastructure will improve. In addition, the Company will continue to seek low-cost financing through the NHDES State Revolving Fund for capital projects. A new requirement for this funding is that any utility seeking SRF financing must have an appropriate level of Asset Management in place to qualify for SRF loans. As the Company continually seeks the lowest cost of funding for capital projects, its ability to apply for and access SRF loan funds

is essential. Additionally, the NHDES supported the Company with two grants of \$15,000 each in 2013 and 2015 for the development of its Asset Management program.

b) Asset Management is a program to support capital asset decision making throughout the Company. It is not a physical asset. Increased functionality/utilization will be achieved in 2018 including but not limited to: (1) an increase in the number of paper processes being converted to a paperless environment, (2) completion of a required level of service, risk, likelihood of failure, consequence of failure and criticality analysis of all tracked Company assets, and (3) the start of developing the Company's overall Asset Management plan.

c) The 2018 budget is the \$300,000 plus approximately \$261,000 carried over from 2017 for a total budget of \$561,000. The basis for the budget is based upon the goals and needs of the project and the Company's assessment of the cost to achieve them, either with internal staff resources or consultants.

d) The Company anticipates the work planned for 2018 to carry over into 2019 along with the associated budget. The scope and magnitude of that carry over will be assessed as 2018 progresses.

e) The Company has been informed by the vendor of the CMMS (Oracle WAM) that there will be a software upgrade in the 2020 timeframe. The extent of the upgrade and the work required to realign other Asset Management systems, including GIS and those associated with timekeeping and inventory, is not well known at this time. What is known is that there will be a need in 2020, thus the budget placeholder of \$90,000 is a reasonable guess at this time, and that amount will be adjusted as more information is received from the vendor.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-22

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26) and Company's response to Staff Data Request 1-1 (b)(iii) and (c):

- a) Northwest Water Main Improvements - Tinker Road: Please explain the \$184,100 difference between the Company's response to Staff 1-1(b)(iii) totaling \$290,900 and the amount indicated on Bates 26 of \$475,000.
- b) Lake Street: Please explain the \$97,940 difference between the Company's response to Staff 1-1(c) totaling \$1,317,260 and the amount indicated on Bates 26 of \$1,415,200.

RESPONSE:

- a) There are two corrections to the Tinker Road high level estimate included in Staff 1-1(b)(iii). The footage of AC water main removal should have been 825', not 800' and the \$50 per LF removal and disposal cost, was removal only. The cost to dispose of the 12" AC water main to haul and dispose of the AC water main is estimated at \$235 per LF. This changes the \$40,000 cost to remove and dispose to \$235,125, resulting in a high level estimated project cost of \$476,025, which was rounded to \$475,000 for budget purposes.
- b) The difference between the High level estimate presented in Staff 1-1(c) of \$1,415,200 is a \$100,000 contingency the engineer added for the potential for night work on this project. The engineer's goal is always at a high level budget estimate to be close to the final cost, but to be conservative, such that the actual project cost comes in less than estimated.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-23

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 26): For each of the following proposed main replacement projects, please provide a brief narrative regarding the placement of the specific criteria relative to each which led to their ranking for replacement during 2018:

- a) Gilman Street \$ 655,000
- b) Factory Street 642,000
- c) Coburn Woods 1,024,400
- d) Northwest Water Main Improvements: Manchester Street 600,000
- e) Northwest Water Main Improvements: Route 101A and Route 121 500,000
- f) Northwest Water Main Improvements: Tinker Road 475,000
- g) Lake Street 1,415,200

RESPONSE:

a) Gilman Street includes the replacement of approximately 1,470 LF of 6 inch diameter unlined cast iron pipe installed in 1924. The Gilman Street main is in the vicinity of St. Joseph's Hospital (a critical customer). The replacement with 12 inch ductile iron will improve water delivery and minimize water quality impact due to unlined cast iron, which is experiencing internal corrosion.

b) Factory Street includes the replacement of approximately 625 LF of 8 inch diameter cast iron main and 950 LF of 12 inch cast iron main with 16 inch diameter ductile iron main. The project replaces century old mains in poor hydraulic condition (which has extensive internal corrosion buildup), with a higher capacity ductile iron water main. The replacement will improve water delivery and water quality in a heavily developed area of Nashua. The work is being coordinated with other private utilities and the City of Nashua street paving program.

c) Coburn Woods has numerous dead end cul-de-sacs with substandard piping materials which have a history of chronic leakage and pipe failure. This results in costly repairs and poses a contamination risk when a failure occurs, or the system is depressurized by a failure elsewhere in the water system.

d) Manchester Street includes the addition of approximately 1,775 LF of 24 inch diameter ductile iron pipe to improve water delivery to the Nashua Core Northwest High Pressure System.

e) Route 101A and Route 121 Closes two long “dead end” pipelines feeding the Amherst area of the Nashua Core Northwest High Pressure System. The addition of approximately 2,300 LF minimizes the number of businesses and residences being without water during a main break by now having two directions of water flow. By linking the two dead ends water delivery is improved.

f) Tinker Road includes the replacement of approximately 1,000 LF of 16 inch diameter asbestos cement pipe with 24 inch diameter ductile iron pipe to improve water delivery to the Nashua Core Northwest High Pressure System

g) Lake Street is being completed in association with City of Nashua sewer replacement program, storm water upgrades and pavement resurfacing, as well as other private utility work (natural gas). The Company is replacing approximately 2,950 LF of 6 inch diameter cast iron pipe installed prior to 1920.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-24

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 27): The Company indicates that it is anticipating replacement of 4 water supply vehicles for a total budget amount of \$210,000 during 2018.

- a) Please provide further explanation regarding the necessity of these replacements.
- b) Please explain the basis for the budgeted amounts.

RESPONSE:

- a) Vehicle replacements are projected each year based upon the age of the vehicle, the mileage on the vehicle, the maintenance history of the vehicle, the type of vehicle use and the condition of the vehicle chassis and body. The four vehicles that are slated for replacement in 2018 are as follows:
 - 1. A 2011 ¾ ton 4 wheel drive pickup with 155,000 miles, with some body rust.
 - 2. A 2008 ¾ ton 4 wheel drive pickup with 108,000 miles, and significant chassis rust.
 - 3. A 2010 ¾ ton 4 wheel drive pickup with 143,000 miles, and some body rust.
 - 4. A 2010 ¾ ton 4 wheel drive pickup with 121,000 miles, and some body rust.
- b) The basis of the budgeted estimate is list price for a heavy duty ¾ ton 4 wheel drive pickup with tool boxes and a towing package, inclusive of outfitting the trucks with lettering and a towing package. Quotes for vehicles are sought from multiple dealers when the vehicles are purchased, in an effort to ensure the best possible pricing.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-25
(SG)

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Exhibit 2, Page 2, 2018 QCPAC Capital Expenditures (Bates 27): The Company indicates a budget amount of \$140,000 for “ClickMobile Move to iPads” during 2018.

- a) Please provide further explanation regarding the necessity of these replacements.
- b) Please explain the basis used for deriving the budget amount of \$140,000.

RESPONSE:

- a) At the time of its’ original implementation in 2014, Click Mobile could not run on an iPad device, as a result the Company implemented Click Mobile on Panasonic Toughbooks, which are a Windows platform device. Entering 2018, the Company was experiencing increasing levels of field failures of the Toughbooks, as well as limitations on the daily battery life of the devices (limiting their overall effectiveness), and Click Mobile has since released a version of its application that is operational on the iPad platform. The Company has made a decision to move to the iPad platform based upon good experience with the iPad in the field, in other parts of the Company. The migration from a Windows to IOS platform will allow users to only have one device in the field, as the field technicians also use other applications that run on an iPad device.
- b) The basis for the \$140,000 budget for this project is as follows:

34 iPad Pros @ \$800 each	= \$ 27,200
External consulting	= \$102,800
Internal labor with DOH	= <u>\$ 10,000</u>
Estimated project cost	= \$140,000

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-26

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 3, 2019 QCPAC Capital Expenditures (Bates 29): Please explain the basis used in deriving the \$5.5 million preliminary budget amount indicated for the Merrimack River Intake project anticipated in 2019.

RESPONSE:

The budget for the Merrimack River Intake was developed in 2016 in consultation with our engineering consultants and companies experienced in the construction of river intakes. The project is entering the final stages of design and the current budget may be adjusted based upon the final design.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-27

Date of Response: 6/27/2018
Witness: John J. Boisvert

REQUEST: Re: Exhibit 2, Page 4, 2020 QCPAC Capital Expenditures (Bates 32): Please explain the basis used in deriving the \$3,080,000 preliminary budget amount indicated for the Kessler Farm Tank Replacement anticipated in 2020.

RESPONSE:

The Company consulted with companies that construct the type of water tank contemplated for this project. Their expertise, combined with the Company's experience with several other projects like Kessler Farm, allowed the Company to develop the preliminary budget estimate.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-28

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Company's response to Staff Data Request 1-5: Based upon the presentation to the Board of Directors included in the Company's response, please reconcile and explain the following with regard to Page 8 of that document relative to PWV's 2018, 2019, and 2020 Capex Budgets:

- a) It appears that the 2018 capital budget for PWV presented to and approved by the Board was \$10.138 million. However, the 2018 capital budget presented by the Company on Bates 26-27 of its filing totals \$12.054 million; a difference of \$1.916 million.
- b) It appears that the 2019 capital budget for PWV presented to and approved by the Board was \$12.704 million. However, the 2019 capital budget presented by the Company on Bates 29-30 of its filing totals \$12.003 million; a difference of \$(0.701) million.
- c) It appears that the 2020 capital budget for PWV presented to and approved by the Board was \$9.070 million. However, the 2020 capital budget presented by the Company on Bates 32-33 of its filing is \$9.953 million; a difference of \$0.883 million.

RESPONSE:

I have attached Exhibit 2, 2018 Board approved PWV budget, Exhibit 3, 2019 Board approved PWV budget and Exhibit 4, 2020 Board approved budget as the basis for the for the Company's responses to Staff 1-5a), 1-5b) and 1-5c). Please note that each of the Budget worksheets has a column titled "Total Budgeted Amount (including O/H) (column C) and a column titled "Total 2018/2019/2020 incl O/H" (column P). The Board approved Capital Expenditure detailed in Company Controller's presentation were the amounts carried in the "Total 2018/2019/2020 incl O/H" column. This column is always less than or equal to the "Total Budgeted Amount" column each year as the "Total Budgeted Amount" column reflects the amount of investment the Company expects to make to complete the total project, which may include a carryover of expenditures into the following year (such as paving costs). For purposes of the QCPAC filing I used the "Total Budgeted Amount (including O/H)" column as opposed to the "Total 2018/2019/2020 incl O/H" column resulting in most of the differences noted between the QCPAC filing and the Board approved budget. With this explanation in place here are the requested responses:

a) 2018 QCPAC filing amount -	\$ 12.054 million
Correct QCPAC filing amount for Asset Mgt from 0.30 to 0.33 million -	+ \$ 0.030 million
Less Reserve for contingent liability for carry over paving costs -	- \$ 0.635 million
Less Difference between Total 2018 Budget Amount and Total 2018 incl O/H columns	- \$ 1.312 million
2018 Board Approved Budget	<u>= \$ 10.137 million</u>
b) 2019 QCPAC filing amount -	\$ 12.003 million
2019 Board Approved budget amount for Bowers Pond Spillway Reconstruct (project in budget twice) -	+ \$ 1.100 million
Less Difference between Total 2019 Budget Amount and Total 2019 incl O/H columns	- \$ 0.398 million
2019 Board Approved Budget	<u>= \$ 12.705 million</u>
c) 2020 QCPAC filing amount -	\$ 9.953 million
2019 Board Approved budget amount for Lake Street final paving (project in 2019 budget -	+ \$ 0.339 million
Less Difference between Total 2020 Budget Amount and Total 2020 incl O/H columns	- \$ 1.222 million
2020 Board Approved Budget	<u>= \$ 9.070 million</u>

I have revised the QCPAC schedules to reflect the Board approved budgeted amount less the doubled amounts for the work on Bowers Pond Spillway and the final paving associated with the Lake Street Water Main replacement project. I believe the use of the Board approved budgeted total is what the Company would expect to capture in the QCPAC surcharge based on the fact that the dollars represented in the Board Approved budget reflect the Company's estimate of what it expects to be used and useful in that calendar year.

Work Description		Total Budgeted Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2018 incl O/H
2017 Distribution Dept. Carryover/Multi-year Projects															
Replace Forman Truck	Existing 2012 Truck has been a safety and maintenance problem	90.00				90.00									-
Subtotal 2017 Distribution Dept. Carryover/Multi-year Projects -		90.00	0.00	0.00	0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00
New 2018 Distribution Dept. Projects															
10 New Services	Single Family, Owner Build, New Homes	46.00					4.60	9.20	9.20	9.20	9.20	4.60			46.00
20 Renewed Services	Replacement of failed services	92.00				4.60	9.20	13.80	18.40	18.40	13.80	9.20	4.60		92.00
10 Hydrants	Replacement of non functional hydrants	50.00					5.00	10.00	10.00	10.00	5.00	5.00	5.00		50.00
10 Valve Replacements	Replacement of Failed Gate Valves	30.00				3.00	3.00	3.00	3.00	6.00	6.00	3.00	3.00		30.00
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers (280)	50.00	2.00	3.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	3.00	50.00
480 New Meters (growth) 5/8"-2" (CORE & CWS, included 200 PFOA)	New meters for new customers, including PFOA	114.00	2.00	2.00	4.00	8.00	18.00	20.00	20.00	16.00	10.00	8.00	4.00	2.00	114.00
2,355 New Meters for Lead Meter exchanges (PWW-CORE & CWS) 5/8"-6"	Replace High lead brass meter with new no lead brass meter	532.00	88.00	70.00	66.00	44.00	22.00	22.00	22.00	22.00	22.00	44.00	44.00	66.00	532.00
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	10.00				10.00									10.00
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles	60.00				60.00									60.00
1 Service Truck - New	Service Truck for 1 new ops employees	35.00		35.00											35.00
Replacement of Meter Supervisor Truck (#14)	Replace 7 year old pick up with 167,000+ miles with small SUV	28.00					28.00								28.00
Replace Valve/vac trailer unit	Existing unit has reach the end of its usable life	65.00						65.00							65.00
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment	39.00						39.00							39.00
Pipe Saws (5)	Ongoing small equipment replacement - run rate	6.00				6.00									6.00
Metal Detectors (6)	Ongoing small equipment replacement - run rate	7.00			7.00										7.00
Add Air Conditioning to Mechanics Bay	Security Project	52.00	6.00				46.00								52.00
Four trench boxes	Four trench boxes	20.00			20.00										20.00
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW	85.00							30.00	55.00					85.00
Subtotal New 2018 Projects -		1,321.00	98.00	110.00	100.00	140.60	140.80	187.00	117.60	141.60	71.00	78.80	64.60	71.00	1,321.00
Total 2018 Capital Projects Budget for Distribution Department -		1,411.00	98.00	110.00	100.00	230.60	140.80	187.00	117.60	141.60	71.00	78.80	64.60	71.00	1,411.00
2017 Engineering Dept. Carryover/Multi-year Projects															
Elm St	Elm St Water Main Replacement	436.00				100.00	200.00	116.00							416.00
Monroe Street	Monroe Street Water Main Replacement	131.00					122.00								122.00
West Pearl Street	West Pearl Street Water Main Replacement	109.00						100.00							100.00
Gillis St	Final Paving, Water main installation completed in 2017	143.00						143.00							143.00
Orange St (Concord St to Lock St)	Final Paving, Water main installation completed in 2017	96.00						96.00							96.00
Buchanan St	Final Paving, Water main installation completed in 2017	36.60							36.60						36.60
Lincoln Ave	Final Paving, Water main installation completed in 2017	52.30							52.30						52.30
Nutt St	Final Paving, Water main installation completed in 2017	39.60							39.60						39.60
Circle Ave	Final Paving, Water main installation completed in 2017	11.00							11.00						11.00
Pratt St	Final Paving, Water main installation completed in 2017	47.00							47.00						47.00
Zellwood Ave	Final Paving, Water main installation completed in 2017	25.00							25.00						25.00
Faxon St	Final Paving, Water main installation completed in 2017	6.00							6.00						6.00
Fifield St	Final Paving, Water main installation completed in 2017	4.40							4.40						4.40
Fowell Ave	Final Paving, Water main installation completed in 2017	59.40							59.40						59.40
Terrace Street	Final Paving, Water main installation completed in 2017	5.20								5.20					5.20
Beard St	Final Paving, Water main installation completed in 2017	16.10								16.10					16.10
Green St	Final Paving, Water main installation completed in 2017	3.10								3.10					3.10
Warren St	Final Paving, Water main installation completed in 2017	11.00								11.00					11.00
Lowell St	Final Paving, Water main installation completed in 2017	23.00								23.00					23.00
Lemon St	Final Paving, Water main installation completed in 2017	4.40								4.40					4.40
Mulvantly St - Emergency Replacement	Final Paving, Water main installation completed in 2017	51.70									51.70				51.70
Asset Management	Reserve for contingent liability for paving costs	(634.80)	-	-	-	-	(116.00)	(255.30)	(108.40)	(62.70)	(92.40)	-	-	-	(634.80)
	Asset Management	330.00	55.00	55.00	55.00	55.00	55.00	55.00							330.00
Subtotal 2017 Engineering Department Carryover/Multi-year Projects -		1,006.00	55.00	55.00	55.00	155.00	261.00	254.70	172.90	0.10	(40.70)	-	-	-	968.00
New 2018 Engineering Dept. Projects															
Gilman Street	Water Main Replacement	655.00				200.00	200.00	75.10							475.10
Ritter Street	Water Main Replacement	223.00							161.50						161.50
Woodward Street	Water Main Replacement	131.00								95.30					95.30
Factory Street	Water Main Replacement	642.00								200.00	200.00	87.00			487.00
Pennichuck Street	Water Main Replacement	53.00											39.90		39.90
Fossa Avenue	Water Main Replacement	80.00													80.00
Russell Avenue	Water Main Replacement	290.00				46.20	237.80								46.20
Taylor Street (Main St to Fifield)	Water Main Replacement	258.00						171.80							237.80
Burnett Street	Water Main Replacement	238.00							172.80						171.80
Field Street	Water Main Replacement	87.00								71.70					172.80
Fernwood Street	Water Main Replacement	116.00								159.00					71.70
Revere Street	Water Main Replacement	239.00													159.00
Stevens Street	Water Main Replacement	293.00									191.00				191.00
Evergreen Street	Water Main Replacement	66.00										40.00			40.00
Morton Street	Water Main Replacement	114.00										69.30			69.30
Park Avenue	Water Main Replacement	132.00											94.00		94.00
												100.00	32.00		132.00

Pennichuck Corporation and Subsidiaries
PWW Capital Expenditure Budget - 2018
(\$000)
Staff Data Request 3-28
Exhibit 2

Work Description		Total Budgeted Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2018 incl O/H
Coburn Woods (all side streets)	Water Main Replacement	1,024.40				100.00	250.00	250.00	250.00	174.30					1,024.30
Northwest Water Main Improvements	Water Main looping	1,575.00	20.00	20.00	100.00	100.00	200.00	200.00	250.00	250.00	200.00	200.00			1,540.00
Lake Street Area Water Main Replacements	Lake Street Area Water Main Replacements	1,415.20				50.00	200.00	300.00	300.00	200.00	35.20				1,085.20
Outside GIS Consulting Services	Outside GIS Consulting Services	73.00	5.00	5.00	8.00	8.00	8.00	8.00	4.00	4.00	8.00	8.00	4.00	3.00	73.00
Water Modeling Consulting	Water Modeling Consulting	50.00						100.00	10.00	10.00	10.00	10.00			140.00
Trimble R2 Units	Trimble R2 Units	13.00						13.00							13.00
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	5.00						5.00							5.00
Replace Jeep with Pickup	Replace Jeep with Pickup	30.00					30.00								30.00
Replace Ranger Pickup	Replace Ranger Pickup	30.00					30.00								30.00
Subtotal New 2018 Projects -		7,833	25.00	25.00	108.00	504.20	1,155.80	1,122.90	1,148.30	1,164.30	644.20	514.30	169.90	3.00	6,584.90
Total 2018 Capital Projects Budget for Engineering Department -		8,839	80.00	80.00	163.00	659.20	1,416.80	1,377.60	1,321.20	1,164.40	603.50	514.30	169.90	3.00	7,552.90
2017 Water Supply Dept. Carryover/Multi-year Projects															
Subtotal 2017 Water Supply Department Carryover/Multi-year Projects -		-	-	-	-	-	-	-	-	-	-	-	-	-	-
New 2018 Engineering Dept. Projects															
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	60.00			15.00			15.00		15.00				15.00	60.00
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	15.00			3.75			3.75		3.75				3.75	15.00
Misc. Structural Improvements	Misc. Structural Improvements	20.00			5.00			5.00		5.00				5.00	20.00
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	20.00			5.00			5.00		5.00				5.00	20.00
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	30.00			7.50			7.50		7.50				7.50	30.00
Well Rehabilitation	Well Rehabilitation	50.00			12.50			12.50		12.50				12.50	50.00
WTP Structural/HVAC	WTP Structural/HVAC	10.00			2.50			2.50		2.50				2.50	10.00
Purchase new lab equipment	Purchase new lab equipment	20.00			5.00			5.00		5.00				5.00	20.00
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	10.00			2.50			2.50		2.50				2.50	10.00
Replace Vehicle	Replace Vehicle	65.00								65.00					65.00
Replace Vehicle	Replace Vehicle	65.00								65.00					65.00
Replace Vehicle	Replace Vehicle	40.00								40.00					40.00
Replace Vehicle	Replace Vehicle	40.00								40.00					40.00
WTP Perimeter Fence	WTP Perimeter Fence	80.00				80.00									80.00
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering	90.00									45.00	45.00			90.00
Camera system upgrade	Camera system upgrade	50.00							50.00						50.00
Dredging feasibility study	Dredging feasibility study	31.50									16.00	15.50			31.50
Sourcewater Protection Study	Sourcewater Protection Study	15.00									15.00				15.00
Aquatic Vegetation Assessment and Management	Aquatic Vegetation Assessment and Management	7.50							7.50						7.50
Subtotal New 2018 Projects -		719.00	-	-	58.75	80.00	-	58.75	57.50	-	344.75	60.50	-	58.75	719.00
Total 2018 Capital Projects Budget for Water Supply Department -		719.00	-	-	58.75	80.00	-	58.75	57.50	-	344.75	60.50	-	58.75	719.00
2017 Information Services Dept. Carryover/Multi-year Projects															
Website Upgrades	Improved Customer Service Experience	36.00	6.00		4.00										10.00
Subtotal 2017 Information Services Department Carryover/Multi-year Projects -		36.00	6.00	-	4.00	-	-	-	-	-	-	-	-	-	10.00
New 2018 Information Services Dept. Projects															
SIEM Appliance	Aggregate Real-time monitoring of system alerts and logs	26.00				26.00									26.00
AD Change Auditor	Needed to track changes to Authentication Server	4.00				4.00									4.00
File Server Replacement	Replace older hardware	13.00					13.00								13.00
Storage Upgrade	Replace non-supported hardware and increase speed	70.00					70.00								70.00
Munis FER Enhancements	Needed as Business process change	64.00				32.00		32.00							64.00
Click Mobile Application Changes	Needed as Business process change	30.00						10.00		10.00		10.00			30.00
ClickMobile Move to iPads	Move to a more functional device	140.00				35.00	35.00	35.00		35.00					140.00
Implement Customer Balances over the phone	Improved Customer Service Experience	4.00	4.00												4.00
Miscellaneous Hardware		15.00													15.00
Miscellaneous Software		12.00	2.00	3.00	2.00		2.00	3.00	2.00	3.00	2.00	3.00	2.00		12.00
LIMS upgrade	Allow for Electronic Data Collection in the Field	11.00			11.00										11.00
Physical Server for Pearl		12.00			12.00										12.00
Corporate Job Scheduler	Centralized nightly Job management and notification	4.00			4.00										4.00
Consulting	Consulting	32.00						32.00							32.00
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.	4.00						4.00							4.00
Additional Computers	Additional Computers	4.00		4.00											4.00
Subtotal New 2018 Projects -		445.00	6.00	7.00	29.00	100.00	120.00	116.00	2.00	48.00	2.00	13.00	2.00	-	445.00
Total 2018 Capital Projects Budget for Information Services Department -		481.00	12.00	7.00	33.00	100.00	120.00	116.00	2.00	48.00	2.00	13.00	2.00	-	455.00
2017 Carryover/Multi-year Projects - Total PWW		1,132.00	61.00	55.00	59.00	245.00	261.00	254.70	172.90	0.10	(40.70)	-	-	-	1,068.00

Work Description	Total Budgeted Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2018 incl O/H
New 2018 Projects - Total PWW	10,317.60	129.00	142.00	295.75	824.80	1,416.60	1,484.65	1,325.40	1,353.90	1,061.95	666.60	236.50	132.75	9,069.90
Total Capital Budget - PWW	11,449.60	190.00	197.00	354.75	1,069.80	1,677.60	1,739.35	1,498.30	1,354.00	1,021.25	666.60	236.50	132.75	10,137.90

1,311.70

Project Description		Total Budgeted Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2019 incl O/H
2018 Distribution Dept. Carryover/Multi-year Projects															
Subtotal 2018 Distribution Dept. Carryover/Multi-year Projects -		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New 2019 Distribution Dept. Projects															
10 New Services	10 New Services	46.00					4.60	9.20	9.20	9.20	9.20	4.60			46.00
20 Renewed Services	20 Renewed Services	92.00				4.60	9.20	13.80	18.40	18.40	13.80	9.20	4.60		92.00
10 Hydrants	10 Hydrants	50.00					5.00	10.00	10.00	10.00	5.00	5.00	5.00		50.00
10 Valve Replacements	10 Valve Replacements	30.00					3.00	3.00	3.00	6.00	6.00	3.00	3.00		30.00
Replace failed radio meter readers	Replace out of warranty failed radio meter readers (280)	50.00	2.00	3.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	3.00	50.00
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	62.00	1.00	2.00	4.00	6.00	8.00	8.00	8.00	8.00	6.00	6.00	4.00	1.00	62.00
1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	259.00	40.00	35.00	33.00	22.00	11.00	11.00	11.00	11.00	11.00	22.00	22.00	30.00	259.00
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	27.00									4.00	6.00	8.00	9.00	27.00
Metal Detectors (6)	Ongoing small equipment replacement - run rate	7.00				7.00									7.00
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	10.00				10.00									10.00
Service Truck replacement (#4)	Replace 2011 Pickup Truck with 160,000+ projected miles	60.00					60.00								60.00
Meter service van replacement (#72)	Replace 2009 Meter Van with 158,000+ projected miles	35.00					35.00								35.00
Mud Pump Replacements (2)	Ongoing small equipment replacement	4.00				4.00									4.00
Tapping Machine replacements (2)	Tapping Machine replacements (2)	4.00					4.00								4.00
Trimble units for Meter Reading (4 units)	Replace remaining CE meter reading equipment	13.00						13.00							13.00
Replace 2850 meter reading radios	Complete with PT's, Replace aging radios	270.00	36.00	32.00	26.00	16.00	16.00	16.00	16.00	16.00	16.00	22.00	26.00	32.00	270.00
Subtotal New 2019 Projects -		1,019.00	79.00	72.00	66.00	77.60	160.80	89.00	80.60	83.60	76.00	82.80	76.60	75.00	1,019.00
Total 2019 Capital Projects Budget for Distribution Department -		1,019.00	79.00	72.00	66.00	77.60	160.80	89.00	80.60	83.60	76.00	82.80	76.60	75.00	1,019.00
2018 Engineering Dept. Carryover/Multi-year Projects															
Work Description															
Elm St	Final Paving, Water main installation completed in 2018	22.00					22.00								22.00
Monroe Street	Final Paving, Water main installation completed in 2018	10.00					10.00								10.00
West Pearl Street	Final Paving, Water main installation completed in 2018	10.00					10.00								10.00
Gilman Street	Final Paving, Water main installation completed in 2018	180.00				180.00									180.00
Ritter Street	Final Paving, Water main installation completed in 2018	61.20					61.20								61.20
Woodward Street	Final Paving, Water main installation completed in 2018	36.20					36.20								36.20
Factory Street	Final Paving, Water main installation completed in 2018	155.60					155.60								155.60
Pennichuck Street	Final Paving, Water main installation completed in 2018	13.20					13.20								13.20
Fossa Avenue	Final Paving, Water main installation completed in 2018	33.40				33.40									33.40
Russell Avenue	Final Paving, Water main installation completed in 2018	52.70					52.70								52.70
Taylor Street (Main St to Fifield)	Final Paving, Water main installation completed in 2018	86.50					86.50								86.50
Burnett Street	Final Paving, Water main installation completed in 2018	65.50					65.50								65.50
Field Street	Final Paving, Water main installation completed in 2018	33.50				33.50									33.50
Fernwood Street	Final Paving, Water main installation completed in 2018	45.00					45.00								45.00
Revere Street	Final Paving, Water main installation completed in 2018	80.10					80.10								80.10
Stevens Street	Final Paving, Water main installation completed in 2018	102.10					102.10								102.10
Evergreen Street	Final Paving, Water main installation completed in 2018	26.00						26.00							26.00
Morton Street	Final Paving, Water main installation completed in 2018	45.00						45.00							45.00
Park Avenue	Final Paving, Water main installation completed in 2018	38.00						38.00							38.00
Northwest Water Main Improvements	Final Paving, Water main installation completed in 2018	35.00					35.00								35.00
Lake Street	Final Paving, Water main installation completed in 2018	330.00				100.00	100.00	100.00	30.00						330.00
Coburn Woods (all side streets)	Final Paving, Water main installation completed in 2018	175.70				100.00	75.70								175.70
Subtotal 2018 Engineering Department Carryover/Multi-year Projects -		1,636.70	-	-	-	446.90	950.80	209.00	30.00	-	-	-	-	-	1,636.70
New 2019 Engineering Dept. Projects															
Work Description															
Brook Street	Water Main Replacement	384.30				100.00	100.00	55.60							255.60
Hamilton Street	Water Main Replacement	88.30					47.40								47.40
Ash Street	Water Main Replacement	174.10						115.80							115.80
Burritt Street	Water Main Replacement	142.80							95.00						95.00
Burritt Street	Water Main Replacement	39.10							21.00						21.00
Verona Street	Water Main Replacement	228.30													228.30
Sarasota Ave	Water Main Replacement	84.20								151.90					151.90
Merrimack River Intake	Merrimack River Intake	5,500.00			500.00	500.00	750.00	750.00	750.00	56.00					56.00
Bowers Dam Spillway Improvements	Bowers Dam Spillway Improvements	1,100.00		30.00	40.00	30.00				750.00	750.00	500.00	250.00		5,500.00
Twin Ridge Station Improvements	Twin Ridge Station Improvements	330.00	5.00	5.00	5.00	5.00				200.00	300.00	300.00	200.00		1,100.00
Outside GIS Consulting Services	Outside GIS Consulting Services	24.00	2.00	2.00	2.00	2.00	2.00		100.00	100.00	100.00	10.00			330.00
Water Modeling Consulting	Water Modeling Consulting	10.00			5.00	5.00		2.00	2.00	2.00	2.00	2.00	2.00	2.00	24.00
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	5						5.00							10.00
Replace SUV	Replace SUV	30.00													5.00
Replace Pickup	Replace Pickup	30.00										30.00			30.00
												30.00			30.00

Project Description		Total Budgeted Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2019 incl O/H
Subtotal New 2019 Projects -		8,170.10	7.00	37.00	552.00	642.00	899.40	928.40	968.00	1,259.90	1,152.00	872.00	452.00	2.00	7,771.70
Total 2019 Capital Projects Budget for Engineering Department -		9,806.80	7.00	37.00	552.00	1,088.90	1,850.20	1,137.40	998.00	1,259.90	1,152.00	872.00	452.00	2.00	9,408.40
2018 Water Supply Dept. Carryover/Multi-year Projects															
Subtotal 2018 Water Supply Department Carryover/Multi-year Projects -		-	-	-	-	-	-	-	-	-	-	-	-	-	-
New 2019 Water Supply Dept. Projects															
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	60.00			15.00			15.00			15.00			15.00	60.00
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	15.00			3.75			3.75			3.75			3.75	15.00
Misc. Structural Improvements	Misc. Structural Improvements	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	30.00			7.50			7.50			7.50			7.50	30.00
Well Rehabilitation	Well Rehabilitation	50.00			12.50			12.50			12.50			12.50	50.00
WTP Structural/HVAC	WTP Structural/HVAC	10.00						10.00							10.00
Purchase new lab equipment	Purchase new lab equipment	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	10.00						10.00							10.00
Replace Vehicle	Replace Vehicle	65.00									65.00				65.00
Replace Vehicle	Replace Vehicle	65.00									65.00				65.00
Replace Vehicle	Replace Vehicle	40.00									40.00				40.00
Replace Vehicle	Replace Vehicle	40.00									40.00				40.00
Bowers Pond Spillway reconstruction	Bowers Pond Spillway reconstruction	900.00							300.00	300.00	300.00				900.00
Carbon media changeout-filters 1 & 3	Carbon media changeout-filters 1 & 3	550.00										550.00			550.00
Subtotal New 2019 Projects -		1,895.00	-	-	53.75	-	-	73.75	300.00	300.00	563.75	550.00	-	53.75	1,895.00
Total 2019 Water Supply Projects Budget for Engineering Department -		1,895.00	-	-	53.75	-	-	73.75	300.00	300.00	563.75	550.00	-	53.75	1,895.00
2018 Information Systems Dept. Carryover/Multi-year Projects															
Subtotal 2018 Information Systems Department Carryover/Multi-year Projects -		-	-	-	-	-	-	-	-	-	-	-	-	-	-
New 2019 Information Systems Dept. Projects															
Desktop PC Replacements	Desktop Replacements	80.00					40.00	20.00	20.00						80.00
Miscellaneous Hardware	Miscellaneous Hardware	15.00				3.00		3.00		3.00		3.00		3.00	15.00
Miscellaneous Software	Miscellaneous Software	12.00	2.00		2.00		2.00		2.00		2.00		2.00		12.00
Other Miscellaneous Projects - Run Rate	Other Miscellaneous Projects - Run Rate	275.00				70.00		70.00		70.00			65.00		275.00
Subtotal New 2019 Projects -		382.00	2.00	-	2.00	73.00	42.00	93.00	22.00	73.00	2.00	3.00	67.00	3.00	382.00
Total 2019 Information Systems Projects Budget for Engineering Department -		382.00	2.00	-	2.00	73.00	42.00	93.00	22.00	73.00	2.00	3.00	67.00	3.00	382.00
2018 Carryover/Multi-year Projects - Total PWW		1,636.70	-	-	-	446.90	950.80	209.00	30.00	-	-	-	-	-	1,636.70
New 2019 Projects - Total PWW		11,466.10	88.00	109.00	673.75	792.60	1,102.20	1,184.15	1,370.60	1,716.50	1,793.75	1,507.80	595.60	133.75	11,067.70
Total Capital Budget - PWW		13,102.80	88.00	109.00	673.75	1,239.50	2,053.00	1,393.15	1,400.60	1,716.50	1,793.75	1,507.80	595.60	133.75	12,704.40

(398.40)

		Total Project Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2020 Budget incl O/H
2019 Distribution Dept. Carryover/Multi-year Projects		Work Description													
Subtotal 2019 Distribution Dept. Carryover/Multi-year Projects -			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New 2020 Distribution Dept. Projects		Work Description													
10 New Services	10 New Services	46.00					4.60	9.20	9.20	9.20	9.20	4.60			0.00
20 Renewed Services	20 Renewed Services	92.00				4.60	9.20	13.80	18.40	18.40	13.80	9.20	4.60		46.00
10 Hydrants	10 Hydrants	50.00					5.00	10.00	10.00	10.00	5.00	5.00	5.00		92.00
10 Valve Replacements	10 Valve Replacements	30.00					3.00	3.00	3.00	6.00	6.00	3.00	3.00		50.00
Replace failed radio meter readers	Replace out of warrantee failed radio meter readers (280)	50.00	2.00	3.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	3.00		30.00
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	65.00	2.00	3.00	4.00	6.00	7.00	8.00	8.00	8.00	7.00	6.00	4.00	3.00	50.00
270 New Meters for PT exchanges 5/8"-6"	270 New Replacement Meters for PT's 5/8"-6'	27.00									4.00	6.00	8.00	9.00	27.00
Metal Detectors (6)	Ongoing small equipment replacement - run rate	7.00				7.00									7.00
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	10.00				10.00									10.00
Service Pick Up replacement (#20)	Replace 2008 with projected 136,000+ miles	35.00					35.00								35.00
Meter Pick Up replacement (#95)	Replace 2008 with projected 130,000+ miles	60.00					60.00								60.00
Meter Van replacement (#27)	Replace 2011 with projected 135,000+ miles	35.00					35.00								35.00
Meter Reading SUV replacement (#21)	Replace 2011 with projected 140,000+ miles	35.00						35.00							35.00
Mud Pump Replacements (3)	Mud Pump Replacements (3)	4.00				4.00									4.00
Radio Replacements (2850)	Complete with PT's, Replace aging radios	270.00	36.00	32.00	26.00	16.00	16.00	16.00	16.00	16.00	16.00	22.00	26.00	32.00	270.00
Subtotal New 2020 Projects -		816.00	40.00	38.00	33.00	55.60	179.80	100.00	69.60	72.60	66.00	60.80	54.60	46.00	816.00
Total 2020 Capital Projects Budget for Distribution Department -		816.00	40.00	38.00	33.00	55.60	179.80	100.00	69.60	72.60	66.00	60.80	54.60	46.00	816.00
2019 Engineering Dept. Carryover/Multi-year Projects		Work Description													
Lake Street	Final Paving, Water main installation completed in 2019	338.70					150.00	150.00	38.70						338.70
Brook Street	Final Paving, Water main installation completed in 2019	128.70					128.70								128.70
Hamilton Street	Final Paving, Water main installation completed in 2019	40.90						40.90							40.90
Ash Street	Final Paving, Water main installation completed in 2019	58.30						58.30							58.30
Burritt Street	Final Paving, Water main installation completed in 2019	47.80						47.80							47.80
Burritt Street	Final Paving, Water main installation completed in 2019	18.10						18.10							18.10
Verona Street	Final Paving, Water main installation completed in 2019	76.50							76.50						76.50
Sarasota Ave	Final Paving, Water main installation completed in 2019	28.20							28.20						28.20
Subtotal 2019 Engineering Dept. Carryover/Multi-year Projects -		737.20	0.00	0.00	0.00	0.00	278.70	315.10	143.40	0.00	0.00	0.00	0.00	0.00	737.20
New 2020 Engineering Dept. Projects		Work Description													
Fields Grove Park Crossing (Chestnut to Lawndale)	Water Main Replacement	506.00					150.00	150.00	141.80						441.80
Benson Avenue	Water Main Replacement	191.50						127.00							127.00
Spaulding Street	Water Main Replacement	329.50							219.20						219.20
Alstead Avenue	Water Main Replacement	73.00						39.20							39.20
Spaulding Avenue	Water Main Replacement	95.20						51.10							51.10
St Lazare Street	Water Main Replacement	91.80						49.30							49.30
Ingalls St (St Camille to end)	Water Main Replacement	44.30						23.80							23.80
Nye Avenues	Water Main Replacement	87.40							47.00						47.00
Copp Street	Water Main Replacement	124.20							83.00						83.00
Gray Avenue	Water Main Replacement	102.30								63.00					63.00
Harvard Street	Water Main Replacement	272.30								181.00					181.00
Ald Street	Water Main Replacement	878.70							50.00	150.00	200.00	200.00	37.00		637.00
Lawndale Avenue	Water Main Replacement	497.20					200.00	160.60							360.60
Taylor Road (Lynn St to	Water Main Replacement	332.50						150.00	91.20						241.20
Temple St (south to gorman)	Water Main Replacement	415.60							150.00	151.40					301.40
School Street (High to W. Pearl Alleyway)	Water Main Replacement	137.40									91.40				91.40
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement	3,080.00	50.00	100.00	100.00	200.00	400.00	400.00	400.00	300.00	300.00	300.00	300.00	230.00	3,080.00
Outside GIS Consulting Services	Outside GIS Consulting Services	18.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	18.00
Water Modeling Consulting	Water Modeling Consulting	10.00			5.00	5.00									10.00
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	5.00					5.00								5.00
Replace SUV	Replace SUV	30.00										30.00			30.00
Replace Pickup	Replace Pickup	30.00										30.00			30.00
Subtotal New 2020 Projects -		7,351.90	51.50	101.50	106.50	206.50	756.50	1,152.50	1,183.70	846.90	592.90	561.50	338.50	231.50	6,130.00
Total 2020 Capital Projects Budget for Eningeering Department -		8,089.10	51.50	101.50	106.50	206.50	1,035.20	1,467.60	1,327.10	846.90	592.90	561.50	338.50	231.50	6,867.20

		Total Project Amount (including O/H)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total 2020 Budget incl O/H
2019 Distribution Dept. Carryover/Multi-year Projects		Work Description													
2019 Water Supply Dept. Carryover/Multi-year Projects		Work Description													
Subtotal 2019 Water Supply Dept. Carryover/Multi-year Projects -			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New 2020 Water Supply Dept. Projects		Work Description													
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	60.00			15.00			15.00			15.00			15.00	60.00
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	15.00			3.75			3.75			3.75			3.75	15.00
Misc. Structural Improvements	Misc. Structural Improvements	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	30.00			7.50			7.50			7.50			7.50	30.00
Well Rehabilitation	Well Rehabilitation	50.00			12.50			12.50			12.50			12.50	50.00
WTP Structural/HVAC	WTP Structural/HVAC	10.00			2.50			2.50			2.50			2.50	10.00
Purchase new lab equipment	Purchase new lab equipment	20.00			5.00			5.00			5.00			5.00	20.00
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	10.00			2.50			2.50			2.50			2.50	10.00
Replace Vehicle	Replace Vehicle	65.00									65.00				65.00
Replace Vehicle	Replace Vehicle	65.00									65.00				65.00
Replace Vehicle	Replace Vehicle	40.00									40.00				40.00
Replace Vehicle	Replace Vehicle	40.00									40.00				40.00
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4	550.00						550.00							550.00
Subtotal New 2020 Projects -		995.00	0.00	0.00	58.75	0.00	0.00	608.75	0.00	0.00	268.75	0.00	0.00	58.75	995.00
Total 2020 Capital Projects Budget for Water Supply Department -		995.00	0.00	0.00	58.75	0.00	0.00	608.75	0.00	0.00	268.75	0.00	0.00	58.75	995.00
2019 Information Systems Dept. Carryover/Multi-year Projects		Work Description													
Subtotal 2019 Information Systems Dept. Carryover/Multi-year Projects -			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New 2020 Information Systems Dept. Projects		Work Description													
Work Order and Asset Management (Synergen upgrade)	Upgrade WAM to new infrastructure and interface	90.00				30.00	30.00	30.00							90.00
Miscellaneous Hardware	Miscellaneous Hardware	15.00				3.00		3.00		3.00		3.00		3.00	15.00
Miscellaneous Software	Miscellaneous Software	12.00	2.00		2.00		2.00		2.00		2.00		2.00		12.00
Other Miscellaneous Projects - Run Rate	Other Miscellaneous Projects - Run Rate	275.00				70.00		70.00	2.00	70.00	2.00	65.00			275.00
Subtotal New 2020 Projects -		392.00	2.00	0.00	2.00	103.00	32.00	103.00	2.00	73.00	2.00	68.00	2.00	3.00	392.00
Total 2020 Capital Projects Budget for Information Systems Department -		392.00	2.00	0.00	2.00	103.00	32.00	103.00	2.00	73.00	2.00	68.00	2.00	3.00	392.00
2019 Carryover/Multi-year Projects - Total PWW		737.20	-	-	-	-	278.70	315.10	143.40	-	-	-	-	-	737.20
New 2020 Projects - Total PWW		9,554.90	93.50	139.50	200.25	365.10	968.30	1,964.25	1,255.30	992.50	929.65	690.30	395.10	339.25	8,333.00
Total Capital Budget - PWW		10,292.10	93.50	139.50	200.25	365.10	1,247.00	2,279.35	1,398.70	992.50	929.65	690.30	395.10	339.25	9,070.20

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Data Requests – Set 3

Date Request Received: 6/13/18
Request No. Staff 3-29

Date of Response: 6/27/2018
Witness: Donald L. Ware

REQUEST: Re: Company's response to Staff Data Request 2-4: Based on the Company's response, should the projected property tax expense amounts associated with the 2018, 2019, and 2020 QCPAC projects be amended as well? Please explain.

RESPONSE:

The Company has no good way to project what local community property taxes will be until December of each year. The tax number used in the schedules in future filings will be the applicable community tax rate based upon the December tax bills of the year before the filing.

The Company has updated the 2018, 2019 and 2020 tax rates to the tax rates from the December 2017 tax bills from each community.

	DW16-806 Approved Step Revenue Requirements		Requested QCPAC For 2017 Capital Additions pro formas		Requested QCPAC Surcharge for 2017 Capital Additions	Projected QCPAC For 2018 Capital Additions pro formas (7,8)	Projected QCPAC Surcharge for 2018 Capital Additions	QCPAC For 2019 Capital Additions pro formas (7,8)	QCPAC Surcharge for 2019 Capital Additions	QCPAC For 2020 Capital Additions pro formas (7,8)	QCPAC Surcharge for 2020 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$7,729,032		\$ -		\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032
Operating Expense Revenue Requirement	\$16,927,242	(1)	\$ 122,079	(4)	\$ 17,049,321	\$ 254,905	\$ 17,304,225	\$ 301,601	\$ 17,605,827	\$ 235,407	\$ 17,841,234
Annual Principal and Interest Payments	\$6,218,648	(2)	\$376,717	(5)(10)	\$ 6,595,365	\$659,491	\$ 7,254,856	\$754,870	\$ 8,009,726	\$567,997	\$ 8,577,722
Principal and Interest Coverage Requirement	1.10	(3)			1.10		1.10		1.10		1.10
Principal and Interest Revenue Requirement	\$ 6,840,513				\$ 7,254,901		\$ 7,980,342		\$ 8,810,698		\$ 9,435,495
Proposed Revenue Requirement	\$ 31,496,787				\$ 32,033,254		\$ 33,013,599		\$ 34,145,557		\$ 35,005,761
Current Water Revenues excluding CBFRR	\$20,694,038				\$ 23,767,755		\$ 24,304,222		\$ 25,284,567		\$ 26,416,525
Add: City Bond Fixed Revenue Requirement	\$7,729,032				\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032
Current Water Revenues with CBFRR	\$ 28,423,070				\$ 31,496,787		\$ 32,033,254		\$ 33,013,599		\$ 34,145,557
Percent QCPAC Surcharge (9)					1.70%		3.06%		3.43%		2.52%
							4.82%		8.41%		11.14%

Notes:

(1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in DW16-806

(2) Annual Principal and interest payments for PW/W debt associated with all plant in service as approved in DW16-806

(3) Principal and interest coverage of 1.10 is as approved in DW16-806

(4) Reflects the net increase in property taxes associated with the plant placed in service between 1/1/2017 and 12/31/2017 that was not included in DW16-806.

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2017 and 12/31/2017 based on a 30 year bond with an actual total all in interest rate of 4.898453% that was not recovered in DW16-806

(7) QCPAC operating expenses are based on the property taxes for plant added during the year

(8) QCPAC Principal and Interest expenses are based on 30 year bond with interest rate of 5.0%

(9) QCPAC percent revenue surcharges based on increase in revenues from the previous year, inclusive of QCPAC surcharges.

(10) Portion of QCPAC Principal and Interest associated with SRF loan of \$ 767,357 for 2017 work completed on Amherst Street project based on a 30 year bond with a rate of 2.462% that was not recovered in DW16-806

\$340,239.57
\$36,477.00
\$376,716.57

101688

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Funded in DW16-806 Step	Estimated Project Cost as of 1/18/2017	Estimated Project Cost as of 11/15/2017	Final Unaudited Project Costs at of 1/19/2018	Community	Taxable	Tax Rate (%)	QCPAC Eligible Annual Tax Expense	Explanation for Change/Addition/Deletion since 1/18/2017
Heavy Dump Truck Replacement (#12)	Heavy Dump Truck Replacement (#12)	1702309	DW14-130	25,734	11/7/2014	Yes	\$ 130,000	Paid 2014 Bond		Merrimack			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Services	9 Renewed Services with 2014 Bond Funds 23 Renewed Services with 2018 Bond Funds	Monthly 21, 22, 23	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial No	\$ 80,000	Paid 2014 Bond \$ 40,000	\$ 100,454	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Hydrants	3 Hydrants replaced with 2014 Bond Funds 5 Hydrants replaced with 2018 Bond Funds	Monthly 31	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial No	\$ 42,000	Paid 2014 Bond \$ 11,000	\$ 18,643	Nashua	Yes	\$ 29.82	\$ 2,996	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Valves	3 Valve Replacements	Monthly 12, 13	DW17-183	26,101	2/2/2018	No		\$ 50,000	\$ 53,122	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
New Services	2 New Services for Single Family Residential, owner build, per Tariff 5 New Services for Single Family Residential, owner build, per Tariff	Monthly 20	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial No	\$ -	Paid 2014 Bond \$ 34,537	\$ 29,648	Nashua	Yes	\$ 29.82	\$ 556	P&I and property taxes to be recovered in 2018 QCPAC
Replace Leaded Brass Meters with Lead free brass meters	410 New Meters for Lead Meter exchanges - 5/8"-6" 1,410 New Meters for Lead Meter exchanges - 5/8"-6" (NEED ACTUAL 332)	Monthly 50	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial No	\$ 832,000	Paid 2014 Bond \$ 247,266	\$ 267,950	Nashua	Yes	\$ 29.82	\$ 1,584	Based on final valve replacement expensidured in 2017
Replace Aging meter reading Radios	Replace 99 failed radios Replace 238 failed radios	Monthly 54	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial Remainder	\$ 28,000	Paid 2014 Bond \$ 22,729	\$ 22,802	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Ferromagnetic Pipe Locators (3)	Ferromagnetic Pipe Locators (3)		DW17-183	26,101	2/2/2018	No	\$ 10,500	\$ 10,500		Merrimack			\$ 884	P&I and property taxes to be recovered in 2018 QCPAC
Heavy Dump Truck Replacement (#86)	Heavy Dump Truck Replacement (#86)	1708349	DW17-183	26,101	2/2/2018	No	\$ 100,000	\$ 100,000	\$ 102,176	Merrimack	No		\$ 7,990	P&I and property taxes recovered in DW16-806 Step Increase
Service Truck replacement (#47)	Service Truck replacement (#47)	1715542	DW17-183	26,101	2/2/2018	No	\$ 60,000	\$ 38,950	\$ 47,889	Merrimack	No		\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replacement of Foreman truck	Replacement of Foreman truck						\$ 90,000	\$ 75,000	\$ -	Merrimack			\$ 680	P&I and property taxes to be recovered in 2018 QCPAC
Replace Dump Truck Body	#312 - Replace Dump Truck Body	1720997							\$ 15,740	Merrimack	No		\$ -	None acquired
Medium Duty Dump Truck Replacement (#71)	Medium Duty Dump Truck Replacement (#71)	1708350	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 90,160	Merrimack	No		\$ -	Deferred until 2018
Replace Truck #70	Replace Truck #70	1707209	DW17-183	26,101	2/2/2018	No	\$ -	\$ 32,034	\$ 32,034	Merrimack	No		\$ -	Project added at end of year using existing truck chassis for new dump body.
Replace Truck #58	Replace 2006 Truck with 104,000 miles	1702097							\$ 6,242	Merrimack	No		\$ -	Truck replaced when transmission failed rather than repair transmission on a 10 year old truck
20 Ton Tag Trailer replacement	20 Ton Tag Trailer replacement						\$ 20,000	\$ -						Deferred
Variable Message Signs - 2	Customer Notification	1702307	DW14-130	25,734	11/7/2014	Yes	\$ 30,000	Paid 2014 Bond						P&I and property taxes recovered in DW16-806 Step Increase
Replacement Radio Meter Reading Equipment (4)	Replace 10 year old radio meter reading handheld units		DW14-130	25,734	11/7/2014	Yes	\$ 25,000	Paid 2014 Bond						P&I and property taxes recovered in DW16-806 Step Increase
Pipe Saws (5)	Pipe Saws (5)	1800440	DW17-183	26,101	2/2/2018	No	\$ 20,000	\$ -	\$ 9,384	Merrimack	No			
Metal Detectors (6)	Metal Detectors (6)	1708348	DW17-183	26,101	2/2/2018	No	\$ 7,000	\$ 6,360	\$ 6,360	Merrimack	No			
Replacement Excavator	Replacement Excavator	1702312	DW17-183	26,101	2/2/2018	No	\$ 75,000	\$ 69,554	\$ 69,554	Merrimack	No			
Complete construction of 16 DW Highway	Final billing for the completion of work by contractor at 16 DW Highway	1701990	DW17-183	26,101	2/2/2018	No	\$ -	\$ 67,050	\$ 65,140	Merrimack	Yes	\$ 28.17	\$ 1,835	Billing from final work on 16 DW not carried over in original budget
MRN meter reading device	MRN meter reading device	1708487	DW17-183	26,101	2/2/2018	No	\$ -	\$ 8,190	\$ 8,190	Various	No			Existing 8 year old meter reading device failed
GPS Units	Turntable Devices	1713734						\$ 21,287	\$ 21,287	Merrimack	No			Devices purchased early to support field deployment of GIS
Raw Water Transmission Main project	Finalization of 2016 project	1601365, 1701991	DW15-046	25,774	4/13/2015	Yes	\$ -	Paid for by SRF	\$ 176,829	Merrimack	Yes	\$ 28.17	\$ 4,981	Charges are for Internal engineering, OH, Union Labor, truck and AFDUC. These expenses are not eligible for SRF funding
Nashua & Amherst Paving	Final paving associated with watermain projects					No	\$ 1,100,000						\$ -	Budget Placeholder
Nashua & Amherst Paving	Park Street Water Main Replacement project paving	1701989	DW17-183	26,101	2/2/2018	No		\$ 4,908	\$ 4,908	Nashua	Yes	\$ 29.82	\$ 146	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Mulberry Street Water Main Replacement project paving	1701988	DW17-183	26,101	2/2/2018	No		\$ 6,840	\$ 6,840	Nashua	Yes	\$ 29.82	\$ 204	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Contribution to City of Nashua in lieu of final trench restoration - includes Rocheche, Ash, and Mangis	1718685, 1718684	DW17-183	26,101	2/2/2018	No		\$ 120,000	\$ 20,040	Nashua	Yes	\$ 29.82	\$ 598	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Chestnut Street Phase I Water Main Replacement project paving	1703643	DW17-183	26,101	2/2/2018	No		\$ 65,780	\$ 131,689	Nashua	Yes	\$ 29.82	\$ 3,027	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Scripture Street Water Main Replacement project paving	1703642	DW17-183	26,101	2/2/2018	No		\$ 11,200	\$ 2,466	Nashua	Yes	\$ 29.82	\$ 74	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Gorman Street Water Main Replacement project paving	1718679	DW17-183	26,101	2/2/2018	No		\$ -	\$ 400	Nashua	Yes	\$ 29.82	\$ 12	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Water Street Water Main Replacement project paving							\$ 44,561						Paving deferred at City request
Nashua & Amherst Paving	Brook Street Water Main Replacement project paving	1700310	DW17-183	26,101	2/2/2018	No		\$ -	\$ 9,844	Nashua	Yes	\$ 29.82	\$ 294	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Ash Street Water Main Replacement project paving	1700315	DW17-183	26,101	2/2/2018	No		\$ -	\$ 22,678	Nashua	Yes	\$ 29.82	\$ 676	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Worcester Street Area Water Main Replacement project paving	1718680	DW17-183	26,101	2/2/2018	No		\$ -	\$ 3,020	Nashua	Yes	\$ 29.82	\$ 90	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Lovell Street Water Main Replacement project paving	1703644	DW17-183	26,101	2/2/2018	No		\$ -	\$ 82,060	Nashua	Yes	\$ 29.82	\$ 2,447	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Townell Street Water Main Replacement project paving	1703639	DW17-183	26,101	2/2/2018	No		\$ -	\$ 17,233	Nashua	Yes	\$ 29.82	\$ 514	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Howard Street Water Main Replacement project paving	1718682	DW17-183	26,101	2/2/2018	No		\$ -	\$ 2,800	Nashua	Yes	\$ 29.82	\$ 83	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Hovis Water Main Replacement project paving	1718683	DW17-183	26,101	2/2/2018	No		\$ -	\$ 1,000	Nashua	Yes	\$ 29.82	\$ 30	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Shedds Ave. Water Main Replacement project paving	1718681	DW17-183	26,101	2/2/2018	No		\$ -	\$ 2,000	Nashua	Yes	\$ 29.82	\$ 60	Budgeted under Final Paving associated with water main replacement projects
Amherst Street Project	Amherst Street Area Water Main Replacement Project													
Amherst Street Project - Amherst Street water main replacement	Replace 3,150 LF of 6" Unlined CI Water main on Amherst Street	1601318, 1702928	DW16-236	25,887	4/24/86	Partial		Paid for by SRF	\$ 923,785	Nashua				Charges are for Internal engineering, OH, Union Labor, truck and AFDUC. These expenses are not eligible for SRF funding. \$767,357 in 2017 construction costs were financed with SRF loan funds. The principal and interest associated with this loan amount must be recovered as part of the 2018 QCPAC surcharge.
Amherst Street Project - Berkshire Street water main replacement	Replace xxx LF of 8"x12" Steel/Unlined CI Water main on Berkshire Street	1601320, 1702931	DW16-236	25,887	4/24/86	Yes		Paid for by SRF	\$ 6,058	Nashua	No			
Amherst Street Project - Terrace Ave. water main replacement	Replace 280 LF of 2" 4" Steel/Unlined CI Water main on Terrace Ave.	1601321, 1702932	DW16-236	25,887	4/24/86	Yes	\$ 75,000	\$ 1,763	\$ 1,763	Nashua				
Amherst Street Project - Bruce Street water main replacement	Replace 260 LF of 6" Unlined CI Water main on Bruce Street	1601319, 1702930	DW16-236	25,887	4/24/86	Yes	\$ 75,000	\$ 4,183	\$ 4,183	Nashua				
Street Hill	New Supplemental Well required by NHDES	1503914, 1602428, 1701490	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 163,831	Plaistow	Yes	\$ 28.39	\$ 4,651	Project began in 2015. Project required by NHDES to address shortage of supply.
Pennichuck Bog - Educational Program Accessway	Construct Nature Walk around Pennichuck Bog						\$ 38,000	\$ -						Deferred
Gilman Street	Replace 8 & 6 in CI with 1225 LF of 8 inch CLDI						\$ 425,000	\$ -						Deferred until 2018
Amherst Mack Hill & Dodge	Replace 1525 feet of 8 A/C with CLDI Transfer services from A/C to D/I Dodge Rd.						\$ 300,000	\$ -						Deferred until future date in coordination with Town Storm Drain project
Milford Booster Station Replacement	Replace 25 Yr old below ground confined space booster station w/above ground station						\$ 550,000	\$ -						Project deferred indefinitely.
Snow Station Upgrade - Add 3rd pump	Increase pumping capacity to meet existing demands and contractual obligations	1702918	DW17-183	26,101	2/2/2018	No	\$ 125,000	\$ 13,323	\$ 13,323	Nashua	Yes	\$ 29.82	\$ 397	Analysis showed that rebuilding one pump would provide initial capacity required.
City Sewer Projects - TBD	Aging infrastructure replacement in coordination with sewer replacement						\$ 400,000							
Warren Street	Replaced 300 LF of 4 inch CI with 8 in DIPCI	1702870	DW17-183	26,101	2/2/2018	No		\$ 60,000	\$ 121,151	Nashua	Yes	\$ 29.82	\$ 3,613	\$20,000 for final paving in 2018
Lowell Street	Replaced 425 LF of 6 inch CI with 6 in DIPCI	1702874	DW17-183	26,101	2/2/2018	No		\$ 60,000	\$ 99,065	Nashua	Yes	\$ 29.82	\$ 2,954	\$38,500 for final paving in late for 2018 was completed in 2017.
Green Street	Replaced 330 LF of 4 inch CI with 8 in DIPCI	1702872	DW17-183	26,101	2/2/2018	No		\$ 27,000	\$ 27,720	Nashua	Yes	\$ 29.82	\$ 827	Including final paving.
Beard Street	Replaced 350 LF of 8 inch CI with 8 inch DIPCI	1702873	DW17-183	26,101	2/2/2018	No		\$ 75,000	\$ 78,412	Nashua	Yes	\$ 29.82	\$ 2,338	Including paving.
Lemon Street	Replaced 320 LF of 2 inch CI with 4 in PVC	1702875	DW17-183	26,101	2/2/2018	No		\$ 30,250	\$ 73,389	Nashua	Yes	\$ 29.82	\$ 2,188	\$17,000 for final paving in 2018
Proctor Street	Replaced 130 LF of 2 & 1.5 inch CI with 4 inch PVC	1707322	DW17-183	26,101	2/2/2018	No		\$ 51,000	\$ 63,829	Nashua	Yes	\$ 29.82	\$ 1,903	Excludes final paving
Giffin Street	Replaced 1,290 LF of 4 inch CI with 8 inch DIPCI	1617684, 1703641	DW17-183	26,101	2/2/2018	No		\$ -	\$ 71,987	Nashua	Yes	\$ 29.82	\$ 2,147	Project missed in Nov 2017 filing
Temple Street	Replaced 375 LF of 8 inch CI with 6 inch HDPE and 8 inch DIPCI	1600381, 1703640	DW17-183	26,101	2/2/2018	No		\$ 151,093	\$ 148,873	Nashua	Yes	\$ 29.82	\$ 4,439	Including final paving.
Mulvaney Street	Replaced 280 LF of 2 inch CI with 4 inch PVC	1707323	DW17-183	26,101	2/2/2018	No		\$ 106,500	\$ 88,957	Nashua	Yes	\$ 29.82	\$ 2,653	Excludes final paving.
24" watermain from Manchester Street to Tinker Road	Add 1800 lf of 24 inch CLDI on Manchester Street Easement to Tinker Road						\$ 500,000	\$ -						Deferred until 2018
Water main looping	Close loop on 101A end of main to beyond Triell and loop onto Triell 1200 lf						\$ 300,000	\$ -						Deferred until 2018
Water main looping	Old Nashua Rd. RR Crossing @ Route 101A	1703646	DW17-183	26,101	2/2/2018	No		\$ -	\$ 8,334	Amherst	Yes	\$ 30.30	\$ 253	
2017 Main Street Area Water Main Replacement - Phase I	Powell - Zellwood - Pratt replace 1720 lf of 6 in CI with 8 in CLDI						\$ 400,000	\$ -						Part of Project deferred until 2018.
Buchanan Avenue	Replaced 540 LF of 6 inch CI with 8 inch DIPCI	1702843	DW17-183	26,101	2/2/2018	No		\$ 84,752	\$ 96,013	Nashua	Yes	\$ 29.82	\$ 2,863	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
Circle Ave. - Main Replacement	Replaced 400 LF of 2 inch Steel with 4 inch PVC	1715613	DW17-183	26,101	2/2/2018	No		\$ -	\$ 21,195	Nashua	Yes	\$ 29.82	\$ 632	
Powell Street	Replaced 900 LF of 6 inch CI with 175 LF of 4 inch and 725 LF of 8 inch DIPCI	1702844	DW17-183	26,101	2/2/2018	No		\$ -	\$ 192,179	Nashua	Yes	\$ 29.82	\$ 5,731	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
Zellwood Avenue	Replaced 375 LF of 6 inch CI with 4 in PVC	1702845	DW17-183	26,101	2/2/2018	No		\$ 480,000	\$ 51,142	Nashua	Yes	\$ 29.82	\$ 1,525	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
Pratt Street	Replaced 710 LF of 6 inch CI with 12 inch DIPCI	1702846	DW17-183	26,101	2/2/2018	No		\$ -	\$ 146,106	Nashua	Yes	\$ 29.82	\$ 4,357	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
2017 Main Street Area Water Main Replacement - Phase II	Aging infrastructure replacement						\$ 320,000							
Lincoln Street	Replaced 790 LF of 6 inch CI with 8 in DIPCI	1702841	DW17-183	26,101	2/2/2018			\$ 152,407	\$ 168,144	Nashua	Yes	\$ 29.82	\$ 5,014	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
Nutt Street	Replaced 100 LF of 1 inch and 500 LF of 4 inch CI with 100 LF of 4 inch and 500 LF of 8 inch DIPCI	1702842	DW17-183	26,101	2/2/2018			\$ 120,440	\$ 109,004	Nashua	Yes	\$ 29.82	\$ 3,251	Individual Streets Part of 2017 Main Street Area/Water Main Replacement Project
Kinsley Street	Replace unlined cast iron leads to side streets ahead of City paving						\$ 175,000	\$ -						Project deferred to 2017
Factory Street	Replace 12 & 8 in CI with 640 lf of 16 in CLDI 640 lf						\$ 250,000	\$ -						Project deferred to 2018
Route 101 Windening, Bedford	NHDOT Project													
Route 101 Windening, Bedford	Relocate water main on Route 101	1701891	DW17-183	26,101	2/2/2018	No		\$ 46,200	\$ 45,974	Bedford	Yes	\$ 23.19	\$ 1,066	NHDOT project that was added in Spring of 2017
Route 101 Windening, Bedford	Relocate water main along Nashua Road													

Route 101 Winding, Bedford	Relocate Service to 3 Nashua Road	1702840	DW17-183	26,101	2/2/2018	No		\$	67,400	\$	116,205	Bedford	Yes	\$	23.19	\$	2,695	NHDOT project that was added in Spring of 2017. Partial reimbursement from NHDOT of \$26,010.89		
Route 122 @ Nathan Lord Lane Water Main Relocation	Water Main Relocation to accommodate Town of Amherst Storm Drain installation	1715666	DW17-183	26,101	2/2/2018	No		\$	-	\$	34,630		Amherst	Yes	\$	30.30	\$	1,805	Town of Amherst Storm Drain project added in Fall of 2017	
Howard St. Emergency Main Replacement -	Howard St. Emergency Main Replacement -	1600371, 1601379									\$	106,838	Nashua	Yes	\$	29.82	\$	3,186	Emergency project to replace failed 2" steel water main late in 2017.	
Trimble Devices - Used for field locating Assets via GIS program	Upgrade to Inad device driven units	1703027	DW17-183	26,101	2/2/2018	No		\$	72,000	\$	68,623		Merrimack	No						
Engineering Replacement Vehicles (2)	Replace 2 Vehicles	1702831, 1702832	DW14-130	25,734	11/7/2014	Yes		\$	64,000	Pd 2014 Bonds	\$	47,336	Merrimack	No						
Complete PWW Core System Hydraulic Model	Distribution Model Phase 2					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-		Merrimack	No					P&I and property taxes recovered in DW16-806 Step Increase	
PWW/PEU Interconnection - DW Highway to River	DW Highway to Merrimack River Booster station					Deferred. No Bond sought. No QCPAC sought.		\$	311,500	\$	-								Project underway, will not be used and useful in 2017	
WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting					Deferred. No Bond sought. No QCPAC sought.		\$	80,000	\$	-								Deferred to 2018 due to timing of final NHDES permitting	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW14-130	25,735	11/7/2014	Partial				Pd 2014 Bonds			Derry	Yes	\$	33.23	\$	-	Deferred, staff time not available to complete in 2017	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	Monthly 60, 61, 62, 63	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	38,000	\$	41,386	Derry	Yes	\$	33.23	\$	1,375	P&I and property taxes recovered in DW16-806 Step Increase
Booster/Well/Chem Feed pump replacements	Replace VFD on Twin Ridge Well	1701888	DW17-183	26,101	2/2/2018	No		\$	-	\$	2,089	\$	2,089	Plaistow	Yes	\$	28.39	\$	59	Budgeted under Booster/Well/Chem Feed pump replacement
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS					Deferred. No Bond sought. No QCPAC sought.		\$	15,000	\$	-								Budget place holder. No treatment system installs/replacement YTD	
Misc. Structural Improvements	Misc. Structural Improvements					Deferred. No Bond sought. No QCPAC sought.		\$	20,000	\$	-								Budget place holder. No structural improvements YTD	
Harris Dam Spillway Reconstruction	Complete Harris Dam Spillway Reconstruction	1701987																		
Replace Vehicle #62	Replace 11 year old truck with 107,863 miles		DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000								A new vehicle was purchased and this vehicle was retained and kept in service. #99 was retired.	
Replace Vehicle #49	Replace 7 year old truck with 104,875 miles	1800462	DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000	\$	27,323	Nashua	No				Retired #49	
Replace vehicle #204	Replace 6 year old truck with 175,260 miles	1800481	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000	\$	42,678	Nashua	No				Change from beginning of budget year as to type of vehicle being replaced. #204 retired.	
Replace Vehicle #63	Replace 7 year old truck with 110,249 miles		DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000								Retired #63	
Replace Vehicle #44	Replace 8 year old truck with over 130,000 miles	1800479																	Retired #44	
New Vehicle #119	New Water Supply Vehicle, no replacement	1704173	DW17-183	26,101	2/2/2018	No		\$	-	\$	63,038	\$	62,282	Nashua	No				No vehicle retired.	
Replace Vehicle #99	Replace 11 year old truck with over 140,000 miles	1800480	DW17-183	26,101	2/2/2018	No													Retired #99	
Replace Vehicle #46	Add utility body to vehicle vehicle #46	1703002	DW17-183	26,101	2/2/2018	No													No vehicle retired.	
Install overhead crane and door-WTP process area	Install overhead crane and door-WTP process area	1701887, 1719861	DW17-183	26,101	2/2/2018	No		\$	75,000	\$	75,000	\$	45,731	Nashua	Yes	\$	29.82	\$	1,364	Design cost for WTP crane and door. Door is used and useful.
Merrimack River Station pump/motor rebuild	Merrimack River Station pump/motor rebuild		DW17-183	26,101	2/2/2018	No		\$	75,000	\$	25,000								Project deferred until 2018	
Misc. equipment purchases	WTP misc. equipment purchases							\$	25,000	\$	-									
Misc. equipment purchases	Purchase New Electric Multi-Meter	1715517	DW17-183	26,101	2/2/2018	No			\$	1,500	\$	1,500	Nashua	No					Budgeted under WTP Misc equipment purchased	
THM precursor control at Bon Terrain Tank	Install mixer in Bon Terrain Tank	1703024	DW17-183	26,101	2/2/2018	No			\$	2,600	\$	2,600	Amherst	Yes	\$	30.30	\$	79	Budgeted under WTP Misc equipment purchased	
Replace VFD on Sludge Chopper Pump at WTP	Replace VFD on Sludge Chopper Pump at WTP	1707190	DW17-183	26,101	2/2/2018	No			\$	3,503	\$	3,503	Nashua	Yes	\$	29.82	\$	104	Budgeted under WTP Misc equipment purchased	
WTP - Replace 30" IP Discharge Meter	WTP - Replace 30" IP Discharge Meter	1701885	DW17-183	26,101	2/2/2018	No			\$	17,177	\$	17,177	Nashua	Yes	\$	29.82	\$	512	Budgeted under WTP Misc equipment purchased	
Purchase new lab equipment	Purchase new lab equipment					Deferred. No Bond sought. No QCPAC sought.		\$	15,000	\$	-									
Purchase new lab equipment	Hanna Titrator	1707187	DW17-183	26,101	2/2/2018	No			\$	5,900	\$	5,900	Nashua	No					Budgeted under Purchase new lab equipment	
WTP structural/HVAC	Replaced Compressor on A/C Unit FWPS	1708347	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	5,568	\$	5,568	Nashua	Yes	\$	29.82	\$	166	Budget place holder. No Misc. Fencing/Security Projects YTD
Misc Security upgrades for remote facilities	Misc. Fencing/Security Projects					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-								Main Gate opening mechanism replaced. Fencing deferred	
Complete Fencing around WTP for Security	Perimeter fencing at WTP	1706963	DW17-183	26,101	2/2/2018	No		\$	80,000	\$	5,588	\$	5,588	Nashua	Yes	\$	29.82	\$	167	Deferred
Replace Clarifier (2)Vacuum Blowers and Actuators	Replace Clarifier (2)Vacuum Blowers and Actuators					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-								Budget Place Holder. See below for actual projects	
Misc. SCADA Electrical upgrades	Misc. SCADA Electrical					Deferred. No Bond sought. No QCPAC sought.		\$	30,000	\$	-								Budgeted under Misc. SCADA Electrical upgrades	
Misc. SCADA Electrical upgrades	Valleyfield - Install Cellular Communication	1701886	DW17-183	26,101	2/2/2018	No		\$	-	\$	5,000	\$	3,249	Plaistow	Yes	\$	28.39	\$	92	Project added to allow remote monitoring of water system
Misc. SCADA Electrical upgrades	Install Cellular Communication, Cabot Preserve	1716549	DW17-183	26,101	2/2/2018	No													Permanent standby generator added on site at this Community Water System.	
Hi-Lo Generator	Hi-Lo Generator	1701899	DW17-183	26,101	2/2/2018	No													Budgeted under Misc. SCADA Electrical upgrades	
Armory Street Booster Pump VFD replacements	Replace failed VFD's on Amory Street Booster Pumps	1719862	DW17-183	26,101	2/2/2018	No		\$	-	\$	23,500	\$	47,332	Derry	Yes	\$	33.23	\$	1,573	Unbudgeted. Security upgrades required hardware replacement
Misc. SCADA Electrical upgrades	Replace all SCADA Computers and Upgrade System	1701889	DW17-183	26,101	2/2/2018	No		\$	-	\$	43,000	\$	19,990	Nashua	Yes	\$	29.82	\$	596	Budget place holder. No Well Rehabilitation Projects YTD
Well Rehabilitations (3)	Well Rehabilitations					Deferred. No Bond sought. No QCPAC sought.		\$	60,000	\$	-								Deferred	
WTP Closed Circuit Camera replacement/improvements	Closed Circuit Camera replacement/improvements					Deferred. No Bond sought. No QCPAC sought.		\$	60,000	\$	-								Deferred	
WTP - Replace storefront glass, renovate WTP reception	Replace storefront glass, renovate WTP reception					Deferred. No Bond sought. No QCPAC sought.		\$	50,000	\$	-								Deferred	
Office renovation-conference room	Office renovation-conference room					Deferred. No Bond sought. No QCPAC sought.		\$	50,000	\$	-								Deferred	
Water Supply - Watershed Public Education	Fertilization / Pesticide - Phase 1					Deferred. No Bond sought. No QCPAC sought.		\$	20,000	\$	-								Will not be completed until 2018	
Stormwater BMP Notifications and Community Education	Stormwater BMP Notifications and Community Education					Deferred. No Bond sought. No QCPAC sought.		\$	12,000	\$	-								Will not be completed until 2018	
St. Joseph's Land Purchase	Watershed protection	1503675	DW17-183	26,101	2/2/2018	No													Project started in 2015. Land purchased from local hospital. Land adjacent to Supply Pond.	
Secure reception area	Office Security for Front Reception Desk	1708425	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	20,990	\$	18,824	Merrimack	No				Original estimate did not include bullet proof glass and other security features	
Adjustable Desk Tops	Accommodate back issues	1713759	DW17-183	26,101	2/2/2018	No		\$	-	\$	6,088	\$	6,088	Merrimack	No					
Asset Management - Phase 3	Asset Management 2016 Carry over	1600061	DW17-183	26,101	2/2/2018	No		\$	200,000	\$	200,000	\$	161,590	Merrimack	Yes	\$	28.17	\$	4,552	
Conversion to R.A.M. Fixed Assets carry-over	Conversion to R.A.M. Fixed Assets carry-over	1707349	DW17-183	26,101	2/2/2018	No		\$	11,000	\$	11,000	\$	6,929	Merrimack	No					
Firewall	Firewall replacement	1702081	DW17-183	26,101	2/2/2018	No		\$	50,000	\$	36,426	\$	28,228	Merrimack	No					
Asset Management - Phase 4	Continue progress on Asset Management implementation	1700300	DW17-183	26,101	2/2/2018	No		\$	736,000	\$	350,000	\$	492,133	Various	Yes	\$	28.85	\$	14,198	Reduced level of work than budgeted due to staff time diverted to PFOA response
Click Mobile Upgrade	Upgrade ClickMobile to work on iPads	1707189	DW17-183	26,101	2/2/2018	No		\$	150,000	\$	5,400								2016 Work completed. 2017 work deferred until 2018	
Click Mobile Upgrade	Purchase iPads for ClickMobile Platform	1702223	DW17-183	26,101	2/2/2018	No		\$	-	\$	5,160	\$	5,160	Various						

Total Projected 2017 PWW Capital Ex \$ 9,729,000 \$ 4,163,760 \$ 6,058,766
Amount to be funded with April 2018 Bond issue - \$ 5,291,409
Amount to be funded with Amherst Street Project SRF loan - \$ 767,357
Projected Property Tax - \$ 122,079

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Replace Forman Truck	Existing Truck has been a safety and maintenance problem		DSRR 0.1			\$ 90,000				Merrimack	No	\$ 28.17	\$ -	
10 New Services	Single Family, Owner Build, New Homes		DW17-183			\$ 46,000				Various	Yes	\$ 28.85	\$ 1,327	
20 Renewed Services	Replacement of failed services		DW17-183			\$ 92,000				Various	Yes	\$ 28.85	\$ 2,654	
10 Hydrants	Replacement of non functional hydrants		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
10 Valve Replacements	Replacement of Failed Gate Valves		DW17-183			\$ 30,000				Various	Yes	\$ 28.85	\$ 866	
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers (280)		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
480 New Meters (growth) 5/8"-2" (CORE & CWS)	New meters for new customers, including PFOA		DW17-183			\$ 114,000				Various	Yes	\$ 28.85	\$ 3,289	
2,355 New Meters for Lead Meter exchanges (PWW-CORE & CWS) 5/8"-6"	Replace High lead brass meter with new no lead brass meter		DW17-183			\$ 532,000				Various	Yes	\$ 28.85	\$ 15,348	
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate		DW17-183			\$ 10,000				Merrimack	No	\$ 28.17	\$ -	
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles		DW17-183			\$ 60,000				Merrimack	No	\$ 28.17	\$ -	
1 Service Truck - New	Service Truck for 1 new ops employees		DSRR 0.1			\$ 35,000				Merrimack	No	\$ 28.17	\$ -	
Replacement of Meter Supervisor Truck (#14)	Replace 7 year old pick up with 167,000+ miles with small SUV		DW17-183			\$ 28,000				Merrimack	No	\$ 28.17	\$ -	
Replace Valve/vac trailer unit	Existing unit has reach the end of its usable life		DW17-183			\$ 65,000				Merrimack	No	\$ 28.17	\$ -	
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment		DSRR 0.1			\$ 39,000				Merrimack	No	\$ 28.17	\$ -	
Pipe Saws (5)	Ongoing small equipment replacement - run rate		DW17-183			\$ 6,000				Merrimack	No	\$ 28.17	\$ -	
Metal Detectors (6)	Ongoing small equipment replacement - run rate		DW17-183			\$ 7,000				Merrimack	No	\$ 28.17	\$ -	
Add Air Conditioning to Mechanics Bay	Security Project		DW17-183			\$ 52,000				Merrimack	No	\$ 28.17	\$ -	
Four trench boxes	Four trench boxes		DW17-183			\$ 20,000				Merrimack	No	\$ 28.17	\$ -	
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW		DW17-183			\$ 85,000				Bedford	Yes	\$ 23.19	\$ 1,971	
Elm St	Replace 1570 LF of 8 & 6 inch CI with 12 inch DIPCL		DW17-183			\$ 416,000				Nashua	Yes	\$ 29.82	\$ 12,405	
Monroe Street	Replace 485 LF of 4 inch (HDPE,CI) with 8 inch DIPCL		DW17-183			\$ 122,000				Nashua	Yes	\$ 29.82	\$ 3,638	
West Pearl Street	Replace 325 LF of 8 inch CI with 8 inch DIPCL		DW17-183			\$ 100,000				Nashua	Yes	\$ 29.82	\$ 2,982	
Gillis St	Residual paving from prior year main replacement		DW17-183			\$ 143,000				Nashua	Yes	\$ 29.82	\$ 4,264	
Orange St (Concord St to Lock St)	Residual paving from prior year main replacement		DW17-183			\$ 96,000				Nashua	Yes	\$ 29.82	\$ 2,863	
Buchanan St	Residual paving from prior year main replacement		DW17-183			\$ 36,600				Nashua	Yes	\$ 29.82	\$ 1,091	
Lincoln Ave	Residual paving from prior year main replacement		DW17-183			\$ 52,300				Nashua	Yes	\$ 29.82	\$ 1,560	
Nutt St	Residual paving from prior year main replacement		DW17-183			\$ 39,600				Nashua	Yes	\$ 29.82	\$ 1,181	
Circle Ave	Residual paving from prior year main replacement		DW17-183			\$ 11,000				Nashua	Yes	\$ 29.82	\$ 328	
Pratt St	Residual paving from prior year main replacement		DW17-183			\$ 47,000				Nashua	Yes	\$ 29.82	\$ 1,402	
Zellwood Ave	Residual paving from prior year main replacement		DW17-183			\$ 25,000				Nashua	Yes	\$ 29.82	\$ 746	
Paxon St	Residual paving from prior year main replacement		DW17-183			\$ 6,000				Nashua	Yes	\$ 29.82	\$ 179	
Fifield St	Residual paving from prior year main replacement		DW17-183			\$ 4,400				Nashua	Yes	\$ 29.82	\$ 131	
Fowell Ave	Residual paving from prior year main replacement		DW17-183			\$ 59,400				Nashua	Yes	\$ 29.82	\$ 1,771	
Terrace Street	Residual paving from prior year main replacement		DW17-183			\$ 5,200				Nashua	Yes	\$ 29.82	\$ 155	
Beard St	Residual paving from prior year main replacement		DW17-183			\$ 16,100				Nashua	Yes	\$ 29.82	\$ 480	
Green St	Residual paving from prior year main replacement		DW17-183			\$ 3,100				Nashua	Yes	\$ 29.82	\$ 92	
Warren St	Residual paving from prior year main replacement		DW17-183			\$ 11,000				Nashua	Yes	\$ 29.82	\$ 328	
Lowell St	Residual paving from prior year main replacement		DW17-183			\$ 23,000				Nashua	Yes	\$ 29.82	\$ 686	
Lemon St	Residual paving from prior year main replacement		DW17-183			\$ 4,400				Nashua	Yes	\$ 29.82	\$ 131	
Mulvanity St - Emergency Replacement	Residual paving from prior year main replacement		DW17-183			\$ 51,700				Nashua	Yes	\$ 29.82	\$ 1,542	
	Reserve for Contingent Liability for Paving Costs					\$ (634,800)				Nashua	Yes	\$ 29.82	\$ (18,930)	
Asset Management	Asset Management		DW17-183			\$ 330,000				Various	Yes	\$ 28.85	\$ 9,521	
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL		DW17-183			\$ 475,100				Nashua	Yes	\$ 29.82	\$ 14,167	
Ritter Street	Replace 500 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 161,500				Nashua	Yes	\$ 29.82	\$ 4,816	
Woodward Street	Replace 300 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 95,300				Nashua	Yes	\$ 29.82	\$ 2,842	
Factory Street	Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL		DW17-183			\$ 487,000				Nashua	Yes	\$ 29.82	\$ 14,522	
Pennichuck Street	Replace 100 LF of 12 inch CI with 12 inch DIPCL		DW17-183			\$ 39,900				Nashua	Yes	\$ 29.82	\$ 1,190	
Fossa Avenue	Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL		DW17-183			\$ 46,200				Nashua	Yes	\$ 29.82	\$ 1,378	
	Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL		DW17-183			\$ 237,800				Nashua	Yes	\$ 29.82	\$ 7,091	
Russell Avenue			DW17-183			\$ 171,800				Nashua	Yes	\$ 29.82	\$ 5,123	
Taylor Street (Main St to Fifield)	Replace 790 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 172,800				Nashua	Yes	\$ 29.82	\$ 5,153	
Burnett Street	Replace 535 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 71,700				Nashua	Yes	\$ 29.82	\$ 2,138	
Field Street	Replace 325 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 159,000				Nashua	Yes	\$ 29.82	\$ 4,741	
Fernwood Street	Replace 450 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 191,000				Nashua	Yes	\$ 29.82	\$ 5,696	
Revere Street	Replace 760 LF of 6 inch CI with 8 inch DIPCL		DW17-183											
	Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF of 4 inch DIPCL		DW17-183			\$ 40,000				Nashua	Yes	\$ 29.82	\$ 1,193	
Stevens Street	Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL		DW17-183			\$ 69,300				Nashua	Yes	\$ 29.82	\$ 2,067	
Evergreen Street	Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL		DW17-183			\$ 94,000				Nashua	Yes	\$ 29.82	\$ 2,803	
Morton Street			DW17-183											
	Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF of 4 inch DIPCL		DW17-183			\$ 132,000				Nashua	Yes	\$ 29.82	\$ 3,936	
Park Avenue	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL		DW17-183			\$ 1,024,400				Nashua	Yes	\$ 29.82	\$ 30,548	
Coburn Woods (all side streets)			DW17-183							Nashua	Yes	\$ 29.82	\$ -	
Northwest Water Main Improvements			DW17-183							Nashua	Yes	\$ 29.82	\$ 17,892	
	Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.	DW17-183			\$ 600,000				Nashua	Yes	\$ 29.82	\$ 14,910	
	Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop	DW17-183			\$ 440,000				Nashua	Yes	\$ 29.82	\$ 13,121	
	Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL	DW17-183			\$ 1,085,200				Nashua	Yes	\$ 29.82	\$ 32,361	
Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DI		DW17-183			\$ 73,000				Various	No	\$ 28.85	\$ -	
Outside GIS Consulting Services	Outside GIS Consulting Services		DW17-183			\$ 140,000				Various	Yes	\$ 28.85	\$ 375	
Water Modeling Consulting	Water Modeling Consulting		DW17-183			\$ 13,000				Various	No	\$ 28.85	\$ -	
Trimble R2 Units	Trimble R2 Units		DW17-183			\$ 5,000				Various	No	\$ 28.85	\$ -	
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
Replace Jeep with Pickup	Replace 2006 Jeep with 152,407 miles with Pickup		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
Replace Ranger Pickup	Replace 2005 Ranger Pickup with 186,885 miles		DW17-183			\$ 60,000				Various	Yes	\$ 28.85	\$ 1,731	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW17-183			\$ 15,000				Various	Yes	\$ 28.85	\$ 433	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW17-183			\$ 20,000				Various	Yes	\$ 28.85	\$ 577	
Misc. Structural Improvements	Misc. Structural Improvements		DW17-183			\$ 20,000				Various	Yes	\$ 28.85	\$ 577	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW17-183							Various	Yes	\$ 28.85	\$ 577	

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW17-183			\$ 30,000				Various	Yes	\$ 28.85	\$ 866	
Well Rehabilitation	Well Rehabilitation		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
WTP Structural/HVAC	WTP Structural/HVAC		DW17-183			\$ 10,000				Nashua	Yes	\$ 29.82	\$ 298	
Purchase new lab equipment	Purchase new lab equipment		DW17-183			\$ 20,000				Nashua	No	\$ 29.82	\$ -	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW17-183			\$ 10,000				Various	Yes	\$ 28.85	\$ 289	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000				Nashua	No	\$ 29.82	\$ -	
WTP Perimeter Fence	WTP Perimeter Fence		DW17-183			\$ 80,000				Merrimack	Yes	\$ 28.17	\$ 2,254	
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering		DSRR 0.1			\$ 90,000				Merrimack	No	\$ 28.17	\$ -	Not Eligible for 2018 QCPAC as this is engineering only
WTP Camera system upgrade	Existing Camera system is outdated		DW17-183			\$ 50,000				Nashua	Yes	\$ 29.82	\$ 1,491	
Dredging feasibility study	Dredging feasibility study		DSRR 0.1			\$ 31,500				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Sourcewater Protection Study	Sourcewater Protection Study		DSRR 0.1			\$ 15,000				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Aquatic Vegetation Assessment and Management	Aquatic Vegetation Assessment and Management		DSRR 0.1			\$ 7,500				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Website Upgrades	Improved Customer Service Experience		DW17-183			\$ 10,000				Merrimack	No	\$ 28.17	\$ -	
SIFM Appliance	Aggregate Real-time monitoring of system alerts and logs		DW17-183			\$ 26,000				Merrimack	No	\$ 28.17	\$ -	
AD Change Auditor	Needed to track changes to Authentication Server		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
File Server Replacement	Replace older hardware		DW17-183			\$ 13,000				Merrimack	No	\$ 28.17	\$ -	
Storage Upgrade	Replace non-supported hardware and increase speed		DW17-183			\$ 70,000				Merrimack	No	\$ 28.17	\$ -	
Munis FER Enhancements	Needed as Business process change		DW17-183			\$ 64,000				Merrimack	No	\$ 28.17	\$ -	
Click Mobile Application Changes	Needed as Business process change		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
ClickMobile Move to iPads	Move to a more functional device		DW17-183			\$ 140,000				Merrimack	No	\$ 28.17	\$ -	
Implement Customer Balances over the phone	Improved Customer Service Experience		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Hardware	Run Rate replacements		DW17-183			\$ 15,000				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Software	Run Rate replacements		DW17-183			\$ 12,000				Merrimack	No	\$ 28.17	\$ -	
LIMS upgrade	Allow for Electronic Data Collection in the Field		DW17-183			\$ 11,000				Merrimack	No	\$ 28.17	\$ -	
Physical Server for Pearl			DW17-183			\$ 12,000				Merrimack	No	\$ 28.17	\$ -	
Corporate Job Scheduler	Centralized nightly Job management and notification		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Consulting	Consulting		DW17-183			\$ 32,000				Merrimack	No	\$ 28.17	\$ -	
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Additional Computers	Additional Computers		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Pennichuck Water Works Projected 2018 Total Capital Expenditure Budget -						\$ 10,138,000	Projected Property Tax Expense associated with QCPAC projects -						\$ 254,905	

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 28.85	\$ 1,327
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 28.85	\$ 2,654
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Replace failed radio meter readers	Replace out of warranty failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 62,000	Various	Yes	\$ 28.85	\$ 1,789
1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	\$ 259,000	Various	Yes	\$ 28.85	\$ 7,472
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 28.85	\$ 779
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Truck replacement (#4)	Replace 2011 Pickup Truck with 160,000+ projected miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter service van replacement (#72)	Replace 2009 Meter Van with 158,000+ projected miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (2)	Ongoing small equipment replacement	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Tapping Machine replacements (2)	Tapping Machine replacements (2)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Trimble units for Meter Reading (4 units)	Replace remaining CE meter reading equipment	\$ 13,000	Merrimack	No	\$ 28.17	\$ -
Replace 2850 meter reading radios	Complete with PT's, Replace aging radios	\$ 270,000	Various	No	\$ 28.85	\$ -
Elm St	Residual paving from prior year main replacement	\$ 22,000	Nashua	Yes	\$ 29.82	\$ 656
Monroe Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
West Pearl Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Gilman Street	Residual paving from prior year main replacement	\$ 180,000	Nashua	Yes	\$ 29.82	\$ 5,368
Ritter Street	Residual paving from prior year main replacement	\$ 61,200	Nashua	Yes	\$ 29.82	\$ 1,825
Woodward Street	Residual paving from prior year main replacement	\$ 36,200	Nashua	Yes	\$ 29.82	\$ 1,079
Factory Street	Residual paving from prior year main replacement	\$ 155,600	Nashua	Yes	\$ 29.82	\$ 4,640
Pennichuck Street	Residual paving from prior year main replacement	\$ 13,200	Nashua	Yes	\$ 29.82	\$ 394
Fossa Avenue	Residual paving from prior year main replacement	\$ 33,400	Nashua	Yes	\$ 29.82	\$ 996
Russell Avenue	Residual paving from prior year main replacement	\$ 52,700	Nashua	Yes	\$ 29.82	\$ 1,572
Taylor Street (Main St to Fifield)	Residual paving from prior year main replacement	\$ 86,500	Nashua	Yes	\$ 29.82	\$ 2,579
Burnett Street	Residual paving from prior year main replacement	\$ 65,500	Nashua	Yes	\$ 29.82	\$ 1,953
Field Street	Residual paving from prior year main replacement	\$ 33,500	Nashua	Yes	\$ 29.82	\$ 999
Fernwood Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Revere Street	Residual paving from prior year main replacement	\$ 80,100	Nashua	Yes	\$ 29.82	\$ 2,389
Stevens Street	Residual paving from prior year main replacement	\$ 102,100	Nashua	Yes	\$ 29.82	\$ 3,045
Evergreen Street	Residual paving from prior year main replacement	\$ 26,000	Nashua	Yes	\$ 29.82	\$ 775
Morton Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Park Avenue	Residual paving from prior year main replacement	\$ 38,000	Nashua	Yes	\$ 29.82	\$ 1,133
Northwest Water Main Improvements	Residual paving from prior year main replacement	\$ 35,000	Nashua	Yes	\$ 29.82	\$ 1,044
Lake Street	Residual paving from prior year main replacement	\$ 330,000	Nashua	Yes	\$ 29.82	\$ 9,841
Coburn Woods (all side streets)	Residual paving from prior year main replacement	\$ 175,700	Nashua	Yes	\$ 29.82	\$ 5,239
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch	\$ 255,600	Nashua	Yes	\$ 29.82	\$ 7,622
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL	\$ 47,400	Nashua	Yes	\$ 29.82	\$ 1,413
Ash Street	Replace 510 LF of 6 inch CI with 8 inch DIPCL	\$ 115,600	Nashua	Yes	\$ 29.82	\$ 3,447
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL	\$ 95,000	Nashua	Yes	\$ 29.82	\$ 2,833
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL	\$ 21,000	Nashua	Yes	\$ 29.82	\$ 626
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL	\$ 151,900	Nashua	Yes	\$ 29.82	\$ 4,530
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL	\$ 56,000	Nashua	Yes	\$ 29.82	\$ 1,670
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	\$ 5,500,000	Merrimack	Yes	\$ 28.17	\$ 154,935
Twin Ridge Station Improvements	Twin Ridge Station Improvements	\$ 330,000	Plaistow	Yes	\$ 28.39	\$ 9,369
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 24,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Bowers Dam Spillway reconstruction	Bowers Dam Spillway reconstruction	\$ 900,000	Various	Yes	\$ 28.85	\$ 25,965
Carbon media changeout-filters 1 & 3	Carbon media changeout-filters 1 & 3	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Desktop PC Replacements	Desktop Replacements	\$ 80,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other Miscellaneous IT Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2019 Total Capital Expenditure Budget -		\$ 11,604,200	Projected Property Tax Expense associated with QCPAC projects -			\$ 301,601

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 29.13	\$ 1,340
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 29.13	\$ 2,680
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 29.13	\$ 874
Replace failed radio meter readers	Replace out of warrantee failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 65,000	Various	Yes	\$ 29.13	\$ 1,893
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 29.13	\$ 787
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Pick Up replacement (#20)	Replace 2008 with projected 136,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Pick Up replacement (#95)	Replace 2008 with projected 130,000+ miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter Van replacement (#27)	Replace 2011 with projected 135,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Reading SUV replacement (#21)	Replace 2011 with projected 140,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (3)	Mud Pump Replacements (3)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Radio Replacements (2850)	Complete with PT's, Replace aging radios	\$ 270,000	Various	Yes	\$ 29.13	\$ 7,865
Brook Street	Residual paving from prior year main replacement	\$ 128,700	Nashua	Yes	\$ 29.82	\$ 3,838
Hamilton Street	Residual paving from prior year main replacement	\$ 40,900	Nashua	Yes	\$ 29.82	\$ 1,220
Ash Street	Residual paving from prior year main replacement	\$ 58,300	Nashua	Yes	\$ 29.82	\$ 1,739
Burritt Street	Residual paving from prior year main replacement	\$ 47,800	Nashua	Yes	\$ 29.82	\$ 1,425
Burritt Street	Residual paving from prior year main replacement	\$ 18,100	Nashua	Yes	\$ 29.82	\$ 540
Verona Street	Residual paving from prior year main replacement	\$ 76,500	Nashua	Yes	\$ 29.82	\$ 2,281
Sarasota Ave	Residual paving from prior year main replacement	\$ 28,200	Nashua	Yes	\$ 29.82	\$ 841
Fields Grove Park Crossing (Chestnut to Lawndale)	Add 750 LF of 16 inch HDPE (stream crossing)	\$ 441,800	Nashua	Yes	\$ 29.82	\$ 13,174
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL	\$ 127,000	Nashua	Yes	\$ 29.82	\$ 3,787
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL	\$ 219,200	Nashua	Yes	\$ 29.82	\$ 6,537
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL	\$ 39,200	Nashua	Yes	\$ 29.82	\$ 1,169
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL	\$ 51,100	Nashua	Yes	\$ 29.82	\$ 1,524
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL	\$ 49,300	Nashua	Yes	\$ 29.82	\$ 1,470
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL	\$ 23,800	Nashua	Yes	\$ 29.82	\$ 710
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL	\$ 47,000	Nashua	Yes	\$ 29.82	\$ 1,402
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL	\$ 83,000	Nashua	Yes	\$ 29.82	\$ 2,475
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL	\$ 63,000	Nashua	Yes	\$ 29.82	\$ 1,879
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	\$ 181,000	Nashua	Yes	\$ 29.82	\$ 5,397
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL	\$ 637,000	Nashua	Yes	\$ 29.82	\$ 18,995
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL	\$ 360,600	Nashua	Yes	\$ 29.82	\$ 10,753
Taylor Road (Lynn St to	Replace 725 LF of 8 inch CI with 12 inch DIPCL	\$ 241,200	Nashua	Yes	\$ 29.82	\$ 7,193
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL	\$ 301,400	Nashua	Yes	\$ 29.82	\$ 8,988
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL	\$ 91,400	Nashua	Yes	\$ 29.82	\$ 2,726
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement	\$ 3,080,000	Nashua	Yes	\$ 29.82	\$ 91,846
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 18,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Work Order and Asset Management (Synergen upgrade)	Upgrade WAM to new infrastructure and interface	\$ 90,000	Merrimack	Yes	\$ 28.17	\$ 2,535
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other IT Miscellaneous Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -		\$ 8,731,500	Projected Property Tax Expense associated with QCPAC projects -			\$ 235,407

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-1

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Staff 3-1 / 3-10: Please clarify whether the interest rate on the Amherst Street Area Water Main Replacement Project SRF Loan is 2.462% or 2.464%.

RESPONSE:

The correct interest rate is 2.464%.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-2

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Staff 3-1 / 3-10: Please confirm that the remaining annual Principal & Interest payment on the Amherst Street SRF Loan to be recovered through the QCPAC should be \$33,655 (\$61,400 - \$27,745 (16-806 Step)) rather than \$36,477 per the calculation on Exhibit 1; a difference of \$2,822. Therefore, the resulting addition to PW's DSRR would be \$373,895 (\$340,240 + \$33,655) rather than \$376,717 (\$340,240 + \$36,477) as indicated on Exhibit 1.

RESPONSE:

The correct amount to be recovered in the 2018 QCPAC surcharge is \$25,178. This is calculated by taking the 2018 SRF payment to the State of \$52,924 (Principal and Interest due on SRF loan in 2018 less principal forgiveness) less \$27,746 recovered in DW16-806.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-3

Date of Response: 8-6-2018
Witness: Larry D. Goodhue

REQUEST: Re: Staff 3-28: Please provide further explanation regarding the following entry contained on the updated 2018 QCPAC Budget (Exhibit 2, Page 2): "Reserve for Contingent Liability for Paving Costs: \$(634,800)"

RESPONSE:

With regard to the negative \$634,800, that all relates to the lines immediately preceding that item in the capital budget, all identified as "paving." That is for our share in the cost of repaving streets in the City of Nashua where water mains and sewer lines were replaced. However, the department at the City responsible for that has not yet requested that we release the payment to them for these amounts, and we indicated to them that unless they bill us timely before year-end, they will have to wait 12 months to get paid for these amounts. This is related to the QCPAC and used and useful rules. Being that we have little confidence that they are going to actually seek this reimbursement in 2018, we fully reserved these amounts in the 2018 Capex budget, but wanted to leave the detailed line items in the budget as a reminder that these costs will be incurred at a point in time (most likely as part of the 2019 Capex expenditures).

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-4

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Staff 3-28: Please explain the \$90,000 increase in the "Water Modeling Consulting" line item included in the 2018 QCPAC Budget (Exhibit 2, Page 2) from the amount as originally filed of \$50,000 to the updated amount of \$140,000.

RESPONSE:

The correct number for the modelling is \$50,000. This has been corrected in the 2018 QCPAC Exh 1 workbook on the 2018 Capex budget tab.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-5

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Staff 3-28: Based on the Company's response, please provide updated budget projections for the years 2019 (Exhibit 2, Page 3) and 2020 (Exhibit 2, Page 4).

RESPONSE:

These budgets have been revised on the attached QCPAC Exh 1, the 2019 and 2020 tabs

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-6

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Filing Attachment B, Draft QCPAC Tariff Language, Bates 37, Last paragraph, First Sentence: The Company indicated that this sentence should be amended to effectively state, "The QCPAC will be applied to all bills rendered 30 days after bonding."

RESPONSE:

This language has been changed to "applied to all bills rendered 30 days after April 4, 2018" which reflects the actual bond sale date. We used the actual date instead of 30 days after the filing as this page will need to be revised with each QCPAC approval.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-7

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Filing Attachment B, Draft QCPAC Tariff Language, Bates 38, Property Taxes: The Company agreed that this paragraph should be amended to mirror the provision for QCPAC Property Tax Expense contained in the approved DW 16-806 Settlement, ie, “. . . incremental property taxes associated with the specific capital projects, as determined in the year of the granting of the QCPAC for such projects.”

RESPONSE:

The language in the attached tariff has been changed as discussed at the tech session.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-8

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Filing Attachment B, Draft QCPAC Tariff Language, Bates 40, Customer Notice: The Company agreed to confirm that it would provide customer notice via a "buck slip". As such: a) Does the Company need to amend the tariff language in any respect? b) Will the Company provide a copy in advance of the proposed "buck slip" to the Commission's Consumer Services Division for comment and approval?

RESPONSE:

Language regarding a buck slip has been added to the proposed tariff.

Pennichuck Water Works, Inc.
DW 18-022
2018 QCPAC
Responses to Staff Tech Session Data Requests

Date Request Received: 7-11-2018
Request No. Staff Tech-9

Date of Response: 8-6-2018
Witness: Donald L. Ware

REQUEST: Re: Water Testimony, Bates 18, Lines 3-5: It appears that the DW 16-806 revenue requirements associated for the fixed contract charges associated with the Anheuser-Busch, Town of Hudson and Town of Milford fixed monthly charges should be subtracted from the overall DW 16-806 revenue requirement in order to determine the appropriate QCPAC %. If yes, please make the appropriate adjustments to the Company's Exhibit 1.

RESPONSE:

This correction was made to the Attached QCPAC Exh 1 workbook in the first tab.

ATTACHMENT B – DRAFT QCPAC TARIFF LANGUAGE

NHPUC NO. 6 Water

Fifth Revised Page 48

PENNICHUCK WATER WORKS, INC.

Superseding Fourth Revised Page 48

QUALIFIED CAPITAL PROJECT ADJUSTMENT CHARGE

In addition to the net charges provided for in this Tariff, a Qualified Capital Project Adjustment Charge ("QCPAC") surcharge of x.xx% will apply to all bills issued 30 days after April 4, 2018.

I. General Description

Purpose: To recover the fixed costs (1.1 time principal and interest and property taxes) of Commission-approved capital expenditures needed to operate maintain, insure regulatory compliance and to replace aging infrastructure which were completed and placed in service and to be recorded in the individual accounts, as noted below, between base rate cases. In addition, QCPAC provides the Company with the resources to complete essential asset replacement for infrastructure for the purpose of improving or protecting water quality and the reliability of service and to comply with evolving regulatory requirements imposed by the Safe Drinking Water Act.

QCPAC Eligible Property will encompass all Assets acquired by the Company as part of its annual capital improvements plan. Any regulatory asset that is recovered through an amortization expense is not eligible for QCPAC treatment.

Computation of the QCPAC

The charge effective for all bills issued 30 days after April 4, 2018 will be calculated to recover the fixed costs of eligible plant additions not previously reflected in the Company's rate base and placed in service between January 1, 2017 and December 31, 2017. Thereafter, the QCPAC will be updated on an annual basis to reflect eligible plant additions placed in service during the prior calendar year. Thus, changes in the QCPAC surcharge percentage will occur as follows:

Effective Date
of QCPAC Change

April 4, 2018

Date To Which QCPAC Eligible
Plant Additions Reflected

December 31, 2018

The QCPAC will be applied to all bills rendered 30 days after April 4, 2018. The QCPAC will be applied uniformly to all customer classes and charges with the exception that the QCPAC will not be applied against the monthly fixed contract charges associated with Anheuser-Busch, Town of Milford and Town of Hudson special contracts.

Issued: September 21, 2018

Effective: April 4, 2018

Issued by: _____

Name: Donald L. Ware

Title: Chief Operating Officer

The fixed costs of eligible infrastructure system improvement projects will consist of principal and interest payments and property taxes calculated as follows:

Principal and Interest: The principal and interest expense will be based on the annual principal and interest associated with the Bond sold on or about March 21, 2018 to pay for the QCPAC qualified projects that were completed and used in useful by December 31, 2017. The Bond Principal and interest of the Bond will be multiplied by 1.1 to determine this portion of the QCPAC surcharge. The revenues collected via the QCPAC surcharge shall be divided into two revenue streams with the revenues associated with 1.0 times the QCPAC principal and interest being part of the Company's Debt Service Revenue Requirement ("DSRR") and the revenues associated with 0.1 times the QCPAC principal and interest being part of the Company's 0.1 Debt Service Revenue Requirement ("0.1 DSRR").

Property Taxes: incremental property taxes associated with the specific capital projects, as determined in the year of the granting of the QCPAC for such projects. The property tax expense will reflect an estimate of the tax expense for such projects based on the tax rate then in effect at the end of the year the QCP was used and useful times the final audited cost of the eligible 's.

QCPAC Surcharge Amount: The charge will be expressed as a percentage carried to two decimal places and will be applied to the effective portion of the total amount billed to each customer under the Company's otherwise applicable rates and charges.

The QCPAC Surcharge Amount approved by the Commission will be recouped back to the effective date of this tariff. The recoupment will be calculated based on actual charges incurred between the effective date of this tariff and the issued date of this tariff and shall be collected as a lump sum on the first bill rendered after the issuance date of this tariff.

Issued: September 21, 2018
Effective: April 4, 2018

Issued by: _____
Name: Donald L. Ware
Title: Chief Operating Officer

Formula: The formula for calculation of the QCPAC surcharge is as follows:

$$\text{QCPAC} = \frac{1.1 \times (\text{AP} + \text{AI}) + \text{PT}}{\text{BRWR} - \text{FCC}}$$

Where:

AP = the annual principal payments associated with the bonds issued to fund QCPAC eligible projects that were used and useful before the end of the preceding year.

AI = the annual interest payments associated with the bonds issued to fund QCPAC eligible projects that were used and useful before the end of the preceding year the pre-tax return rate applicable to eligible infrastructure system improvement projects.

PT = annual property taxes related to approved QCP's

BRWR= base retail water revenues as approved by the Commission in the Company's last rate proceeding, DW 16-806, or a subsequent docket.

FCC = Fixed Contract Charges not subject to PWW general rate increases. Fixed Contract Charges are part of PWW's special water contracts with Anheuser-Busch, Town of Milford and Town of Hudson approved by the Commission.

Annual updates: Supporting data for each annual update will be filed with the Commission and the Office of Consumer Advocate no later than February 15th of each year.

Audits: The QCPAC will be subject to audit prior to the determination by the Commission.

New Base Rates: The QCPAC charge will be reset at zero as of the effective date of new base rates that provide for prospective recovery of the annual costs that had theretofore been recovered under the QCPAC. Thereafter, only the fixed costs of new eligible plant additions that have not previously been reflected in the Company's rate base would be reflected in the annual updates of the QCPAC.

Issued: September 21, 2018
Effective: April 4, 2018

Issued by: _____
Name: Donald L. Ware
Title: Chief Operating Officer

Customer Notice: At least thirty (30) days in advance of a QCPAC filing, the Company will notify Customers of the filing by including an explanatory bill insert with the bills. Customers shall also be notified of changes in the QCPAC by including appropriate information with the first bill they receive following any change.

Notice of Project Substitution: If, after the Company has received Commission approval for Year 1 QCPAC projects, because of changed circumstances or significant new information the Company plans to undertake projects in Year 1 that were not included on the list of approved QCPAC projects for that year or it has decided not to proceed with one or more projects that were included on the Commission-approved list, it shall notify the Commission and all parties to the proceeding in which the list of QCPAC projects was approved that the Company plans to add to or delete projects and the reason for the proposed changes, in accordance with the following schedule. The Company will submit updates for approved QCPAC projects for that year, based upon information known on a year-to-date basis, from the beginning of the year through the following effective dates, on the associated reporting dates:

Effective Date

June 30
September 30
November 30

Reporting Date

August 15
November 15
January 15

Issued: September 21, 2018
Effective: April 4, 2018

Issued by: _____
Name: Donald L. Ware
Title: Chief Operating Officer

	DW16-806 Approved		Requested QCPAC		Requested QCPAC		Projected QCPAC For		Projected QCPAC		QCPAC For 2019		QCPAC Surcharge for		QCPAC For 2020		QCPAC Surcharge	
	Step Revenue		For 2017 Capital		Surcharge for 2017		2018 Capital Additions		Surcharge for 2018		Capital Additions		2019 Capital		Capital Additions		for 2020 Capital	
	Requirements (11)		Additions pro formas		Capital Additions		pro formas (7,8)		Capital Additions		pro formas (7,8)		Additions		pro formas (7,8)		Additions	
City Bond Fixed Revenue Requirement (CBFRR)	\$7,729,032	(11)			\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ -	\$ 7,729,032	\$ 7,729,032	
Operating Expense Revenue Requirement	\$16,442,012	(1)(11)	\$ 122,079	(4)	\$ 16,564,090	\$ 254,905	\$ 16,818,995	\$ 301,601	\$ 17,120,597	\$ 235,407	\$ 17,356,004							
Annual Principal and Interest Payments	\$6,218,648	(2)	\$365,418	(5)(10)	\$ 6,584,066	\$653,637	\$ 7,237,702	\$754,870	\$ 7,992,572	\$567,997	\$ 8,560,569							
Principal and Interest Coverage Requirement	1.10	(3)			1.10		1.10		1.10		1.10							
Principal and Interest Revenue Requirement	\$ 6,840,513				\$ 7,242,472		\$ 7,961,473		\$ 8,791,829		\$ 9,416,626							
Proposed Revenue Requirement	\$ 31,011,556				\$ 31,535,594		\$ 32,509,500		\$ 33,641,458		\$ 34,501,662							
Current Water Revenues excluding CBFRR	\$20,694,038				\$ 23,282,524		\$ 23,806,562		\$ 24,780,468		\$ 25,912,426							
Add: City Bond Fixed Revenue Requirement	\$7,729,032				\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032							
Current Water Revenues with CBFRR	\$ 28,423,070				\$ 31,011,556		\$ 31,535,594		\$ 32,509,500		\$ 33,641,458							
Percent QCPAC Surcharge (9)					1.69%		3.09%		3.48%		2.56%							
							4.83%		8.48%		11.25%							

Notes:

(1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in DW16-806

(2) Annual Principal and interest payments for PWW debt associated with all plant in service as approved in DW16-806

(3) Principal and interest coverage of 1.10 is as approved in DW16-806

(4) Reflects the net increase in property taxes associated with the plant placed in service between 1/1/2017 and 12/31/2017 that was not included in DW16-806.

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2017 and 12/31/2017 based on a 30 year bond with an actual total all in interest rate of 4.898453% that was not recovered in DW16-806

(7) QCPAC operating expenses are based on the property taxes for plant added during the year

(8) QCPAC Principal and Interest expenses are based on 30 year bond with interest rate of 5.0%

(9) QCPAC percent revenue surcharges based on increase in revenues from the previous year, inclusive of QCPAC surcharges.

(10) Portion of QCPAC Principal and Interest associated with SRF loan of \$ 767,357 for 2017 work completed on Amherst Street project based on the fact that \$ 27,746.00 of P&I was recovered in DW16-806 leaving \$ 25,178.00 of remaining P&I on this SRF loan to be collected via the QCPAC surcharge. The remaining P&I is based on the amortization schedule for this loan provided by the NHDES and is the P&I payment due the State in 2018 after principal forgiveness.

(11) Reduction in revenues associated with fixed contracts as follows: Hudson Annual Fixed Chg \$ 32,800 Milford Annual Fixed Chg \$ 81,000.00 A-B Annual Fixed Chg \$ 371,430.48

Project Name/Description	Project Description	Work Order #	Financing Document No.	NHPPUC Order No.	Date of NHPPUC Order	Funded in DW16-806 Step	Estimated Project Cost as of 1/18/2017	Estimated Project Cost as of 11/15/2017	Final Unaudited Project Costs as of 1/19/2018	Community	Taxable	Tax Rate (%)	QCPAC Eligible Annual Tax Expense	Explanation for Change/Addition/Deletion since 1/18/2017
Heavy Dump Truck Replacement (#12)	Heavy Dump Truck Replacement (#12)	1702309	DW14-130	25,734	11/7/2014	Yes	\$ 130,000	Paid 2014 Bond	\$ -	Merrimack			\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Services	9 Renewed Services with 2014 Bond Funds	Monthly 21, 22, 23	DW14-130	25,735	11/7/2014	Partial	\$ 80,000	Paid 2014 Bond	\$ -	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Hydrants	23 Renewed Services with 2018 Bond Funds	Monthly 31	DW17-183	26,101	2/2/2018	No	\$ -	\$ 40,000	\$ 100,454	Nashua	Yes	\$ 29.82	\$ 2,996	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Valves	3 Hydrants replaced with 2014 Bond Funds	Monthly 31	DW14-130	25,735	11/7/2014	Partial	\$ 42,000	Paid 2014 Bond	\$ -	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
New Services	5 Hydrants replaced with 2018 Bond Funds	Monthly 12, 13	DW17-183	26,101	2/2/2018	No	\$ -	\$ 11,000	\$ 18,643	Nashua	Yes	\$ 29.82	\$ 556	P&I and property taxes to be recovered in 2018 QCPAC
Replace Leaded Brass Meters with Lead free brass meters	3 Valve Replacements	Monthly 29	DW17-183	26,101	2/2/2018	No	\$ -	\$ 50,000	\$ 53,122	Nashua	Yes	\$ 29.82	\$ 1,584	Based on final valve replacement expensed in 2017.
Replace Aging meter reading Radios	2 New Services for Single Family Residential, owner build, per Tariff	Monthly 29	DW14-130	25,735	11/7/2014	Partial	\$ -	Paid 2014 Bond	\$ -	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
	5 New Services for Single Family Residential, owner build, per Tariff	Monthly 29	DW17-183	26,101	2/2/2018	No	\$ -	\$ 34,537	\$ 29,618	Nashua	Yes	\$ 29.82	\$ 884	P&I and property taxes to be recovered in 2018 QCPAC
	410 New Meters for Lead Meter exchanges - 5/8"-6"	Monthly 50	DW14-130	25,735	11/7/2014	Partial	\$ 832,000	Paid 2014 Bond	\$ -	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
	1,410 New Meters for Lead Meter exchanges - 5/8"-6" (NIEED ACTUAL 332)	Monthly 50	DW17-183	26,101	2/2/2018	No	\$ -	\$ 247,266	\$ 267,950	Nashua	Yes	\$ 29.82	\$ 7,990	P&I and property taxes to be recovered in 2018 QCPAC
	Replace 99 failed radios	Monthly 54	DW14-130	25,735	11/7/2014	Partial	\$ 28,000	Paid 2014 Bond	\$ -	Nashua	Yes	\$ 29.82	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
	Replace 238 failed radios	Monthly 54	DW17-183	26,101	2/2/2018	Remainder	\$ -	\$ 22,729	\$ 22,802	Nashua	Yes	\$ 29.82	\$ 680	P&I and property taxes to be recovered in 2018 QCPAC
Ferromagnetic Pipe locators (3)	Ferromagnetic Pipe locators (3)	1708349	DW17-183	26,101	2/2/2018	No	\$ 10,500	\$ 10,500	\$ -	Merrimack	No	\$ -	\$ -	None acquired
Heavy Dump Truck Replacement (#86)	Heavy Dump Truck Replacement (#86)	1708349	DW17-183	26,101	2/2/2018	No	\$ 100,000	\$ 100,000	\$ 102,176	Merrimack	No	\$ -	\$ -	
Service Truck replacement (#47)	Service Truck replacement (#47)	1715542	DW17-183	26,101	2/2/2018	No	\$ 60,000	\$ 38,950	\$ 47,889	Merrimack	No	\$ -	\$ -	
Replacement of Foreman truck	Replacement of Foreman truck					Deferred. No Bond sought. No QCPAC sought.	\$ 90,000	\$ 75,000	\$ -	Merrimack	No	\$ -	\$ -	Deferred until 2018
Replace Dump Truck Body	#312 - Replace Dump Truck Body	1720997					\$ -	\$ -	\$ 15,740	Merrimack	No	\$ -	\$ -	Project added at end of year using existing truck chassis for new dump body.
Medium Duty Dump Truck Replacement (#71)	Medium Duty Dump Truck Replacement (#71)	1708350	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 90,160	Merrimack	No	\$ -	\$ -	
Replace Truck #70	Replace Truck #70	1707209	DW17-183	26,101	2/2/2018	No	\$ -	\$ 32,034	\$ 32,034	Merrimack	No	\$ -	\$ -	Truck replaced when transmission failed rather than repair transmission on a 10 year old truck
Replace Truck #58	Replace 2006 Truck with 104,000 miles	1702097					\$ -	\$ -	\$ 6,242	Merrimack	No	\$ -	\$ -	
20 Ton Tag Trailer replacement	20 Ton Tag Trailer replacement					Deferred. No Bond sought. No QCPAC sought.	\$ 20,000	\$ -	\$ -				\$ -	Deferred
Variable Message Signs - 2	Customer Notification	1702307	DW14-130	25,734	11/7/2014	Yes	\$ 30,000	Paid 2014 Bond	\$ -				\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Replacement Radio Meter Reading Equipment (4)	Replace 10 year old radio meter reading handheld units		DW14-130	25,734	11/7/2014	Yes	\$ 25,000	Paid 2014 Bond	\$ -				\$ -	P&I and property taxes recovered in DW16-806 Step Increase
Pipe Saws (5)	Pipe Saws (5)	1800440	DW17-183	26,101	2/2/2018	No	\$ 20,000	\$ -	\$ 9,384	Merrimack	No	\$ -	\$ -	
Metal Detectors (6)	Metal Detectors (6)	1708348	DW17-183	26,101	2/2/2018	No	\$ 7,000	\$ 6,360	\$ 6,360	Merrimack	No	\$ -	\$ -	
Replacement Excavator	Replacement Excavator	1702312	DW17-183	26,101	2/2/2018	No	\$ 75,000	\$ 69,554	\$ 69,554	Merrimack	No	\$ -	\$ -	
Complete construction of 16 DW Highway	Final billing for the completion of work by contractor at 16 DW Highway	1701990	DW17-183	26,101	2/2/2018	No	\$ -	\$ 67,050	\$ 65,140	Merrimack	Yes	\$ 28.17	\$ 1,835	Billing from final work on 16 DW not carried over in original budget
MRN meter reading device	MRN meter reading device	1708487	DW17-183	26,101	2/2/2018	No	\$ -	\$ 8,190	\$ 8,190	Various	No	\$ -	\$ -	Existing 8 year old meter reading device failed
GPS Units	Trimble Devices	1713734					\$ -	\$ -	\$ 21,287	Merrimack	No	\$ -	\$ -	Devices purchased only to support field deployment of GIS
Raw Water Transmission Main project	Finalization of 2016 project	1601365, 1701991	DW15-046	25,774	4/13/2015	Yes	\$ -	Paid for by SRF	\$ 176,829	Merrimack	Yes	\$ 28.17	\$ 4,981	Charges are for Internal engineering, OIL, Union Labor, truck and AFUDC. These expenses are not eligible for SRF funding
Nashua & Amherst Paving	Final paving associated with watermain projects					No	\$ 1,100,000		\$ -			\$ -	\$ -	Budget Placeholder
Nashua & Amherst Paving	Park Street Water Main Replacement project paving	1701989	DW17-183	26,101	2/2/2018	No	\$ -	\$ 4,908	\$ 4,908	Nashua	Yes	\$ 29.82	\$ 146	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Mulberry Street Water Main Replacement project paving	1701988	DW17-183	26,101	2/2/2018	No	\$ -	\$ 6,840	\$ 6,840	Nashua	Yes	\$ 29.82	\$ 204	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Contribution to City of Nashua in lieu of final trench restoration - includes Rochette, Ash, and Marquis	1718685, 1718684	DW17-183	26,101	2/2/2018	No	\$ -	\$ 120,000	\$ 20,040	Nashua	Yes	\$ 29.82	\$ 598	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Chestnut Street Phase I Water Main Replacement project paving	1703643	DW17-183	26,101	2/2/2018	No	\$ -	\$ 65,780	\$ 131,689	Nashua	Yes	\$ 29.82	\$ 3,927	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Scripture Street Water Main Replacement project paving	1703642	DW17-183	26,101	2/2/2018	No	\$ -	\$ 11,200	\$ 2,466	Nashua	Yes	\$ 29.82	\$ 74	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Gorman Street Water Main Replacement project paving	1718679	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 400	Nashua	Yes	\$ 29.82	\$ 12	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Water Street Water Main Replacement project paving						\$ -	\$ 44,561	\$ -				\$ -	Paving deferred at City request
Nashua & Amherst Paving	Book Street Water Main Replacement project paving	1700310	DW17-183	26,101	2/2/2018	No	\$ -	\$ 9,844	\$ 9,844	Nashua	Yes	\$ 29.82	\$ 294	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Ash Street Water Main Replacement project paving	1700315	DW17-183	26,101	2/2/2018	No	\$ -	\$ 22,678	\$ -	Nashua	Yes	\$ 29.82	\$ 676	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Worcester Street Area Water Main Replacement project paving	1718680	DW17-183	26,101	2/2/2018	No	\$ -	\$ 5,020	\$ -	Nashua	Yes	\$ 29.82	\$ 90	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Lovell Street Water Main Replacement project paving	1703644	DW17-183	26,101	2/2/2018	No	\$ -	\$ 82,060	\$ -	Nashua	Yes	\$ 29.82	\$ 2,447	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Towells Street Water Main Replacement project paving	1703639	DW17-183	26,101	2/2/2018	No	\$ -	\$ 17,233	\$ -	Nashua	Yes	\$ 29.82	\$ 514	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Howard Street Water Main Replacement project paving	1718682	DW17-183	26,101	2/2/2018	No	\$ -	\$ 2,800	\$ -	Nashua	Yes	\$ 29.82	\$ 83	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Floyds Water Main Replacement project paving	1718683	DW17-183	26,101	2/2/2018	No	\$ -	\$ 1,000	\$ -	Nashua	Yes	\$ 29.82	\$ 30	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Shedd's Ave. Water Main Replacement project paving	1718681	DW17-183	26,101	2/2/2018	No	\$ -	\$ 2,000	\$ -	Nashua	Yes	\$ 29.82	\$ 60	Budgeted under Final Paving associated with water main replacement projects
Amherst Street Project	Amherst Street Area Water Main Replacement Project													
Amherst Street Project - Amherst Street water main replacement	Replace 3,150 LF of 6" Unlined CI Water main on Amherst Street	1601318, 1702928	DW16-236	25,887	4/28/16	Partial		Paid for by SRF	\$ 923,785	Nashua	No			Charges are for Internal engineering, OIL, Union Labor, truck and AFUDC. These expenses are not eligible for SRF funding. \$767,357 in 2017 construction costs were financed with SRF loan funds. The principal and interest associated with this loan amount must be recovered as part of the 2018 QCPAC surcharge.
Amherst Street Project - Berkshire Street water main replacement	Replace xxx LF of 8" Steel/Unlined CI Water main on Berkshire Street	1601320, 1702931	DW16-236	25,887	4/28/16	Yes		Paid for by SRF	\$ 6,058	Nashua				
Amherst Street Project - Terrace Ave. water main replacement	Replace 280 LF of 2" /4" Steel/Unlined CI Water main on Terrace Ave.	1601321, 1702932	DW16-236	25,887	4/28/16	Yes	\$ 75,000	\$ -	\$ 1,763	Nashua				
Amherst Street Project - Bruce Street water main replacement	Replace 260 LF of 6" Unlined CI Water main on Bruce Street	1601319, 1702930	DW16-236	25,887	4/28/16	Yes	\$ 75,000	\$ -	\$ 4,183	Nashua				
Sweet Hill	New Supplemental Well required by NHDES	1503914, 1602428, 1701490	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 163,831	Plaistow	Yes	\$ 28.30	\$ 4,651	Project began in 2015. Project required by NHDES to address shortage of supply.
Pennichuck Bog - Educational Program Accessway	Construct Nature Walk around Pennichuck Bog					Deferred. No Bond sought. No QCPAC sought.	\$ 38,000	\$ -	\$ -				\$ -	Deferred
Gilman Street	Replace 8 & 6 in CI with 1225 LF of 8 inch CLDI					Deferred. No Bond sought. No QCPAC sought.	\$ 425,000	\$ -	\$ -				\$ -	Deferred until 2018
Amherst Mack Hill & Dodge	Replace 1525 feet of 8 A/C with CLDI Transfer services from A/C to D/I Dodge Rd.					Deferred. No Bond sought. No QCPAC sought.	\$ 300,000	\$ -	\$ -				\$ -	Deferred until future date in coordination with Town Storm Drain project
Milford Booster Station Replacement	Replace 25 Yr old below ground confined space booster station w/above ground station					Deferred. No Bond sought. No QCPAC sought.	\$ 550,000	\$ -	\$ -				\$ -	Project deferred indefinitely.
Snow Station Upgrade - Add 3rd pump	Increase pumping capacity to meet existing demands and contractual obligations	1702918	DW17-183	26,101	2/2/2018	No	\$ 125,000	\$ 13,323	\$ 13,323	Nashua	Yes	\$ 29.82	\$ 397	Analysis showed that rebuilding one pump would provide initial capacity required.
City Sewer Projects - TBD	Aging infrastructure replacement in coordination with sewer replacement						\$ 400,000		\$ -				\$ -	
Warten Street	Replaced 300 LF of 4 inch CI with 8 in DIPCL	1702870	DW17-183	26,101	2/2/2018	No	\$ -	\$ 60,000	\$ 121,151	Nashua	Yes	\$ 29.82	\$ 3,613	\$20,000 for final paving in 2018
Lowell Street	Replaced 425 LF of 6 inch CI with 6 in DIPCL	1702874	DW17-183	26,101	2/2/2018	No	\$ -	\$ 60,000	\$ 99,065	Nashua	Yes	\$ 29.82	\$ 2,954	\$38,500 for final paving in slate for 2018 was completed in 2017.
Green Street	Replaced 330 LF of 4 inch CI with 8 in DIPCL	1702872	DW17-183	26,101	2/2/2018	No	\$ -	\$ 27,000	\$ 27,720	Nashua	Yes	\$ 29.82	\$ 827	Including final paving
Beard Street	Replaced 350 LF of 8 inch CI with 8 inch DIPCL	1702873	DW17-183	26,101	2/2/2018	No	\$ -	\$ 75,000	\$ 78,412	Nashua	Yes	\$ 29.82	\$ 2,338	Including paving
Lemon Street	Replaced 320 LF of 2 inch CI with 4 in PVC	1702875	DW17-183	26,101	2/2/2018	No	\$ -	\$ 30,250	\$ 73,389	Nashua	Yes	\$ 29.82	\$ 2,188	\$17,000 for final paving in 2018
Proctor Street	Replaced 130 LF of 2.8x1.5 inch CI with 4 inch PVC	1707322	DW17-183	26,101	2/2/2018	No	\$ -	\$ 51,000	\$ 63,829	Nashua	Yes	\$ 29.82	\$ 1,903	Excludes final paving
Gilfill Street	Replaced 1,290 LF of 4 inch CI with 8 inch DIPCL	1617684, 1703641	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 71,987	Nashua	Yes	\$ 29.82	\$ 2,147	Project missed in Nov 2017 filing
Temple Street	Replaced 375 LF of 8 inch CI with 6 inch DIPCL and 8 inch DIPCL	1600381, 1703640	DW17-183	26,101	2/2/2018	No	\$ -	\$ 151,093	\$ 148,873	Nashua	Yes	\$ 29.82	\$ 4,439	Including final paving
Mulvaney Street	Replaced 280 LF of 2 inch CI with 4 inch PVC	1707323	DW17-183	26,101	2/2/2018	No	\$ -	\$ 106,300	\$ 88,957	Nashua	Yes	\$ 29.82	\$ 2,653	Excludes final paving
24" watermain from Manchester Street to Tinker Road	Add 1800 LF of 24 inch CLDI on Manchester Street Easement to Tinker Road					Deferred. No Bond sought. No QCPAC sought.	\$ 500,000	\$ -	\$ -				\$ -	Deferred until 2018
Water main looping	Close loop on 101A end of main to beyond Truell and loop onto Truell 1200 LF					Deferred. No Bond sought. No QCPAC sought.	\$ 300,000	\$ -	\$ -				\$ -	Deferred until 2018
Water main looping	Old Nashua Rd. RR Crossing @ Route 101A	1703646	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 8,334	Amherst	Yes	\$ 30.30	\$ 253	
2017 Main Street Area Water Main Replacement - Phase I	Fowell - Zellwood - Pratt replace 1720 LF of 6 in CI with 8 in CLDI					Deferred. No Bond sought. No QCPAC sought.	\$ 400,000	\$ -	\$ -				\$ -	Part of Project deferred until 2018
Buchanan Avenue	Replaced 540 LF of 6 inch CI with 8 inch DIPCL	1702843	DW17-183	26,101	2/2/2018	No	\$ -	\$ 84,752	\$ 96,013	Nashua	Yes	\$ 29.82	\$ 2,863	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Circle Ave. - Main Replacement	Replaced 400 LF of 2 inch Steel with 4 inch PVC	1715613	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 21,195	Nashua	Yes	\$ 29.82	\$ 632	
Fowell Street	Replaced 900 LF of 6 inch CI with 175 LF of 4 inch and 725 LF of 8 inch DIPCL	1702844	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 192,179	Nashua	Yes	\$ 29.82	\$ 5,731	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Zellwood Avenue	Replaced 375 LF of 6 inch CI with 4 in PVC	1702845	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 51,142	Nashua	Yes	\$ 29.82	\$ 1,525	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Pearl Street	Replaced 710 LF of 6 inch CI with 12 inch DIPCL	1702846	DW17-183	26,101	2/2/2018	No	\$ -	\$ -	\$ 146,106	Nashua	Yes	\$ 29.82	\$ 4,357	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
2017 Main Street Area Water Main Replacement - Phase II	Aging infrastructure replacement						\$ 320,000		\$ -				\$ -	
Lincoln Street	Replaced 790 LF of 6 inch CI with 8 in DIPCL	1702841	DW17-183	26,101	2/2/2018	No	\$ -	\$ 152,407	\$ 168,144	Nashua	Yes	\$ 29.82	\$ 5,014	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Nutt Street	Replaced 100 LF of 1 inch and 500 LF of 4 inch and 500 LF of 8 inch DIPCL	170284												

Route 101 Widening, Bedford	Relocate Service to 3 Nashua Road	1702840	DW17-183	26,101	2/2/2018	No		\$	67,400	\$	116,205	Bedford	Yes	\$	23.19	\$	2,695	NHDOT project that was added in Spring of 2017. Partial reimbursement from NHDOT of \$26,010.89	
Route 122 @ Nathan Loni Lane Water Main Relocation	Water Main Relocation to accommodate Town of Amherst Storm Drain installation	1715666	DW17-183	26,101	2/2/2018	No		\$	-	\$	54,630	Amherst	Yes	\$	30.30	\$	1,805	Town of Amherst Storm Drain project added in Fall of 2017	
Howard St. Emergency Main Replacement -	Howard St. Emergency Main Replacement -	1600371, 1601379								\$	106,838	Nashua	Yes	\$	29.82	\$	3,186	Emergency project to replace failed 2" steel water main late in 2017.	
Trimble Devices - Used for field locating Assets via GIS program	Upgrade to iPad device driven units	1703027	DW17-183	26,101	2/2/2018	No		\$	72,000	\$	68,623	Merrimack	No					P&I and property taxes recovered in DW16-806 Step Increase	
Engineering Replacement Vehicles (2)	Replace 2 Vehicles	1702831, 1702832	DW14-130	25,734	11/7/2014	Yes		\$	64,000	Pd 2014 Bonds	\$	-	Merrimack	No				Project underway, will not be used and useful in 2017	
Complete PWW Core System Hydraulic Model	Distribution Model Phase 2					Deferred. No Bond sought. No OCPAC sought.		\$	25,000	\$	-							Deferred to 2018 due to timing of final NHDES permitting	
PWW-PEU Interconnection - DW Highway to River	DW Highway to Merrimack River Booster station					Deferred. No Bond sought. No OCPAC sought.		\$	311,500	\$	-							Deferred, staff time not available to complete in 2017	
WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting					Deferred. No Bond sought. No OCPAC sought.		\$	80,000	\$	-							P&I and property taxes recovered in DW16-806 Step Increase	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW14-130	25,735	11/7/2014	Partial				Pd 2014 Bonds		Derry	Yes	\$	33.23	\$	-		
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	Monthly 60, 61, 62, 63	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	38,000	Derry	Yes	\$	33.23	\$	1,375		
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	1701888	DW17-183	26,101	2/2/2018	No		\$	2,089	\$	2,089	Plaistow	Yes	\$	28.39	\$	59	Budgeted under Booster/Well/Chem Feed pump replacement	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS					Deferred. No Bond sought. No OCPAC sought.		\$	15,000	\$	-							Budget place holder. No treatment system installs/replacement YTD	
Misc. Structural Improvements	Misc. Structural Improvements					Deferred. No Bond sought. No OCPAC sought.		\$	20,000	\$	-							Budget place holder. No structural improvements YTD	
Harris Dam Spillway Reconstruction	Complete Harris Dam Spillway Reconstruction	1701987								\$	6,018	Nashua	Yes	\$	29.82	\$	179		
Replace Vehicle #62	Replace 11 year old truck with 107,863 miles		DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000							A new vehicle was purchased and this vehicle was retained and kept in service. #99 was retired.	
Replace Vehicle #49	Replace 7 year old truck with 104,875 miles	1800462	DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000	Nashua	No					Retired #49	
Replace vehicle #204	Replace 6 year old truck with 175,260 miles	1800481	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000	Nashua	No					Change from beginning of budget year as to type of vehicle being replaced. #204 retired.	
Replace Vehicle #63	Replace 7 year old truck with 110,249 miles		DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000							Retired #63	
Replace Vehicle #44	Replace 8 year old truck with over 130,000 miles	1800479								\$	42,678	Nashua	No					Retired #44	
New Vehicle #119	New Water Supply Vehicle, no replacement	1704173	DW17-183	26,101	2/2/2018	No		\$	-	\$	63,038	Nashua	No					No vehicle retired.	
Replace Vehicle #99	Replace 11 year old truck with over 140,000 miles	1800480	DW17-183	26,101	2/2/2018	No				\$	27,323	Nashua	No					Retired #99	
Replace Vehicle #46	Add utility body to vehicle #46	1703002	DW17-183	26,101	2/2/2018	No				\$	2,071	Nashua	No					No vehicle retired.	
Install overhead crane and door-WTP process area	Install overhead crane and door-WTP process area	1701887, 1719861	DW17-183	26,101	2/2/2018	No		\$	75,000	\$	75,000	Nashua	Yes	\$	29.82	\$	1,364	Design cost for WTP crane and door. Door is used and useful.	
Merrimack River Station pump/motor rebuild	Merrimack River Station pump/motor rebuild		DW17-183	26,101	2/2/2018	No		\$	75,000	\$	25,000							Project deferred until 2018	
Misc. equipment purchases	WTP misc. equipment purchases							\$	25,000	\$	-								
Misc. equipment purchases	Purchase New Electric Multi-Meter	1715547	DW17-183	26,101	2/2/2018	No			\$	1,500	\$	1,500	Nashua	No				Budgeted under WTP Misc equipment purchased	
THM precursor control at Bon Terrain Tank	Install mixer in Bon Terrain Tank	1703024	DW17-183	26,101	2/2/2018	No			\$	2,600	\$	2,600	Amherst	Yes	\$	30.30	\$	79	Budgeted under WTP Misc equipment purchased
Replace VFD on Sludge Chopper Pump at WTP	Replace VFD on Sludge Chopper Pump at WTP	1707190	DW17-183	26,101	2/2/2018	No			\$	3,503	\$	3,503	Nashua	Yes	\$	29.82	\$	104	Budgeted under WTP Misc equipment purchased
WTP - Replace 30" IP Discharge Meter	WTP - Replace 30" IP Discharge Meter	1701885	DW17-183	26,101	2/2/2018	No			\$	17,177	\$	17,177	Nashua	Yes	\$	29.82	\$	512	Budgeted under WTP Misc equipment purchased
Purchase new lab equipment	Purchase new lab equipment					Deferred. No Bond sought. No OCPAC sought.		\$	15,000	\$	-								
Purchase new lab equipment	Hanna Titration	1707187	DW17-183	26,101	2/2/2018	No			\$	5,900	\$	5,900	Nashua	No				Budgeted under Purchase new lab equipment	
WTP structural/HVAC	Replaced Compressor on A/C Unit HVAC	1708347	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	5,568	Nashua	Yes	\$	29.82	\$	166		
Misc Security upgrades for remote facilities	Misc. Fencing/Security Projects					Deferred. No Bond sought. No OCPAC sought.		\$	25,000	\$	-							Budget place holder. No Misc. Fencing/Security Projects YTD	
Complete Fencing around WTP for Security	Perimeter fencing at WTP	1706963	DW17-183	26,101	2/2/2018	No		\$	80,000	\$	5,588	Nashua	Yes	\$	29.82	\$	167	Main Gate opening mechanism replaced. Fencing deferred	
Replace Clarifier (2)Vacuum Blowers and Actuators	Replace Clarifier (2)Vacuum Blowers and Actuators					Deferred. No Bond sought. No OCPAC sought.		\$	25,000	\$	-							Deferred	
Misc. SCADA Electrical upgrades	Misc. SCADA Electrical					Deferred. No Bond sought. No OCPAC sought.		\$	30,000	\$	-							Budget Place Holder. See below for actual projects	
Misc. SCADA Electrical upgrades	Valleyfield - Install Cellular Communication	1701886	DW17-183	26,101	2/2/2018	No		\$	-	\$	5,000	Plaistow	Yes	\$	28.39	\$	92	Budgeted under Misc. SCADA Electrical upgrades	
Misc. SCADA Electrical upgrades	Install Cellular Communication, Cabot Preserve	1716549	DW17-183	26,101	2/2/2018	No				\$	2,642	Bedford	Yes	\$	23.19	\$	61	Project added to allow remote monitoring of water system	
Hi-Lo Generator	Hi-Lo Generator	1701899	DW17-183	26,101	2/2/2018	No				\$	47,332	Derry	Yes	\$	33.23	\$	1,573	Permanent standby generator added on site at this Community Water System.	
Armory Street Booster Pump VFD replacements	Replace failed VFD's on Armory Street Booster Pumps	1719862	DW17-183	26,101	2/2/2018	No		\$	-	\$	23,500	Nashua	Yes	\$	29.82	\$	-	Budgeted under Misc. SCADA Electrical upgrades	
Misc. SCADA Electrical upgrades	Replace all SCADA Computers and Upgrade System	1701889	DW17-183	26,101	2/2/2018	No		\$	-	\$	43,000	Nashua	Yes	\$	29.82	\$	506	Unbudgeted. Security upgrades required hardware replacement	
Well Rehabilitations (3)	Well Rehabilitations					Deferred. No Bond sought. No OCPAC sought.		\$	60,000	\$	-							Budget place holder. No Well Rehabilitation Projects YTD	
WTP Closed Circuit Camera replacement/improvements	Closed Circuit Camera replacement/improvements					Deferred. No Bond sought. No OCPAC sought.		\$	60,000	\$	-							Deferred	
WTP - Replace storefront glass, renovate WTP reception	Replace storefront glass, renovate WTP reception					Deferred. No Bond sought. No OCPAC sought.		\$	50,000	\$	-							Deferred	
Office renovation-conference room	Office renovation-conference room					Deferred. No Bond sought. No OCPAC sought.		\$	50,000	\$	-							Deferred	
Water Supply - Watershed Public Education	Fertilization / Pesticide - Phase I					Deferred. No Bond sought. No OCPAC sought.		\$	20,000	\$	-							Will not be completed until 2018	
Stormwater BMP Notifications and Community Education	Stormwater BMP Notifications and Community Education					Deferred. No Bond sought. No OCPAC sought.		\$	12,000	\$	-							Will not be completed until 2018	
St. Joseph's Land Purchase	Watershed protection	1503675	DW17-183	26,101	2/2/2018	No				\$	69,790	Nashua	Yes	\$	29.82	\$	2,081	Project started in 2015. Land purchased from local hospital. Land adjacent to Supply Pond.	
Secure reception area	Office Security for Front Reception Desk	1708425	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	20,990	Merrimack	No					Original estimate did not include bullet proof glass and other security features	
Adjustable Desk Tops	Accommodate back issues	1713759	DW17-183	26,101	2/2/2018	No		\$	-	\$	6,088	Merrimack	No						
Asset Management - Phase 3	Asset Management 2016 Carry-over	1600061	DW17-183	26,101	2/2/2018	No		\$	200,000	\$	200,000	Merrimack	Yes	\$	28.17	\$	4,552		
Conversion to R.A.M. Fixed Assets carry-over	Conversion to R.A.M. Fixed Assets carry-over	1707349	DW17-183	26,101	2/2/2018	No		\$	11,000	\$	11,000	Merrimack	No						
Firewall	Firewall replacement	1702081	DW17-183	26,101	2/2/2018	No		\$	50,000	\$	36,426	Merrimack	No						
Asset Management - Phase 4	Continue progress on Asset Management implementation	1700300	DW17-183	26,101	2/2/2018	No		\$	736,000	\$	350,000	Various	Yes	\$	28.85	\$	14,198	Reduced level of work than budgeted due to staff time diverted to PFOA response	
Click Mobile Upgrade	Upgrade ClickMobile to work on iPads	1707189	DW17-183	26,101	2/2/2018	No		\$	150,000	\$	5,400							2016 Work completed. 2017 work deferred until 2018	
Click Mobile Upgrade	Purchase iPads for ClickMobile Platform	1702223	DW17-183	26,101	2/2/2018	No		\$	-	\$	5,160	Various	Yes	\$	28.85	\$	149	Budgeted for under Upgrade ClickMobile to work on iPads	
Infoview upgrade	Upgrade Infoview to the latest version	1702224	DW17-183	26,101	2/2/2018	No		\$	5,000	\$	3,150	Various	Yes	\$	28.85	\$	91		
Exchange Upgrade	Upgrade Exchange to the latest version		DW17-183	26,101	2/2/2018	No		\$	31,000	\$	20,420							Deferred	
Retention Archive Solution	Infrastructure to Archive older stagnant files					Deferred. No Bond sought. No OCPAC sought.		\$	80,000	\$	-							Deferred until 2018	
Munis Enhancements	Bill prints/forms, Forms import, Click-Munis import, CSS and Dashboard/Central					Deferred. No Bond sought. No OCPAC sought.		\$	180,000	\$	-							Waiting for vendor acceptance of software enhancements	
Miscellaneous Software						Deferred. No Bond sought. No OCPAC sought.		\$	15,00</										

Total Projected 2017 PWW Capital Ex \$ 9,729,000 \$ 4,163,760 \$ 6,058,766 Projected Property Tax - \$ 122,079
Amount to be funded with April 2018 Bond issue - \$ 5,291,409
Amount to be funded with Amherst Street Project SRF loan - \$ 767,357

1- Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Replace Forman Truck	Existing Truck has been a safety and maintenance problem		DSRR 0.1			\$ 90,000				Merrimack	No	\$ 28.17	\$ -	
10 New Services	Single Family, Owner Build, New Homes		DW17-183			\$ 46,000				Various	Yes	\$ 28.85	\$ 1,327	
20 Renewed Services	Replacement of failed services		DW17-183			\$ 92,000				Various	Yes	\$ 28.85	\$ 2,654	
10 Hydrants	Replacement of non functional hydrants		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
10 Valve Replacements	Replacement of Failed Gate Valves		DW17-183			\$ 30,000				Various	Yes	\$ 28.85	\$ 866	
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers (280)		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
480 New Meters (growth) 5/8"-2" (CORI & CWS)	New meters for new customers, including PFOA		DW17-183			\$ 114,000				Various	Yes	\$ 28.85	\$ 3,289	
2,355 New Meters for Lead Meter exchanges (PWW-CORI & CWS) 5/8"-6"	Replace 1 high lead brass meter with new no lead brass meter		DW17-183			\$ 532,000				Various	Yes	\$ 28.85	\$ 15,348	
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate		DW17-183			\$ 10,000				Merrimack	No	\$ 28.17	\$ -	
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles		DW17-183			\$ 60,000				Merrimack	No	\$ 28.17	\$ -	
1 Service Truck - New	Service Truck for 1 new ops employees		DSRR 0.1			\$ 35,000				Merrimack	No	\$ 28.17	\$ -	
Replacement of Meter Supervisor Truck (#14)	Replace 7 year old pick up with 167,000+ miles with small SUV		DW17-183			\$ 28,000				Merrimack	No	\$ 28.17	\$ -	
Replace Valve/vac trailer unit	Existing unit has reach the end of its usable life		DW17-183			\$ 65,000				Merrimack	No	\$ 28.17	\$ -	
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment		DSRR 0.1			\$ 39,000				Merrimack	No	\$ 28.17	\$ -	
Pipe Saws (5)	Ongoing small equipment replacement - run rate		DW17-183			\$ 6,000				Merrimack	No	\$ 28.17	\$ -	
Metal Detectors (6)	Ongoing small equipment replacement - run rate		DW17-183			\$ 7,000				Merrimack	No	\$ 28.17	\$ -	
Add Air Conditioning to Mechanics Bay	Security Project		DW17-183			\$ 52,000				Merrimack	No	\$ 28.17	\$ -	
Four trench boxes	Four trench boxes		DW17-183			\$ 20,000				Merrimack	No	\$ 28.17	\$ -	
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW		DW17-183			\$ 85,000				Bedford	Yes	\$ 23.19	\$ 1,971	
Elm St	Replace 1570 LF of 8 & 6 inch CI with 12 inch DIPCL		DW17-183			\$ 416,000				Nashua	Yes	\$ 29.82	\$ 12,405	
Monroe Street	Replace 485 LF of 4 inch (HDPE,CI) with 8 inch DIPCL		DW17-183			\$ 122,000				Nashua	Yes	\$ 29.82	\$ 3,638	
West Pearl Street	Replace 325 LF of 8 inch CI with 8 inch DIPCL		DW17-183			\$ 100,000				Nashua	Yes	\$ 29.82	\$ 2,982	
Gillis St	Residual paving from prior year main replacement		DW17-183			\$ 143,000				Nashua	Yes	\$ 29.82	\$ 4,264	
Orange St (Concord St to Lock St)	Residual paving from prior year main replacement		DW17-183			\$ 96,000				Nashua	Yes	\$ 29.82	\$ 2,863	
Buchanan St	Residual paving from prior year main replacement		DW17-183			\$ 36,600				Nashua	Yes	\$ 29.82	\$ 1,091	
Lincoln Ave	Residual paving from prior year main replacement		DW17-183			\$ 52,300				Nashua	Yes	\$ 29.82	\$ 1,560	
Nutt St	Residual paving from prior year main replacement		DW17-183			\$ 39,600				Nashua	Yes	\$ 29.82	\$ 1,181	
Carele Ave	Residual paving from prior year main replacement		DW17-183			\$ 11,000				Nashua	Yes	\$ 29.82	\$ 328	
Pratt St	Residual paving from prior year main replacement		DW17-183			\$ 47,000				Nashua	Yes	\$ 29.82	\$ 1,402	
Zellwood Ave	Residual paving from prior year main replacement		DW17-183			\$ 25,000				Nashua	Yes	\$ 29.82	\$ 746	
Faxon St	Residual paving from prior year main replacement		DW17-183			\$ 6,000				Nashua	Yes	\$ 29.82	\$ 179	
Fifield St	Residual paving from prior year main replacement		DW17-183			\$ 4,400				Nashua	Yes	\$ 29.82	\$ 131	
Fowell Ave	Residual paving from prior year main replacement		DW17-183			\$ 59,400				Nashua	Yes	\$ 29.82	\$ 1,771	
Terrace Street	Residual paving from prior year main replacement		DW17-183			\$ 5,200				Nashua	Yes	\$ 29.82	\$ 155	
Beard St	Residual paving from prior year main replacement		DW17-183			\$ 16,100				Nashua	Yes	\$ 29.82	\$ 480	
Green St	Residual paving from prior year main replacement		DW17-183			\$ 3,100				Nashua	Yes	\$ 29.82	\$ 92	
Warren St	Residual paving from prior year main replacement		DW17-183			\$ 11,000				Nashua	Yes	\$ 29.82	\$ 328	
Lowell St	Residual paving from prior year main replacement		DW17-183			\$ 23,000				Nashua	Yes	\$ 29.82	\$ 686	
Lemon St	Residual paving from prior year main replacement		DW17-183			\$ 4,400				Nashua	Yes	\$ 29.82	\$ 131	
Mulvanity St - Emergency Replacement	Residual paving from prior year main replacement		DW17-183			\$ 51,700				Nashua	Yes	\$ 29.82	\$ 1,542	
	Reserve for Contingent Liability for Paving Costs					\$ (634,800)				Nashua	Yes	\$ 29.82	\$ (18,930)	
Asset Management	Asset Management		DW17-183			\$ 330,000				Various	Yes	\$ 28.85	\$ 9,521	
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL		DW17-183			\$ 475,100				Nashua	Yes	\$ 29.82	\$ 14,167	
Ritter Street	Replace 500LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 161,500				Nashua	Yes	\$ 29.82	\$ 4,816	
Woodward Street	Replace 300 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 95,300				Nashua	Yes	\$ 29.82	\$ 2,842	
Factory Street	Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL		DW17-183			\$ 487,000				Nashua	Yes	\$ 29.82	\$ 14,522	
Pennichuck Street	Replace 100 LF of 12 inch CI with 12 inch DIPCL		DW17-183			\$ 39,900				Nashua	Yes	\$ 29.82	\$ 1,190	
Fossa Avenue	Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL		DW17-183			\$ 46,200				Nashua	Yes	\$ 29.82	\$ 1,378	
	Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL		DW17-183			\$ 237,800				Nashua	Yes	\$ 29.82	\$ 7,091	
Russell Avenue	Replace 790 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 171,800				Nashua	Yes	\$ 29.82	\$ 5,123	
Taylor Street (Main St to Fifield)	Replace 535 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 172,800				Nashua	Yes	\$ 29.82	\$ 5,153	
Burnett Street	Replace 325 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 71,700				Nashua	Yes	\$ 29.82	\$ 2,138	
Field Street	Replace 450 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 159,000				Nashua	Yes	\$ 29.82	\$ 4,741	
Fernwood Street	Replace 760 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 191,000				Nashua	Yes	\$ 29.82	\$ 5,696	
Revere Street	Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF of 4 inch DIPCL		DW17-183			\$ 40,000				Nashua	Yes	\$ 29.82	\$ 1,193	
Stevens Street	Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL		DW17-183			\$ 69,300				Nashua	Yes	\$ 29.82	\$ 2,067	
Evergreen Street	Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL		DW17-183			\$ 94,000				Nashua	Yes	\$ 29.82	\$ 2,803	
Morton Street	Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF of 4 inch DIPCL		DW17-183			\$ 132,000				Nashua	Yes	\$ 29.82	\$ 3,936	
Park Avenue	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL		DW17-183			\$ 1,024,400				Nashua	Yes	\$ 29.82	\$ 30,548	
Coburn Woods (all side streets)			DW17-183							Nashua	Yes	\$ 29.82	\$ -	
Northwest Water Main Improvements			DW17-183							Nashua	Yes	\$ 29.82	\$ 17,892	
	Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.	DW17-183			\$ 600,000				Nashua	Yes	\$ 29.82	\$ 14,910	
	Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop	DW17-183			\$ 500,000				Nashua	Yes	\$ 29.82	\$ 13,121	
	Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL	DW17-183			\$ 440,000				Nashua	Yes	\$ 29.82	\$ 32,361	
Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DI		DW17-183			\$ 1,085,200				Nashua	Yes	\$ 29.82	\$ -	
Outside GIS Consulting Services	Outside GIS Consulting Services		DW17-183			\$ 73,000				Various	No	\$ 28.85	\$ -	
Water Modeling Consulting	Water Modeling Consulting		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 375	
Trimble R2 Units	Trimble R2 Units		DW17-183			\$ 13,000				Various	No	\$ 28.85	\$ -	
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment		DW17-183			\$ 5,000				Various	No	\$ 28.85	\$ -	
Replace Jeep with Pickup	Replace 2006 Jeep with 152,407 miles with Pickup		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
Replace Ranger Pickup	Replace 2005 Ranger Pickup with 186,885 miles		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW17-183			\$ 60,000				Various	Yes	\$ 28.85	\$ 1,731	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW17-183			\$ 15,000				Various	Yes	\$ 28.85	\$ 433	
Misc. Structural Improvements	Misc. Structural Improvements		DW17-183			\$ 20,000				Various	Yes	\$ 28.85	\$ 577	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW17-183			\$ 20,000				Various	Yes	\$ 28.85	\$ 577	

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW17-183			\$ 30,000				Various	Yes	\$ 28.85	\$ 866	
Well Rehabilitation	Well Rehabilitation		DW17-183			\$ 50,000				Various	Yes	\$ 28.85	\$ 1,443	
WTP Structural/HVAC	WTP Structural/HVAC		DW17-183			\$ 10,000				Nashua	Yes	\$ 29.82	\$ 298	
Purchase new lab equipment	Purchase new lab equipment		DW17-183			\$ 20,000				Nashua	No	\$ 29.82	\$ -	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW17-183			\$ 10,000				Various	Yes	\$ 28.85	\$ 289	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000				Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000				Nashua	No	\$ 29.82	\$ -	
WTP Perimeter Fence	WTP Perimeter Fence		DW17-183			\$ 80,000				Merrimack	Yes	\$ 28.17	\$ 2,254	
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering		DSRR 0.1			\$ 90,000				Merrimack	No	\$ 28.17	\$ -	Not Eligible for 2018 QCPAC as this is engineering only
WTP Camera system upgrade	Existing Camera system is outdated		DW17-183			\$ 50,000				Nashua	Yes	\$ 29.82	\$ 1,491	
Dredging feasibility study	Dredging feasibility study		DSRR 0.1			\$ 31,500				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Sourcewater Protection Study	Sourcewater Protection Study		DSRR 0.1			\$ 15,000				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Aquatic Vegetation Assessment and Management	Aquatic Vegetation Assessment and Management		DSRR 0.1			\$ 7,500				Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Website Upgrades	Improved Customer Service Experience		DW17-183			\$ 10,000				Merrimack	No	\$ 28.17	\$ -	
SIEM Appliance	Aggregate Real-time monitoring of system alerts and logs		DW17-183			\$ 26,000				Merrimack	No	\$ 28.17	\$ -	
AD Change Auditor	Needed to track changes to Authentication Server		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
File Server Replacement	Replace older hardware		DW17-183			\$ 13,000				Merrimack	No	\$ 28.17	\$ -	
Storage Upgrade	Replace non-supported hardware and increase speed		DW17-183			\$ 70,000				Merrimack	No	\$ 28.17	\$ -	
Munis FER Enhancements	Needed as Business process change		DW17-183			\$ 64,000				Merrimack	No	\$ 28.17	\$ -	
Click Mobile Application Changes	Needed as Business process change		DW17-183			\$ 30,000				Merrimack	No	\$ 28.17	\$ -	
ClickMobile Move to iPads	Move to a more functional device		DW17-183			\$ 140,000				Merrimack	No	\$ 28.17	\$ -	
Implement Customer Balances over the phone	Improved Customer Service Experience		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Hardware	Run Rate replacements		DW17-183			\$ 15,000				Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Software	Run Rate replacements		DW17-183			\$ 12,000				Merrimack	No	\$ 28.17	\$ -	
LIMS upgrade	Allow for Electronic Data Collection in the Field		DW17-183			\$ 11,000				Merrimack	No	\$ 28.17	\$ -	
Physical Server for Pearl			DW17-183			\$ 12,000				Merrimack	No	\$ 28.17	\$ -	
Corporate Job Scheduler	Centralized nightly Job management and notification		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Consulting	Consulting		DW17-183			\$ 32,000				Merrimack	No	\$ 28.17	\$ -	
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Additional Computers	Additional Computers		DW17-183			\$ 4,000				Merrimack	No	\$ 28.17	\$ -	
Pennichuck Water Works Projected 2018 Total Capital Expenditure Budget -						\$ 10,048,000	Projected Property Tax Expense associated with QCPAC projects -						\$ 254,905	

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 28.85	\$ 1,327
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 28.85	\$ 2,654
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Replace failed radio meter readers	Replace out of warranty failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 62,000	Various	Yes	\$ 28.85	\$ 1,789
1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	\$ 259,000	Various	Yes	\$ 28.85	\$ 7,472
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 28.85	\$ 779
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Truck replacement (#4)	Replace 2011 Pickup Truck with 160,000+ projected miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter service van replacement (#72)	Replace 2009 Meter Van with 158,000+ projected miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (2)	Ongoing small equipment replacement	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Tapping Machine replacements (2)	Tapping Machine replacements (2)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Trimble units for Meter Reading (4 units)	Replace remaining CE meter reading equipment	\$ 13,000	Merrimack	No	\$ 28.17	\$ -
Replace 2850 meter reading radios	Complete with PT's, Replace aging radios	\$ 270,000	Various	No	\$ 28.85	\$ -
Elm St	Residual paving from prior year main replacement	\$ 22,000	Nashua	Yes	\$ 29.82	\$ 656
Monroe Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
West Pearl Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Gilman Street	Residual paving from prior year main replacement	\$ 180,000	Nashua	Yes	\$ 29.82	\$ 5,368
Ritter Street	Residual paving from prior year main replacement	\$ 61,200	Nashua	Yes	\$ 29.82	\$ 1,825
Woodward Street	Residual paving from prior year main replacement	\$ 36,200	Nashua	Yes	\$ 29.82	\$ 1,079
Factory Street	Residual paving from prior year main replacement	\$ 155,600	Nashua	Yes	\$ 29.82	\$ 4,640
Pennichuck Street	Residual paving from prior year main replacement	\$ 13,200	Nashua	Yes	\$ 29.82	\$ 394
Fossa Avenue	Residual paving from prior year main replacement	\$ 33,400	Nashua	Yes	\$ 29.82	\$ 996
Russell Avenue	Residual paving from prior year main replacement	\$ 52,700	Nashua	Yes	\$ 29.82	\$ 1,572
Taylor Street (Main St to Fifield)	Residual paving from prior year main replacement	\$ 86,500	Nashua	Yes	\$ 29.82	\$ 2,579
Burnett Street	Residual paving from prior year main replacement	\$ 65,500	Nashua	Yes	\$ 29.82	\$ 1,953
Field Street	Residual paving from prior year main replacement	\$ 33,500	Nashua	Yes	\$ 29.82	\$ 999
Fernwood Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Revere Street	Residual paving from prior year main replacement	\$ 80,100	Nashua	Yes	\$ 29.82	\$ 2,389
Stevens Street	Residual paving from prior year main replacement	\$ 102,100	Nashua	Yes	\$ 29.82	\$ 3,045
Evergreen Street	Residual paving from prior year main replacement	\$ 26,000	Nashua	Yes	\$ 29.82	\$ 775
Morton Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Park Avenue	Residual paving from prior year main replacement	\$ 38,000	Nashua	Yes	\$ 29.82	\$ 1,133
Northwest Water Main Improvements	Residual paving from prior year main replacement	\$ 35,000	Nashua	Yes	\$ 29.82	\$ 1,044
Lake Street	Residual paving from prior year main replacement	\$ 330,000	Nashua	Yes	\$ 29.82	\$ 9,841
Coburn Woods (all side streets)	Residual paving from prior year main replacement	\$ 175,700	Nashua	Yes	\$ 29.82	\$ 5,239
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch	\$ 255,600	Nashua	Yes	\$ 29.82	\$ 7,622
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL	\$ 47,400	Nashua	Yes	\$ 29.82	\$ 1,413
Ash Street	Replace 510 LF of 6 inch CI with 8 inch DIPCL	\$ 115,600	Nashua	Yes	\$ 29.82	\$ 3,447
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL	\$ 95,000	Nashua	Yes	\$ 29.82	\$ 2,833
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL	\$ 21,000	Nashua	Yes	\$ 29.82	\$ 626
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL	\$ 151,900	Nashua	Yes	\$ 29.82	\$ 4,530
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL	\$ 56,000	Nashua	Yes	\$ 29.82	\$ 1,670
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	\$ 5,500,000	Merrimack	Yes	\$ 28.17	\$ 154,935
Twin Ridge Station Improvements	Twin Ridge Station Improvements	\$ 330,000	Plaistow	Yes	\$ 28.39	\$ 9,369
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 24,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Bowers Dam Spillway reconstruction	Bowers Dam Spillway reconstruction	\$ 900,000	Various	Yes	\$ 28.85	\$ 25,965
Carbon media changeout-filters 1 & 3	Carbon media changeout-filters 1 & 3	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Desktop PC Replacements	Desktop Replacements	\$ 80,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other Miscellaneous IT Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2019 Total Capital Expenditure Budget -		\$ 11,604,200	Projected Property Tax Expense associated with QCPAC projects -			\$ 301,601

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 29.13	\$ 1,340
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 29.13	\$ 2,680
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 29.13	\$ 874
Replace failed radio meter readers	Replace out of warrantee failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 65,000	Various	Yes	\$ 29.13	\$ 1,893
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 29.13	\$ 787
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Pick Up replacement (#20)	Replace 2008 with projected 136,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Pick Up replacement (#95)	Replace 2008 with projected 130,000+ miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter Van replacement (#27)	Replace 2011 with projected 135,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Reading SUV replacement (#21)	Replace 2011 with projected 140,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (3)	Mud Pump Replacements (3)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Radio Replacements (2850)	Complete with PT's, Replace aging radios	\$ 270,000	Various	Yes	\$ 29.13	\$ 7,865
Brook Street	Residual paving from prior year main replacement	\$ 128,700	Nashua	Yes	\$ 29.82	\$ 3,838
Hamilton Street	Residual paving from prior year main replacement	\$ 40,900	Nashua	Yes	\$ 29.82	\$ 1,220
Ash Street	Residual paving from prior year main replacement	\$ 58,300	Nashua	Yes	\$ 29.82	\$ 1,739
Burritt Street	Residual paving from prior year main replacement	\$ 47,800	Nashua	Yes	\$ 29.82	\$ 1,425
Burritt Street	Residual paving from prior year main replacement	\$ 18,100	Nashua	Yes	\$ 29.82	\$ 540
Verona Street	Residual paving from prior year main replacement	\$ 76,500	Nashua	Yes	\$ 29.82	\$ 2,281
Sarasota Ave	Residual paving from prior year main replacement	\$ 28,200	Nashua	Yes	\$ 29.82	\$ 841
Fields Grove Park Crossing (Chestnut to Lawndale)	Add 750 LF of 16 inch HDPE (stream crossing)	\$ 441,800	Nashua	Yes	\$ 29.82	\$ 13,174
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL	\$ 127,000	Nashua	Yes	\$ 29.82	\$ 3,787
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL	\$ 219,200	Nashua	Yes	\$ 29.82	\$ 6,537
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL	\$ 39,200	Nashua	Yes	\$ 29.82	\$ 1,169
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL	\$ 51,100	Nashua	Yes	\$ 29.82	\$ 1,524
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL	\$ 49,300	Nashua	Yes	\$ 29.82	\$ 1,470
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL	\$ 23,800	Nashua	Yes	\$ 29.82	\$ 710
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL	\$ 47,000	Nashua	Yes	\$ 29.82	\$ 1,402
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL	\$ 83,000	Nashua	Yes	\$ 29.82	\$ 2,475
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL	\$ 63,000	Nashua	Yes	\$ 29.82	\$ 1,879
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	\$ 181,000	Nashua	Yes	\$ 29.82	\$ 5,397
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL	\$ 637,000	Nashua	Yes	\$ 29.82	\$ 18,995
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL	\$ 360,600	Nashua	Yes	\$ 29.82	\$ 10,753
Taylor Road (Lynn St to	Replace 725 LF of 8 inch CI with 12 inch DIPCL	\$ 241,200	Nashua	Yes	\$ 29.82	\$ 7,193
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL	\$ 301,400	Nashua	Yes	\$ 29.82	\$ 8,988
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL	\$ 91,400	Nashua	Yes	\$ 29.82	\$ 2,726
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement	\$ 3,080,000	Nashua	Yes	\$ 29.82	\$ 91,846
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 18,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Work Order and Asset Management (Synergen upgrade)	Upgrade WAM to new infrastructure and interface	\$ 90,000	Merrimack	Yes	\$ 28.17	\$ 2,535
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other IT Miscellaneous Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -		\$ 8,731,500	Projected Property Tax Expense associated with QCPAC projects -			\$ 235,407

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Laflamme, Jayson

From: Ware, Don <dona1d.ware@PENNICHUCK.com>
Sent: Tuesday, August 21, 2018 3:28 PM
To: Laflamme, Jayson; Richard W. Head
Cc: 'Michelle R. Preve'; Leone, Anthony; Buckley, Brian; Howe, Carol Ann; Brennan, James J; Kerrigan, Jay; Vercellotti, Joseph; Goodhue, Larry; PUC - OCA Litigation
Subject: RE: PWW QCPAC Petition 18-022 filing
Attachments: QCPAC Capex 2018 - 2nd Qtr Project Update - DRAFT 8.21.18.xlsx

Jayson:

Attached please find a revised set of Exhibits for the 2nd Quarter update for PWW's QCPAC filing. Per our telephone conversation the 2nd quarter update made on 8/16/2018 was placed on an earlier version of the QCPAC Exhibits as opposed to the most recent version that had incorporated all data request and tech session updates. Please refer to the attached exhibits and my responses (in red) below. The attached revised exhibits answer most of the questions. If upon review you have additional questions or need additional information please do not hesitate to let me know.

Thanks.

Don



Donald L. Ware, PE
Chief Operating Officer
Pennichuck Corporation
25 Manchester Street
Merrimack, NH 03054
(603)913-2330
dona1d.ware@pennichuck.com

From: Laflamme, Jayson [mailto:Jayson.Laflamme@puc.nh.gov]
Sent: Tuesday, August 21, 2018 11:23 AM
To: Ware, Don; Richard W. Head
Cc: 'Michelle R. Preve'; Leone, Anthony; Buckley, Brian; Howe, Carol Ann; Brennan, James J; Kerrigan, Jay; Vercellotti, Joseph; Goodhue, Larry; PUC - OCA Litigation
Subject: RE: PWW QCPAC Petition 18-022 filing

Hi Richard and Don:

In reviewing the QCPAC update received on 8/16, Staff noted some significant changes relative to certain amounts that it believed had been previously established. Staff also noted that there were no explanations provided relative to the overall change in the original 2018 budget amount and the 6/30 cost estimate for the 2018 projects. Please see the following:

1) **Exhibit 1 – 2017 QCPAC Calculation:**

- a. It appears that the property tax expense relative to 2017 Capex has increased from \$122,079 (per Staff Audit Issue # 1) to \$130,538. Please explain. The correct tax is \$122,079 as reflected on the attached Exhibit 1.
- b. It appears that the principal and interest payments relative to 2017 Capex have increased from \$365,418 (per Staff Tech – 2) to \$376,717. Please explain. The correct principal and interest is \$365,418 as reflected on the attached Exhibit 1.
- c. It appears that the fixed contract charges pertaining to Anheuser-Busch, Town of Hudson, and Town of Milford have not been adjusted out of the revenue requirement per Staff Tech – 9. Please explain. The attached Exhibit adjusts out the fixed contract charges.

2) Exhibit 2, Page 2 – 2018 Budget:

- a. The original approved budget amount appears to be now \$12,054,400 instead of the \$10,048,000 as per the Company's Tech Session Responses. Please explain. The original approved amount is \$10,048,000 as reflected on the attached exhibits.
- b. If the original approved budget amount should, in fact, be \$10,048,000, would such change the amount of the total estimated project costs as of 6/30/18 currently indicated as \$11,289,637? Please explain. The correct 6/30/2018 projected capital expenditures are \$9,142,095 as opposed to \$11,289,637.
- c. Could the Company please provide a high level explanation relative to the major changes between the original budget amount (\$12,054,400 or \$10,048,000) and the total estimated project costs as of 6/30/18 currently indicated as \$11,289,637?

The difference between the Board approved budget of \$10,048,000 and the current \$9,142,095 or a projected reduction of \$905,905 is primarily a reflection of the following changes to the approved budget:

1. Anticipated spend on the Company's asset management plan projected to be \$561,000 vs. the approved budget of \$330,000. The approved budget was missing a \$281,000 carry over of 2017 project work that was not completed in 2017 but will be completed in 2018.
2. The Coburn Woods project, estimated at a cost of \$1,024,400 was deferred in order to make funds available to allow the Company to partner with the City of Nashua's 2018 sewer projects on Kinsley and Harvard Streets as well as other unbudgeted projects that developed during the first half of 2018.
3. The Northwest water main improvement projects, estimated at a cost of \$1,540,000, were deferred until 2019 in order to try to take advantage of lower cost financing that is available from the State's Drinking Water and Groundwater Trust fund.
4. An estimated \$727,000 of unbudgeted water main replacement work was added to replace poor quality and/or undersized water main that was going to be paved over as part of the City's 2018 paving program (see rows 83, 84, 95, 86, 87 & 89 for existing water main descriptors).
5. A new project, the Shakespeare High pressure system upgrade, unveiled itself in the spring of 2018. The estimated cost of this project is 273,000. This project evolved after a number of water meters were burst during the spring due to water hammer. A hydraulic analysis of the neighborhood where the meters burst revealed a series of dead end water mains subject to hydraulic pressure transients associated with pump station starts and stops. This project will eliminate the dead ends and associated pressure transients while also increasing the pressure for several dozen homes from less than 40 psi to between 50 and 78 psi.

- 3) **Exhibit 2, Page 3 – 2019 Budget:** It appears that the approved budget amount appears to be now \$12,002,800 instead of \$11,604,200 as per the Company's Tech Session responses. Please explain. The correct budget number for 2019, per the attached Exhibit is \$11,604,200.

- 4) **Exhibit 2, Page 4 – 2020 Budget:** It appears that the approved budget amount appears to be now \$9,953,400 instead of \$8,731,500 as per the Company's Tech Session responses. Please explain. The correct budget number for 2019, per the attached Exhibit is \$8,731,500.

In light of the above, would the Company be amenable to pushing the date for Staff/OCA recommendations regarding the 2018 QCPAC filing back to 9/12?

Thank you,

Jayson Laflamme

Assistant Director, Gas-Water Division
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429
(603) 271-6322
jayson.laflamme@puc.nh.gov

From: Michelle R. Preve [mailto:mrp@rathlaw.com]

Sent: Thursday, August 16, 2018 3:39 PM

To: PUC - Executive.Director; Speidel, Alexander; Noonan, Amanda; Leone, Anthony; Buckley, Brian; carolann.howe@pennichuck.com; donald.ware@pennichuck.com; Brennan, James J; jay.kerrigan@pennichuck.com; Laflamme, Jayson; Vercellotti, Joseph; larry.goodhue@pennichuck.com; PUC - OCA Litigation; Descoteau, Robyn; Richard W. Head; Frink, Steve

Subject: PWW QCPAC Petition 18-022 filing

Dear Executive Director Howland:

Attached hereto please find correspondence with attachments by Attorney Richard Head for filing with the PUC. The original and six copies will be hand-delivered to the PUC (and one copy to the OCA) this afternoon.

Thank you.

Regards,

Michelle R. Preve
Litigation Assistant

Rath, Young and Pignatelli, P.C.

National Impact. Uniquely New Hampshire.

One Capital Plaza
Concord NH 03301-1500
www.rathlaw.com

T (603) 226-2600
F (603) 226-2700
DD (603) 410-4363



CONFIDENTIAL COMMUNICATION: This message is intended only for the use of the addressee and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this

message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this e-mail in error, please notify us immediately by return e-mail and delete this e-mail and all attachments from your system.

	DW16-806 Approved Step Revenue Requirements (11)		Requested QCPAC For 2017 Capital Additions pro formas		Requested QCPAC Surcharge for 2017 Capital Additions	Projected QCPAC For 2018 Capital Additions pro formas (7,8)	Projected QCPAC Surcharge for 2018 Capital Additions	QCPAC For 2019 Capital Additions pro formas (7,8)	QCPAC Surcharge for 2019 Capital Additions	QCPAC For 2020 Capital Additions pro formas (7,8)	QCPAC Surcharge for 2020 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$7,729,032			\$	7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032
Operating Expense Revenue Requirement	\$16,442,012	(1)(11)	\$ 122,079	(4)	\$ 16,564,090	\$ 245,778	\$ 16,809,869	\$ 301,601	\$ 17,111,470	\$ 235,407	\$ 17,346,877
Annual Principal and Interest Payments	\$6,218,648	(2)	\$365,418	(5)(10)	\$ 6,584,066	\$594,706	\$ 7,178,772	\$754,870	\$ 7,933,642	\$567,997	\$ 8,501,638
Principal and Interest Coverage Requirement	1.10	(3)			1.10		1.10		1.10		1.10
Principal and Interest Revenue Requirement	\$ 6,840,513				\$ 7,242,472		\$ 7,896,649		\$ 8,727,006		\$ 9,351,802
Proposed Revenue Requirement	\$ 31,011,556				\$ 31,535,594		\$ 32,435,550		\$ 33,567,508		\$ 34,427,712
Current Water Revenues excluding CBFRR	\$20,694,038				\$ 23,282,524		\$ 23,806,562		\$ 24,706,518		\$ 25,838,476
Add: City Bond Fixed Revenue Requirement	\$7,729,032				\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032
Current Water Revenues with CBFRR	\$ 28,423,070				\$ 31,011,556		\$ 31,535,594		\$ 32,435,550		\$ 33,567,508
Percent QCPAC Surcharge (9)					1.69%		2.85%		3.49%		2.56%
							4.59%		8.24%		11.02%

Notes:

(1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in DW16-806

(2) Annual Principal and interest payments for PWV debt associated with all plant in service as approved in DW16-806

(3) Principal and interest coverage of 1.10 is as approved in DW16-806

(4) Reflects the net increase in property taxes associated with the plant placed in service between 1/1/2017 and 12/31/2017 that was not included in DW16-806.

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2017 and 12/31/2017 based on a 30 year bond with an actual total all in interest rate of 4.898453% that was not recovered in DW16-806

(7) QCPAC operating expenses are based on the property taxes for plant added during the year

(8) QCPAC Principal and Interest expenses are based on 30 year bond with interest rate of 5.0%

(9) QCPAC percent revenue surcharges based on increase in revenues from the previous year, inclusive of QCPAC surcharges.

(10) Portion of QCPAC Principal and Interest associated with SRF loan of \$ 767,357 for 2017 work completed on Amherst Street project based on the fact that \$ 27,746.00 of P&I was recovered in DW16-806 leaving \$ 25,178.00 of remaining P&I on this SRF loan to be collected via the QCPAC surcharge. The remaining P&I is based on the amortization schedule for this loan provided by the NHDES and is the P&I payment due the State in 2018 after principal forgiveness.

(11) Reduction in revenues associated with fixed contracts as follows: Hudson Annual Fixed Chg \$ 32,800 Milford Annual Fixed Chg \$ 81,000.00 A-B Annual Fixed Chg \$ 371,430.48

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Funded in DW 16-806 Step	Estimated Project Cost as of 1/18/2017	Estimated Project Cost as of 11/15/2017	Final Unaudited Project Costs as of 1/19/2018	Community	Taxable	Tax Rate (%)	QCPAC Eligible Annual Tax Expense	Explanation for Change/Addition/Deletion since 1/18/2017
Heavy Dump Truck Replacement (#12)	Heavy Dump Truck Replacement (#12)	1702309	DW14-130	25,734	11/7/2014	Yes	\$ 130,000	Paid 2014 Bond		Merrimack			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
Replace Aging Services	9 Renewed Services with 2014 Bond Funds	Monthly 21, 22, 23	DW14-130	25,735	11/7/2014	Partial	\$ 80,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
	23 Renewed Services with 2018 Bond Funds		DW17-183	26,101	2/2/2018	No		\$ 40,000	\$ 100,454	Nashua	Yes	\$ 29.82	\$ 2,996	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Hydrants	3 Hydrants replaced with 2014 Bond Funds	Monthly 31	DW14-130	25,735	11/7/2014	Partial	\$ 42,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
	5 Hydrants replaced with 2018 Bond Funds		DW17-183	26,101	2/2/2018	No		\$ 11,000	\$ 18,643	Nashua	Yes	\$ 29.82	\$ 556	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Valves	3 Valve Replacements	Monthly 12, 13	DW17-183	26,101	2/2/2018	No		\$ 50,000	\$ 53,122	Nashua	Yes	\$ 29.82	\$ 1,584	Based on final valve replacement expeditured in 2017.
New Services	2 New Services for Single Family Residential, owner build, per Tariff	Monthly 20	DW14-130	25,735	11/7/2014	Partial	\$ -	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
	5 New Services for Single Family Residential, owner build, per Tariff		DW17-183	26,101	2/2/2018	No		\$ 34,537	\$ 29,648	Nashua	Yes	\$ 29.82	\$ 884	P&I and property taxes to be recovered in 2018 QCPAC
Replace Leaded Brass Meters with Lead free brass meters	410 New Meters for Lead Meter exchanges - 5/8"-6"	Monthly 50	DW14-130	25,735	11/7/2014	Partial	\$ 832,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
	1,410 New Meters for Lead Meter exchanges - 5/8"-6" (NHPUC ACPLU) 332		DW17-183	26,101	2/2/2018	No		\$ 247,266	\$ 267,950	Nashua	Yes	\$ 29.82	\$ 7,990	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging meter reading Radios	Replace 99 failed radios	Monthly 54	DW14-130	25,735	11/7/2014	Partial	\$ 28,000	Paid 2014 Bond		Nashua			\$ -	P&I and property taxes recovered in DW 16-806 Step Increase
	Replace 238 failed radios		DW17-183	26,101	2/2/2018	Remainder		\$ 23,729	\$ 22,802	Nashua	Yes	\$ 29.82	\$ 680	P&I and property taxes to be recovered in 2018 QCPAC
Ferromagnetic Pipe locators (3)	Ferromagnetic Pipe locators (3)		DW17-183	26,101	2/2/2018	No	\$ 10,500	\$ 10,500		Merrimack			\$ -	None acquired
Heavy Dump Truck Replacement (#86)	Heavy Dump Truck Replacement (#86)	1708349	DW17-183	26,101	2/2/2018	No	\$ 100,000	\$ 100,000	\$ 102,176	Merrimack	No		\$ -	
Service Truck replacement (#47)	Service Truck replacement (#47)	1715542	DW17-183	26,101	2/2/2018	No	\$ 60,000	\$ 38,950	\$ 47,889	Merrimack	No		\$ -	
Replacement of Foreman truck	Replacement of Foreman truck		Deferred. No Bond sought. No QCPAC sought.				\$ 90,000	\$ 75,000	\$ -	Merrimack			\$ -	Deferred until 2018
Replace Dump Truck Body	#312 - Replace Dump Truck Body	1720997					\$ 10,500	\$ -	\$ 15,740	Merrimack	No		\$ -	Project added at end of year using existing truck chassis for new dump body.
Medium Duty Dump Truck Replacement (#71)	Medium Duty Dump Truck Replacement (#71)	1708350	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 90,160	Merrimack	No		\$ -	
Replace Truck #70	Replace Truck #70	1707209	DW17-183	26,101	2/2/2018	No	\$ -	\$ 32,034	\$ 32,034	Merrimack	No		\$ -	Truck replaced when transmission failed rather than repair transmission on a 10 year old truck
Replace Truck #58	Replace 2006 Truck with 104,000 miles	1702097						\$ -	\$ 6,242	Merrimack	No			
20 Ton Tag Trailer replacement	20 Ton Tag Trailer replacement		Deferred. No Bond sought. No QCPAC sought.				\$ 20,000	\$ -						Deferred
Variable Message Signs - 2	Customer Notification	1702307	DW14-130	25,734	11/7/2014	Yes	\$ 30,000	Paid 2014 Bond						P&I and property taxes recovered in DW 16-806 Step Increase
Replacement Radio Meter Reading Equipment (4)	Replace 10 year old radio meter reading handheld units		DW14-130	25,734	11/7/2014	Yes	\$ 25,000	Paid 2014 Bond						P&I and property taxes recovered in DW 16-806 Step Increase
Pipe Saws (5)	Pipe Saws (5)	1800440	DW17-183	26,101	2/2/2018	No	\$ 20,000	\$ -	\$ 9,384	Merrimack	No			
Metal Detectors (6)	Metal Detectors (6)	1708348	DW17-183	26,101	2/2/2018	No	\$ 7,000	\$ 6,360	\$ 6,360	Merrimack	No			
Replacement Excavator	Replacement Excavator	1702312	DW17-183	26,101	2/2/2018	No	\$ 75,000	\$ 69,554	\$ 69,554	Merrimack	No			
Complete construction of 16 DW Highway	Final billing for the completion of work by contractor at 16 DW Highway	1701990	DW17-183	26,101	2/2/2018	No	\$ -	\$ 67,050	\$ 65,140	Merrimack	Yes	\$ 28.17	\$ 1,835	Billing from final work on 16 DW not carried over in original budget
MRN meter reading device	MRN meter reading device	1708487	DW17-183	26,101	2/2/2018	No	\$ -	\$ 8,190	\$ 8,190	Various	No			Existing 8 year old meter reading device failed
GPS Units	Trimble Devices	1713734						\$ 21,287	\$ -	Merrimack	No			Devices purchased early to support field deployment of GIS.
Raw Water Transmission Main project	Finalization of 2016 project	1601365, 1701991	DW15-046	25,774	4/13/2015	Yes	\$ -	Paid for by SRF	\$ 176,829	Merrimack	Yes	\$ 28.17	\$ 4,981	Charges are for Internal engineering, O&M, Union Labor, truck and AFUDC. These expenses are not eligible for SRF funding.
Nashua & Amherst Paving	Final paving associated with watermain projects					No	\$ 1,100,000						\$ -	Budget Placeholder
Nashua & Amherst Paving	Park Street Water Main Replacement project paving	1701989	DW17-183	26,101	2/2/2018	No		\$ 4,908	\$ 4,908	Nashua	Yes	\$ 29.82	\$ 146	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Mulberry Street Water Main Replacement project paving	1701988	DW17-183	26,101	2/2/2018	No		\$ 6,840	\$ 6,840	Nashua	Yes	\$ 29.82	\$ 204	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Contribution to City of Nashua in lieu of final trench restoration - includes Rochette, Ash, and Marquis	1718685, 1718684	DW17-183	26,101	2/2/2018	No		\$ 120,000	\$ 20,040	Nashua	Yes	\$ 29.82	\$ 598	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Chestnut Street Phase 1 Water Main Replacement project paving	1703643	DW17-183	26,101	2/2/2018	No		\$ 65,780	\$ 131,689	Nashua	Yes	\$ 29.82	\$ 3,927	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Scipione Street Water Main Replacement project paving	1703642	DW17-183	26,101	2/2/2018	No		\$ 11,200	\$ 2,466	Nashua	Yes	\$ 29.82	\$ 74	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Gorman Street Water Main Replacement project paving	1718679	DW17-183	26,101	2/2/2018	No		\$ -	\$ 400	Nashua	Yes	\$ 29.82	\$ 12	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Water Street Water Main Replacement project paving							\$ 44,561						Paving deferred at City request
Nashua & Amherst Paving	Brook Street Water Main Replacement project paving	1700310	DW17-183	26,101	2/2/2018	No		\$ 9,844	\$ 9,844	Nashua	Yes	\$ 29.82	\$ 294	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Ash Street Water Main Replacement project paving	1700315	DW17-183	26,101	2/2/2018	No		\$ 22,678	\$ -	Nashua	Yes	\$ 29.82	\$ 676	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Worcester Street Area Water Main Replacement project paving	1718680	DW17-183	26,101	2/2/2018	No		\$ 3,020	\$ -	Nashua	Yes	\$ 29.82	\$ 90	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Lovell Street Water Main Replacement project paving	1703644	DW17-183	26,101	2/2/2018	No		\$ 82,060	\$ -	Nashua	Yes	\$ 29.82	\$ 2,447	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Towells Street Water Main Replacement project paving	1703639	DW17-183	26,101	2/2/2018	No		\$ 17,233	\$ -	Nashua	Yes	\$ 29.82	\$ 514	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Howard Street Water Main Replacement project paving	1718682	DW17-183	26,101	2/2/2018	No		\$ 2,800	\$ -	Nashua	Yes	\$ 29.82	\$ 83	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Hoars Water Main Replacement project paving	1718683	DW17-183	26,101	2/2/2018	No		\$ 1,000	\$ -	Nashua	Yes	\$ 29.82	\$ 30	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Shedd's Ave. Water Main Replacement project paving	1718681	DW17-183	26,101	2/2/2018	No		\$ 2,000	\$ -	Nashua	Yes	\$ 29.82	\$ 60	Budgeted under Final Paving associated with water main replacement projects
Amherst Street Project	Amherst Street Area Water Main Replacement Project													
Amherst Street Project - Amherst Street water main replacement	Replace 3,150 LF of 6" Unlined CI Water main on Amherst Street	1601318, 1702928	DW16-236	25,887	42486	Partial		Paid for by SRF	\$ 923,785	Nashua				Charges are for Internal engineering, O&M, Union Labor, truck and AFUDC. These expenses are not eligible for SRF funding.
Amherst Street Project - Berkshire Street water main replacement	Replace xxx LF of s"/s" Steel/Unlined CI Water main on Berkshire Street	1601320, 1702931	DW16-236	25,887	42486	Yes		Paid for by SRF	\$ 6,058	Nashua	No			\$707,357 in 2017 construction costs were financed with SRF loan funds. The principal and interest associated with this loan amount must be recovered as part of the 2018 QCPAC surcharge.
Amherst Street Project - Terrace Ave. water main replacement	Replace 280 LF of 2"/4" Steel/Unlined CI Water main on Terrace Ave.	1601321, 1702932	DW16-236	25,887	42486	Yes	\$ 75,000		\$ 1,763	Nashua				
Amherst Street Project - Bruce Street water main replacement	Replace 260 LF of 6" Unlined CI Water main on Bruce Street	1601319, 1702930	DW16-236	25,887	42486	Yes	\$ 75,000		\$ 4,183	Nashua				
Sweet Hill	New Supplemental Well required by NHDES	1503914, 1602428, 1701490	DW17-183	26,101	2/2/2018	No	\$ 70,000	\$ 70,000	\$ 163,831	Plinston	Yes	\$ 28.39	\$ 4,651	Project began in 2015. Project required by NHDES to address shortage of supply.
Pennichuck Bog - Educational Program Accessway	Construct Nature Walk around Pennichuck Bog		Deferred. No Bond sought. No QCPAC sought.				\$ 38,000	\$ -						Deferred
Gilman Street	Replace 8 & 6 in CI with 1225 LF of 8 inch CL121		Deferred. No Bond sought. No QCPAC sought.				\$ 425,000	\$ -						Deferred until 2018
Amherst Mack Fill & Dodge	Replace 1525 feet of 8 A/C with CL121 Transfer services from A/C to D/I Dodge Rd.		Deferred. No Bond sought. No QCPAC sought.				\$ 300,000	\$ -						Deferred until future date in coordination with Town Storm Drain project
Milford Booster Station Replacement	Replace 25 Yr old, below ground confined space booster station w/above ground station		Deferred. No Bond sought. No QCPAC sought.				\$ 550,000	\$ -						Project deferred indefinitely.
Snow Station Upgrade - Add 3rd pump	Increase pumping capacity to meet existing demands and contractual obligations	1702918	DW17-183	26,101	2/2/2018	No	\$ 125,000	\$ 13,323	\$ 13,323	Nashua	Yes	\$ 29.82	\$ 397	Analysis showed that rebuilding one pump would provide initial capacity required.
City Sewer Projects - TBD	Aging infrastructure replacement in coordination with sewer replacement						\$ 400,000							
Warren Street	Replaced 300 LF of 4 inch CI with 8 in DIPCL	1702870	DW17-183	26,101	2/2/2018	No		\$ 60,000	\$ 121,151	Nashua	Yes	\$ 29.82	\$ 3,613	\$20,000 for final paving in 2018
Lowell Street	Replaced 425 LF of 6 inch CI with 6 in DIPCL	1702874	DW17-183	26,101	2/2/2018	No		\$ 60,000	\$ 99,065	Nashua	Yes	\$ 29.82	\$ 2,954	\$38,500 for final paving in state for 2018 was completed in 2017.
Green Street	Replaced 330 LF of 4 inch CI with 8 in DIPCL	1702872	DW17-183	26,101	2/2/2018	No		\$ 27,000	\$ 27,720	Nashua	Yes	\$ 29.82	\$ 827	Including final paving
Beard Street	Replaced 350 LF of 8 inch CI with 8 inch DIPCL	1702873	DW17-183	26,101	2/2/2018	No		\$ 75,000	\$ 78,412	Nashua	Yes	\$ 29.82	\$ 2,338	Including paving
Lennon Street	Replaced 320 LF of 2 inch CI with 4 in PVC	1702875	DW17-183	26,101	2/2/2018	No		\$ 30,250	\$ 73,389	Nashua	Yes	\$ 29.82	\$ 2,188	\$17,000 for final paving in 2018
Proctor Street	Replaced 130 LF of 2 & 1.5 inch CI with 4 inch PVC	1707322	DW17-183	26,101	2/2/2018	No		\$ 51,000	\$ 63,829	Nashua	Yes	\$ 29.82	\$ 1,903	Excludes final paving
Gillis Street	Replaced 1,290 LF of 4 inch CI with 8 inch DIPCL	1617684, 1703641	DW17-183	26,101	2/2/2018	No		\$ -	\$ 71,987	Nashua	Yes	\$ 29.82	\$ 2,147	Project missed in Nov 2017 filing.
Temple Street	Replaced 375 LF of 8 inch CI with 6 inch DIPCL and 8 inch DIPCL	1600381, 1703640	DW17-183	26,101	2/2/2018	No		\$ 151,093	\$ 148,873	Nashua	Yes	\$ 29.82	\$ 4,439	Including final paving
Mulvaney Street	Replaced 280 LF of 2 inch CI with 4 inch PVC	1707323	DW17-183	26,101	2/2/2018	No		\$ 106,300	\$ 88,957	Nashua	Yes	\$ 29.82	\$ 2,653	Excludes final paving
24" watermain from Manchester Street to Tinker Road	Add 1800 LF of 24 inch CLDI on Manchester Street Easement to Tinker Road		Deferred. No Bond sought. No QCPAC sought.				\$ 500,000	\$ -						Deferred until 2018
Water main looping	Close loop on 101A end of main to beyond Truell and loop onto Truell 1200 LF		Deferred. No Bond sought. No QCPAC sought.				\$ 300,000	\$ -						Deferred until 2018
Water main looping	Old Nashua Rd. RR Crossing @ Route 101A	1703646	DW17-183	26,101	2/2/2018	No			\$ 8,334	Amherst	Yes	\$ 30.30	\$ 253	
2017 Main Street Area Water Main Replacement - Phase I	Fowell - Zellwood - Pratt replace 1720 LF of 6 in CI with 8 in CLDI		Deferred. No Bond sought. No QCPAC sought.				\$ 400,000	\$ -						Part of Project deferred until 2018
Buchanan Avenue	Replaced 540 LF of 6 inch CI with 8 inch DIPCL	1702843	DW17-183	26,101	2/2/2018	No		\$ 84,752	\$ 96,013	Nashua	Yes	\$ 29.82	\$ 2,863	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Circle Ave. - Main Replacement	Replaced 400 LF of 2 inch Steel with 4 inch PVC	1715613	DW17-183	26,101	2/2/2018	No			\$ 21,195	Nashua	Yes	\$ 29.82	\$ 632	
Finnell Street	Replaced 900 LF of 6 inch CI with 175 LF of 4 inch and 725 LF of 8 inch DIPCL	1702844	DW17-183	26,101	2/2/2018	No			\$ 192,179	Nashua	Yes	\$ 29.82	\$ 5,731	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Zellwood Avenue	Replaced 375 LF of 6 inch CI with 4 in PVC	1702845	DW17-183	26,101	2/2/2018	No		\$ 480,000	\$ 51,142	Nashua	Yes	\$ 29.82	\$ 1,525	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Pratt Street	Replaced 710 LF of 6 inch CI with 12 inch DIPCL	1702846	DW17-183	26,101	2/2/2018	No			\$ 146,106	Nashua	Yes	\$ 29.82	\$ 4,357	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
2017 Main Street Area Water Main Replacement - Phase II	Aging infrastructure replacement						\$ 320,000							
Lincoln Street	Replaced 790 LF of 6 inch CI with 8 in DIPCL	1702841	DW17-183	26,101	2/2/2018			\$ 152,407	\$ 168,144	Nashua	Yes	\$ 29.82	\$ 5,014	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project

Route 101 Widening, Bedford	Relocate Service to 3 Nashua Road	1702840	DW17-183	26,101	2/2/2018	No		\$	67,400	\$	116,205	Bedford	Yes	\$	23.19	\$	2,695	NHDOT project that was added in Spring of 2017. Partial reimbursement from NHDOT of \$26,010.89		
Route 122 or Nathan Lord Lane Water Main Relocation	Water Main Relocation to accommodate Town of Amherst Storm Drain installation	1715666	DW17-183	26,101	2/2/2018	No		\$	-	\$	54,630	Amherst	Yes	\$	30.30	\$	1,805	Town of Amherst Storm Drain project added in Fall of 2017		
Howard St. Emergency Main Replacement -	Howard St. Emergency Main Replacement -	1600371, 1601379									\$	106,838	Nashua	Yes	\$	29.82	\$	3,186	Emergency project to replace failed 2" steel water main late in 2017.	
Trimble Devices - Used for field locating Assets via GIS program	Upgrade to iPad device driven units	1703027	DW17-183	26,101	2/2/2018	No		\$	72,000	\$	68,623	Merrimack	No							
Engineering Replacement Vehicles (2)	Replace 2 Vehicles	1702831, 1702832	DW14-130	25,734	11/7/2014	Yes		\$	64,000	Pd 2014 Bonds	\$	-	Merrimack	No					P&I and property taxes recovered in DW16-806 Step Increase	
Complete PWW Core System Hydraulic Model	Distribution Model Phase 2					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-								Project underway, will not be used and useful in 2017	
PWW-PBU Interconnection - DW Highway to River	DW Highway to Merrimack River Booster station					Deferred. No Bond sought. No QCPAC sought.		\$	311,500	\$	-								Deferred to 2018 due to timing of final NHDES permitting	
WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting					Deferred. No Bond sought. No QCPAC sought.		\$	80,000	\$	-								Deferred, start time not available to complete in 2017	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW14-130	25,735	11/7/2014	Partial				Pd 2014 Bonds			Derry	Yes	\$	33.23	\$	-	P&I and property taxes recovered in DW16-806 Step Increase	
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	Monthly 60, 61, 62, 63	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	38,000	\$	41,386	Derry	Yes	\$	33.23	\$	1,375	
Booster/Well/Chem Feed pump replacements	Replace VFD on Twin Ridge Well	1701888	DW17-183	26,101	2/2/2018	No		\$	2,089	\$	2,089	\$	2,089	Plainbow	Yes	\$	28.39	\$	50	Budgeted under Booster/Well/Chem Feed pump replacement
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS					Deferred. No Bond sought. No QCPAC sought.		\$	15,000	\$	-								Budget place holder. No treatment system installs/replacement YTD	
Misc. Structural Improvements	Misc. Structural Improvements					Deferred. No Bond sought. No QCPAC sought.		\$	20,000	\$	-								Budget place holder. No structural improvements YTD	
Harris Dam Spillway Reconstruction	Complete Harris Dam Spillway Reconstruction	1701987								\$	6,018	Nashua	Yes	\$	29.82	\$	179			
Replace Vehicle #62	Replace 11 year old truck with 107,863 miles		DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000								A new vehicle was purchased and this vehicle was retained and kept in service. #99 was retired.	
Replace Vehicle #49	Replace 7 year old truck with 104,875 miles	1800462	DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000	\$	27,323	Nashua	No				Retired #49	
Replace vehicle #204	Replace 6 year old truck with 175,260 miles	1800481	DW17-183	26,101	2/2/2018	No		\$	60,000	\$	45,000	\$	42,678	Nashua	No				Change from beginning of budget year as to type of vehicle being replaced. #204 retired.	
Replace Vehicle #63	Replace 7 year old truck with 110,249 miles		DW17-183	26,101	2/2/2018	No		\$	35,000	\$	35,000								Retired #63	
Replace Vehicle #44	Replace 8 year old truck with over 130,000 miles	1800479								\$	42,678	Nashua	No						Retired #44	
New Vehicle #119	New Water Supply Vehicle, no replacement	1704173	DW17-183	26,101	2/2/2018	No		\$	-	\$	63,038	Nashua	No						No vehicle retired.	
Replace Vehicle #99	Replace 11 year old truck with over 140,000 miles	1800480	DW17-183	26,101	2/2/2018	No				\$	27,323	Nashua	No						Retired #99	
Replace Vehicle #46	Add utility body to vehicle vehicle #46	1703002	DW17-183	26,101	2/2/2018	No				\$	2,071	Nashua	No						No vehicle retired.	
Install overhead crane and door WTP process area	Install overhead crane and door WTP process area	1701887, 1719861	DW17-183	26,101	2/2/2018	No		\$	75,000	\$	75,000	\$	45,731	Nashua	Yes	\$	29.82	\$	1,364	Design cost for WTP crane and door. Door is used and useful.
Merrimack River Station pump/motor rebuild	Merrimack River Station pump/motor rebuild		DW17-183	26,101	2/2/2018	No		\$	75,000	\$	25,000								Project deferred until 2018	
Misc. equipment purchases	WTP misc. equipment purchases							\$	25,000	\$	-									
Misc. equipment purchases	Purchase New Electric Multi-Meter	1715547	DW17-183	26,101	2/2/2018	No			\$	1,500	\$	1,500	Nashua	No					Budgeted under WTP Misc equipment purchased	
THM precursor control at Bon Terrain Tank	Install mixer in Bon Terrain Tank	1703024	DW17-183	26,101	2/2/2018	No			\$	2,600	\$	2,600	Amherst	Yes	\$	30.30	\$	79	Budgeted under WTP Misc equipment purchased	
Replace VFD on Sludge Chopper Pump at WTP	Replace VFD on Sludge Chopper Pump at WTP	1707190	DW17-183	26,101	2/2/2018	No			\$	3,503	\$	3,503	Nashua	Yes	\$	29.82	\$	104	Budgeted under WTP Misc equipment purchased	
WTP - Replace 30" IP Discharge Meter	WTP - Replace 30" IP Discharge Meter	1701885	DW17-183	26,101	2/2/2018	No			\$	17,177	\$	17,177	Nashua	Yes	\$	29.82	\$	512	Budgeted under WTP Misc equipment purchased	
Purchase new lab equipment	Purchase new lab equipment					Deferred. No Bond sought. No QCPAC sought.		\$	15,000	\$	-									
Purchase new lab equipment	Hanna Titration	1707187	DW17-183	26,101	2/2/2018	No			\$	5,900	\$	5,900	Nashua	No					Budgeted under Purchase new lab equipment	
WTP structural/UVAC	Replaced Compressor on A/C Unit FWPS	1708347	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	5,568	\$	5,568	Nashua	Yes	\$	29.82	\$	166	
Misc Security upgrades for remote facilities	Misc. Fencing/Security Projects					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-								Budget place holder. No Misc. Fencing/Security Projects YTD	
Complete Fencing around WTP for Security	Perimeter fencing at WTP	1706963	DW17-183	26,101	2/2/2018	No		\$	80,000	\$	5,588	\$	5,588	Nashua	Yes	\$	29.82	\$	167	Main Gate opening mechanism replaced. Fence deferred
Replace Clarifier (2) Vacuum Blowers and Actuators	Replace Clarifier (2) Vacuum Blowers and Actuators					Deferred. No Bond sought. No QCPAC sought.		\$	25,000	\$	-								Deferred	
Misc. SCADA Electrical upgrades	Misc. SCADA Electrical					Deferred. No Bond sought. No QCPAC sought.		\$	30,000	\$	-								Budget Place Holder. See below for actual projects	
Misc. SCADA Electrical upgrades	Vallefield - Install Cellular Communication	1701886	DW17-183	26,101	2/2/2018	No		\$	-	\$	5,000	\$	3,249	Plainbow	Yes	\$	28.39	\$	92	Budgeted under Misc. SCADA Electrical upgrades
Misc. SCADA Electrical upgrades	Install Cellular Communication, Cabot Preserve	1716549	DW17-183	26,101	2/2/2018	No					\$	2,642	Bedford	Yes	\$	23.19	\$	61	Project added to allow remote monitoring of water system	
Hi-Lo Generator	Hi-Lo Generator	1701899	DW17-183	26,101	2/2/2018	No				\$	47,332	\$	47,332	Derry	Yes	\$	33.23	\$	1,573	Permanent standby generator added on site at this Community Water System.
Armory Street Booster Pump VFD replacement	Replace failed VFD's on Armory Street Booster Pumps	1719862	DW17-183	26,101	2/2/2018	No		\$	-	\$	23,500	\$	-	Nashua	Yes	\$	29.82	\$	-	Budgeted under Misc. SCADA Electrical upgrades
Misc. SCADA Electrical upgrades	Replace all SCADA Computers and Upgrade System	1701889	DW17-183	26,101	2/2/2018	No		\$	-	\$	43,000	\$	19,990	Nashua	Yes	\$	29.82	\$	596	Unbudgeted. Security upgrades required hardware replacement
Well Rehabilitations (3)	Well Rehabilitations					Deferred. No Bond sought. No QCPAC sought.		\$	60,000	\$	-								Budget place holder. No Well Rehabilitation Projects YTD	
WTP Closed Circuit Camera replacement/improvements	Closed Circuit Camera replacement/improvements					Deferred. No Bond sought. No QCPAC sought.		\$	60,000	\$	-								Deferred	
WTP - Replace storefront glass, renovate WTP reception	Replace storefront glass, renovate WTP reception					Deferred. No Bond sought. No QCPAC sought.		\$	50,000	\$	-								Deferred	
Office renovation-conference room	Office renovation-conference room					Deferred. No Bond sought. No QCPAC sought.		\$	50,000	\$	-								Deferred	
Water Supply - Watershed Public Education	Fertilization / Pesticide - Phase 1					Deferred. No Bond sought. No QCPAC sought.		\$	20,000	\$	-								Will not be completed until 2018	
Stormwater BMP Notifications and Community Education	Stormwater BMP Notifications and Community Education					Deferred. No Bond sought. No QCPAC sought.		\$	12,000	\$	-								Will not be completed until 2018	
St. Joseph's Land Purchase	Watershed protection	1503675	DW17-183	26,101	2/2/2018	No				\$	69,790	\$	69,790	Nashua	Yes	\$	29.82	\$	2,081	Project started in 2015. Land purchased from local hospital. Land adjacent to Supply Pond.
Secure reception area	Office Security for Front Reception Desk	1708425	DW17-183	26,101	2/2/2018	No		\$	10,000	\$	20,990	\$	18,824	Merrimack	No				Original estimate did not include bullet proof glass and other security features	
Adjustable Desk Tops	Accommodate back issues	1713759	DW17-183	26,101	2/2/2018	No		\$	-	\$	6,088	\$	6,088	Merrimack	No					
Asset Management - Phase 3	Asset Management 2016 Carry over	1600061	DW17-183	26,101	2/2/2018	No		\$	200,000	\$	200,000	\$	161,590	Merrimack	Yes	\$	28.17	\$	4,552	
Conversion to R.A.M. Fixed Assets carry-over	Conversion to R.A.M. Fixed Assets carry-over	1707349	DW17-183	26,101	2/2/2018	No		\$	11,000	\$	11,000	\$	6,929	Merrimack	No	\$	-	\$	-	
Firewall	Firewall replacement	1702081	DW17-183	26,101	2/2/2018	No		\$	50,000	\$	36,426	\$	28,228	Merrimack	No					
Asset Management - Phase 4	Continue progress on Asset Management implementation	1700300	DW17-183	26,101	2/2/2018	No		\$	736,000	\$	350,000	\$	492,133	Various	Yes	\$	28.85	\$	14,498	Reduced level of work than budgeted due to staff time diverted to PFOA response

Total Projected 2017 PWW Capital Ex \$ 9,729,000 \$ 4,163,760 \$ 6,058,766
Amount to be funded with April 2018 Bond issue - \$ 5,291,409
Amount to be funded with Amherst Street Project SRP loan - \$ 767,357

Projected Property Tax - \$ 122,079

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Replace Forman Truck	Existing Truck has been a safety and maintenance problem		DSRR 0.1			\$ 90,000	\$ 97,685			Merrimack	No	\$ 28.17	\$ -	Additional labor, metal and other hardware to properly outfit the truck
10 New Services	Single Family, Owner Build, New Homes		DW17-183			\$ 46,000	\$ 46,000			Various	Yes	\$ 28.85	\$ 1,327	
20 Renewed Services	Replacement of failed services		DW17-183			\$ 92,000	\$ 92,000			Various	Yes	\$ 28.85	\$ 2,654	
10 Hydrants	Replacement of non functional hydrants		DW17-183			\$ 50,000	\$ 50,000			Various	Yes	\$ 28.85	\$ 1,443	
10 Valve Replacements	Replacement of Failed Gate Valves		DW17-183			\$ 30,000	\$ 30,000			Various	Yes	\$ 28.85	\$ 866	
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers (280)		DW17-183			\$ 50,000	\$ 50,000			Various	Yes	\$ 28.85	\$ 1,443	
480 New Meters (growth) 5/8"-2" (CORE & CWS)	New meters for new customers, including PFOA		DW17-183			\$ 114,000	\$ 114,000			Various	Yes	\$ 28.85	\$ 3,289	
2,353 New Meters for Lead Meter exchanges (PWW-CORE & CWS) 5/8"-6"	Replace High lead brass meter with new no lead brass meter		DW17-183			\$ 532,000	\$ 532,000			Various	Yes	\$ 28.85	\$ 15,348	
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate		DW17-183			\$ 10,000	\$ 10,000			Merrimack	No	\$ 28.17	\$ -	
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles		DW17-183			\$ 60,000	\$ 60,000			Merrimack	No	\$ 28.17	\$ -	
1 Service Truck - New	Service Truck for 1 new ops employees		DSRR 0.1			\$ 35,000	\$ 35,000			Merrimack	No	\$ 28.17	\$ -	
Replacement of Meter Supervisor Truck (#14)	Replace 7 year old pick up with 167,000+ miles with small SUV		DW17-183			\$ 28,000	\$ 28,000			Merrimack	No	\$ 28.17	\$ -	
Replace Valve/vac trailer unit	Existing unit has reach the end of its usable life		DW17-183			\$ 65,000	\$ 65,000			Merrimack	No	\$ 28.17	\$ -	
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment		DSRR 0.1			\$ 39,000	\$ 39,000			Merrimack	No	\$ 28.17	\$ -	
Pipe Saws (5)	Ongoing small equipment replacement - run rate		DW17-183			\$ 6,000	\$ 6,000			Merrimack	No	\$ 28.17	\$ -	
Metal Detectors (6)	Ongoing small equipment replacement - run rate		DW17-183			\$ 7,000	\$ 7,000			Merrimack	No	\$ 28.17	\$ -	
Add Air Conditioning to Mechanics Bay	Security Project		DW17-183			\$ 52,000	\$ 62,641			Merrimack	No	\$ 28.17	\$ -	Updated quotes with higher materials cost, steel surcharge & Freight.
Four trench boxes	Four trench boxes		DW17-183			\$ 20,000	\$ 22,456			Merrimack	No	\$ 28.17	\$ -	
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW		DW17-183			\$ 85,000	\$ 310,000			Bedford	Yes	\$ 23.19	\$ 7,189	Original budget done prior to design; increased scope of work to remove all AC water main from Back River Rd.
Elm St	Replace 1570 LF of 8 & 6 inch CI with 12 inch DIPCL		DW17-183			\$ 416,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	City Sewer delayed until 2019
Monroe Street	Replace 485 LF of 4 inch (HDPE) CI with 8 inch DIPCL		DW17-183			\$ 122,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	City Sewer delayed until 2019
West Pearl Street	Replace 325 LF of 8 inch CI with 8 inch DIPCL		DW17-183			\$ 100,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	City Sewer delayed until 2019
Gillis St	Residual paving from prior year main replacement		DW17-183			\$ 143,000	\$ 66,000			Nashua	Yes	\$ 29.82	\$ 1,968	Restoration turned over to City of Nashua with multiple utilities contributing
Orange St (Concord St to Lock St)	Residual paving from prior year main replacement		DW17-183			\$ 96,000	\$ 96,000			Nashua	Yes	\$ 29.82	\$ 2,863	
Temple Street	Residual paving from prior year main replacement		DW17-184			\$ -	\$ 20,000			Nashua	Yes	\$ 29.82	\$ 596	
Buchanan St	Residual paving from prior year main replacement		DW17-183			\$ 36,600	\$ 36,600			Nashua	Yes	\$ 29.82	\$ 1,091	
Lincoln Ave	Residual paving from prior year main replacement		DW17-183			\$ 52,300	\$ 52,300			Nashua	Yes	\$ 29.82	\$ 1,560	
Nutt St	Residual paving from prior year main replacement		DW17-183			\$ 39,600	\$ 39,600			Nashua	Yes	\$ 29.82	\$ 1,181	
Circle Ave	Residual paving from prior year main replacement		DW17-183			\$ 11,000	\$ 11,000			Nashua	Yes	\$ 29.82	\$ 328	
Pratt St	Residual paving from prior year main replacement		DW17-183			\$ 47,000	\$ 47,000			Nashua	Yes	\$ 29.82	\$ 1,402	
Zellwood Ave	Residual paving from prior year main replacement		DW17-183			\$ 25,000	\$ 25,000			Nashua	Yes	\$ 29.82	\$ 746	
Faxon St	Residual paving from prior year main replacement		DW17-183			\$ 6,000	\$ 6,000			Nashua	Yes	\$ 29.82	\$ 179	
Fifield St	Residual paving from prior year main replacement		DW17-183			\$ 4,400	\$ 4,400			Nashua	Yes	\$ 29.82	\$ 131	
Fowell Ave	Residual paving from prior year main replacement		DW17-183			\$ 59,400	\$ 59,400			Nashua	Yes	\$ 29.82	\$ 1,771	
Terrace Street	Residual paving from prior year main replacement		DW17-183			\$ 5,200	\$ 5,200			Nashua	Yes	\$ 29.82	\$ 155	
Beard St	Residual paving from prior year main replacement		DW17-183			\$ 16,100	\$ 17,700			Nashua	Yes	\$ 29.82	\$ 528	
Green St	Residual paving from prior year main replacement		DW17-183			\$ 3,100	\$ 3,100			Nashua	Yes	\$ 29.82	\$ 92	
Warren St	Residual paving from prior year main replacement		DW17-183			\$ 11,000	\$ 11,000			Nashua	Yes	\$ 29.82	\$ 328	
Lowell St	Residual paving from prior year main replacement		DW17-183			\$ 23,000	\$ 23,000			Nashua	Yes	\$ 29.82	\$ 686	
Lemon St	Residual paving from prior year main replacement		DW17-183			\$ 4,400	\$ 4,400			Nashua	Yes	\$ 29.82	\$ 131	
Mulvanity St - Emergency Replacement	Residual paving from prior year main replacement		DW17-183			\$ 51,700	\$ 21,670			Nashua	Yes	\$ 29.82	\$ 646	Paving shared with other impacted Utilities and City
Proctor Street Emergency Replacement	Residual paving from prior year main replacement		DW17-184			\$ -	\$ 11,600			Nashua	Yes	\$ 29.82	\$ 346	
Asset Management	Reserve for Contingent Liability for Paving Costs					\$ (634,800)	\$ (634,800)			Nashua	No	\$ 29.82	\$ -	
Asset Management	Asset Management		DW17-183			\$ 330,000	\$ 561,000			Various	Yes	\$ 28.85	\$ 16,185	Budget should be \$561k, \$330k carry-over plus \$231k 2018 budget
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL		DW17-183			\$ 475,100	\$ 435,000			Nashua	Yes	\$ 29.82	\$ 12,972	Reduce based on bid numbers May be deferred to 2019 due to City work starting later does not include final paving
Ritter Street	Replace 500LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 161,500	\$ 215,000			Nashua	Yes	\$ 29.82	\$ 6,411	Reduce based on bid numbers does not include final paving
Woodward Street	Replace 300 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 95,300	\$ 110,000			Nashua	Yes	\$ 29.82	\$ 3,280	Reduce based on bid numbers does not include final paving
Factory Street	Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL		DW17-183			\$ 487,000	\$ 520,000			Nashua	Yes	\$ 29.82	\$ 15,506	Reduce based on bid numbers does not include final paving
Pennichuck Street	Replace 100 LF of 12 inch CI with 12 inch DIPCL		DW17-183			\$ 39,900	\$ 42,000			Nashua	Yes	\$ 29.82	\$ 1,252	Reduce based on bid numbers does not include final paving
Early Street	Replace 385 LF of 6" CI with 8" DIPCL		DW17-184			\$ -	\$ 119,000			Nashua	Yes	\$ 29.82	\$ 3,549	Added to Misc Replacements to improve fire protection near hospital
Fossa Avenue	Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL		DW17-183			\$ 46,200	\$ 38,346			Nashua	Yes	\$ 29.82	\$ 1,143	Reduce based on bid numbers does not include final paving
Russell Avenue	Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL		DW17-183			\$ 237,800	\$ 197,374			Nashua	Yes	\$ 29.82	\$ 5,886	Reduce based on bid numbers does not include final paving
Taylor Street (Main St to Fifield)	Replace 790 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 171,800	\$ 142,594			Nashua	Yes	\$ 29.82	\$ 4,252	Reduce based on bid numbers does not include final paving
Burnett Street	Replace 535 LF of 6 inch CI with 12 inch DIPCL		DW17-183			\$ 172,800	\$ 143,424			Nashua	Yes	\$ 29.82	\$ 4,277	Reduce based on bid numbers does not include final paving
Field Street	Replace 325 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 71,700	\$ 59,511			Nashua	Yes	\$ 29.82	\$ 1,775	Reduce based on bid numbers does not include final paving
Fernwood Street	Replace 450 LF of 6 inch CI with 6 inch DIPCL		DW17-183			\$ 159,000	\$ 131,970			Nashua	Yes	\$ 29.82	\$ 3,935	Reduce based on bid numbers does not include final paving
Revere Street	Replace 760 LF of 6 inch CI with 8 inch DIPCL		DW17-183			\$ 191,000	\$ 158,530			Nashua	Yes	\$ 29.82	\$ 4,727	Reduce based on bid numbers does not include final paving
Stevens Street	Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF of 4 inch DIPCL		DW17-183			\$ 40,000	\$ 33,200			Nashua	Yes	\$ 29.82	\$ 990	Reduce based on bid numbers does not include final paving
Evergreen Street	Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL		DW17-183			\$ 69,300	\$ 57,519			Nashua	Yes	\$ 29.82	\$ 1,715	Reduce based on bid numbers does not include final paving
Morton Street	Replace 290 LF of 1.5 inch CI with 350 LF of 4 inch DIPCL		DW17-183			\$ 94,000	\$ 78,020			Nashua	Yes	\$ 29.82	\$ 2,327	Reduce based on bid numbers does not include final paving
Park Avenue	Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF of 4 inch DIPCL		DW17-183			\$ 132,000	\$ 109,560			Nashua	Yes	\$ 29.82	\$ 3,267	Reduce based on bid numbers does not include final paving
Coburn Woods (all side streets)	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL		DW17-183			\$ 1,024,400	\$ -			Nashua	Yes	\$ 29.82	\$ -	Deferred to 2019
Northwest Water Main Improvements			DW17-183											
Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.		DW17-183			\$ 600,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	Deferred to 2019 to take advantage of low interest DWGTF Loan
Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop		DW17-183			\$ 500,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	Deferred to 2019 to take advantage of low interest DWGTF Loan
Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL		DW17-183			\$ 440,000	\$ -			Nashua	Yes	\$ 29.82	\$ -	Deferred to 2019 to take advantage of low interest DWGTF Loan
Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DI		DW17-183			\$ 1,085,200	\$ 1,415,200			Nashua	Yes	\$ 29.82	\$ 42,201	Gas Company with late start. Project requires temporary water. May be deferred to 2019
Kinsley Street	Replace 275 LF of 12" CI and 1020 LF of 6" CI with 12" DIPCL					\$ -	\$ 526,000			Nashua	Yes	\$ 29.82	\$ 15,685	In conjunction with the City of Nashua's 2018 sewer replacements
Harvard Street	Replace 784 LF of 8 inch CI with 8 inch DIPCL					\$ -	\$ 150,000			Nashua	Yes	\$ 29.82	\$ 4,473	In conjunction with the City of Nashua's 2018 sewer replacements
Outside GIS Consulting Services	Outside GIS Consulting Services		DW17-183			\$ 73,000	\$ 73,000			Various	No	\$ 28.85	\$ -	
Water Modeling Consulting	Water Modeling Consulting		DW17-183			\$ 50,000	\$ 50,000			Various	No	\$ 28.85	\$ -	
Trimble R2 Units	Trimble R2 Units		DW17-183			\$ 13,000	\$ -			Various	Yes	\$ 28.85	\$ -	
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment		DW17-183			\$ 5,000	\$ 5,000			Various	No	\$ 28.85	\$ -	
Replace Jeep with Pickup	Replace 2006 Jeep with 152,407 miles with Pickup		DW17-183			\$ 30,000	\$ 22,969			Merrimack	No	\$ 28.17	\$ -	
Replace Ranger Pickup	Replace 2005 Ranger Pickup with 186,885 miles		DW17-183			\$ 30,000	\$ 34,050			Merrimack	No	\$ 28.17	\$ -	
Mast Road Replacement (PEU-PWW) Interconnection	PWW share of PWW-PEU Interconnection budget					\$ -	\$ 57,000			Merrimack	Yes	\$ 28.17	\$ 1,606	Added after approved budget. Opportunity to replace 8 inch A/C pipe
Marshall Street	Replace 1074 LF of 8" CI with 1074 LF of 8" DIPCL					\$ -	\$ 270,000			Nashua	Yes	\$ 29.82	\$ 8,051	RR crossing on Marshall St was to be lowered and fire protection concerns
Ferry Alls Court	Replace 116 LF of 1.25" steel pipe with 4" PVC					\$ -	\$ 60,000			Nashua	Yes	\$ 29.82	\$ 1,789	Paving program to overlav street. Found leak. Main froun in poor condition
Salvail Court	Replace 100 LF of 1.25 inch steel pipe with 4 inch PVC					\$ -	\$ 55,000			Nashua	Yes	\$ 29.82	\$ 1,640	paving program, same cr as Ferry Alls Ct.
Lovewell Street	Replace 400 LF of 1.25" steel pipe with 8" DIPCL					\$ -	\$ 210,000			Nashua	Yes	\$ 29.82	\$ 6,262	Gas replacement will compromise 1933 era water line
Shakespeare High Pressure System	Expand HTP system to address pressure issues to 4 streets					\$ -	\$ 273,000			Nashua	Yes	\$ 29.82	\$ 8,141	Includes Check Valves, PRV and Pump Station upgrade

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Lakeside Avenue	Replace 275 LF of 1.25" steel pipe with 4" PVC					\$ -	\$ 75,000			Nashua	Yes	\$ 29.82	\$ 2,237	Adjacent to the Lake St water main replacement opportunity to replace undersized steel pipe.
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW17-183			\$ 60,000	\$ 60,000			Various	Yes	\$ 28.85	\$ 1,731	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW17-183			\$ 15,000	\$ 15,000			Various	Yes	\$ 28.85	\$ 433	
Misc. Structural Improvements	Misc. Structural Improvements		DW17-183			\$ 20,000	\$ 20,000			Various	Yes	\$ 28.85	\$ 577	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW17-183			\$ 20,000	\$ 20,000			Various	Yes	\$ 28.85	\$ 577	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW17-183			\$ 30,000	\$ 30,000			Various	Yes	\$ 28.85	\$ 866	
Well Rehabilitation	Well Rehabilitation		DW17-183			\$ 50,000	\$ 50,000			Various	Yes	\$ 28.85	\$ 1,443	
WTP Structural/HVAC	WTP Structural/HVAC		DW17-183			\$ 10,000	\$ 10,000			Nashua	Yes	\$ 29.82	\$ 298	
Purchase new lab equipment	Purchase new lab equipment		DW17-183			\$ 20,000	\$ 20,000			Nashua	No	\$ -	\$ -	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW17-183			\$ 10,000	\$ 10,000			Various	Yes	\$ 28.85	\$ 289	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000	\$ 65,000			Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 65,000	\$ 65,000			Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000	\$ 40,000			Nashua	No	\$ 29.82	\$ -	
Replace Water Supply Vehicle	Run rate vehicle replacement		DW17-183			\$ 40,000	\$ 40,000			Nashua	No	\$ 29.82	\$ -	
WTP Perimeter Fence	WTP Perimeter Fence		DW17-183			\$ 80,000	\$ 80,000			Merrimack	Yes	\$ 28.17	\$ 2,254	
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering		DSRR 0.1			\$ 90,000	\$ 90,000			Merrimack	No	\$ 28.17	\$ -	Not Eligible for 2018 QCPAC as this is engineering only
WTP Camera system upgrade	Existing Camera system is outdated		DW17-183			\$ 50,000	\$ 50,000			Nashua	Yes	\$ 29.82	\$ 1,491	
Dredging feasibility study	Dredging feasibility study		DSRR 0.1			\$ 31,500	\$ 31,500			Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Sourcewater Protection Study	Sourcewater Protection Study		DSRR 0.1			\$ 15,000	\$ 15,000			Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Aquatic Vegetation Assessment and Management	Aquatic Vegetation Assessment and Management		DSRR 0.1			\$ 7,500	\$ 7,500			Various	No	\$ 28.85	\$ -	Study is not QCPAC Qualified
Website Upgrades	Improved Customer Service Experience	1814346/1704175	DW17-183			\$ 10,000	\$ 19,068			Merrimack	No	\$ 28.17	\$ -	
SIEM Appliance	Aggregate Real-time monitoring of system alerts and logs		DW17-183			\$ 26,000	\$ -			Merrimack	No	\$ 28.17	\$ -	Project Cancelled due to reduced need
AD Change Auditor	Needed to track changes to Authentication Server		DW17-183			\$ 4,000	\$ 4,000			Merrimack	No	\$ 28.17	\$ -	
File Server Replacement	Replace older hardware		DW17-183			\$ 13,000	\$ -			Merrimack	No	\$ 28.17	\$ -	Project Cancelled due to reduced need
Storage Upgrade	Replace non-supported hardware and increase speed	1817426	DW17-183			\$ 70,000	\$ 52,000			Merrimack	No	\$ 28.17	\$ -	
Munis FER Enhancements	Needed as Business process change		DW17-183			\$ 64,000	\$ 64,000			Merrimack	No	\$ 28.17	\$ -	
Click Mobile Application Changes	Needed as Business process change		DW17-183			\$ 30,000	\$ 30,000			Merrimack	No	\$ 28.17	\$ -	
ClickMobile Move to iPads	Move to a more functional device	1702223	DW17-183			\$ 140,000	\$ 140,000			Merrimack	No	\$ 28.17	\$ -	Hardware purchases and Contractor charges
Implement Customer Balances over the phone	Improved Customer Service Experience		DW17-183			\$ 4,000	\$ 4,000			Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Hardware	Run Rate replacements	1813280	DW17-183			\$ 15,000	\$ 15,000			Merrimack	No	\$ 28.17	\$ -	
Miscellaneous Software	Run Rate replacements		DW17-183			\$ 12,000	\$ 12,000			Merrimack	No	\$ 28.17	\$ -	
LIMS upgrade	Allow for Electronic Data Collection in the Field	1817795	DW17-183			\$ 11,000	\$ 6,000			Merrimack	No	\$ 28.17	\$ -	
Physical Server for Pearl			DW17-183			\$ 12,000	\$ -			Merrimack	No	\$ 28.17	\$ -	Project probably not going to be needed
Corporate Job Scheduler	Centralized nightly Job management and notification		DW17-183			\$ 4,000	\$ 4,000			Merrimack	No	\$ 28.17	\$ -	
Consulting	Consulting		DW17-183			\$ 32,000	\$ 32,000			Merrimack	No	\$ 28.17	\$ -	
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.	1813464	DW17-183			\$ 4,000	\$ 5,442			Merrimack	No	\$ 28.17	\$ -	
Additional Computers	Additional Computers	1814843	DW17-183			\$ 4,000	\$ 5,717			Merrimack	No	\$ 28.17	\$ -	
Office 365 Exchange Migration	Office 365 Exchange Migration	1817818				\$ -	\$ 16,400			Merrimack	No	\$ 28.17	\$ -	
Replacement Printer - Engineering	Replacement Printer - Engineering	1817323				\$ -	\$ 2,249			Merrimack	No	\$ 28.17	\$ -	Replace failed engineering printer
Pennichuck Water Works Projected 2018 Total Capital Expenditure Budget -						\$ 10,048,000	\$ 9,142,095	Projected Property Tax Expense associated with QCPAC projects -						\$ 245,778

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 28.85	\$ 1,327
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 28.85	\$ 2,654
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Replace failed radio meter readers	Replace out of warranty failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 62,000	Various	Yes	\$ 28.85	\$ 1,789
1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	1,150 New Meters for Lead Meter exchanges (PWW-CORE) 5/8"-6'	\$ 259,000	Various	Yes	\$ 28.85	\$ 7,472
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 28.85	\$ 779
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Truck replacement (#4)	Replace 2011 Pickup Truck with 160,000+ projected miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter service van replacement (#72)	Replace 2009 Meter Van with 158,000+ projected miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (2)	Ongoing small equipment replacement	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Tapping Machine replacements (2)	Tapping Machine replacements (2)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Trimble units for Meter Reading (4 units)	Replace remaining CE meter reading equipment	\$ 13,000	Merrimack	No	\$ 28.17	\$ -
Replace 2850 meter reading radios	Complete with PT's, Replace aging radios	\$ 270,000	Various	No	\$ 28.85	\$ -
Elm St	Residual paving from prior year main replacement	\$ 22,000	Nashua	Yes	\$ 29.82	\$ 656
Monroe Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
West Pearl Street	Residual paving from prior year main replacement	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Gilman Street	Residual paving from prior year main replacement	\$ 180,000	Nashua	Yes	\$ 29.82	\$ 5,368
Ritter Street	Residual paving from prior year main replacement	\$ 61,200	Nashua	Yes	\$ 29.82	\$ 1,825
Woodward Street	Residual paving from prior year main replacement	\$ 36,200	Nashua	Yes	\$ 29.82	\$ 1,079
Factory Street	Residual paving from prior year main replacement	\$ 155,600	Nashua	Yes	\$ 29.82	\$ 4,640
Pennichuck Street	Residual paving from prior year main replacement	\$ 13,200	Nashua	Yes	\$ 29.82	\$ 394
Fossa Avenue	Residual paving from prior year main replacement	\$ 33,400	Nashua	Yes	\$ 29.82	\$ 996
Russell Avenue	Residual paving from prior year main replacement	\$ 52,700	Nashua	Yes	\$ 29.82	\$ 1,572
Taylor Street (Main St to Fifield)	Residual paving from prior year main replacement	\$ 86,500	Nashua	Yes	\$ 29.82	\$ 2,579
Burnett Street	Residual paving from prior year main replacement	\$ 65,500	Nashua	Yes	\$ 29.82	\$ 1,953
Field Street	Residual paving from prior year main replacement	\$ 33,500	Nashua	Yes	\$ 29.82	\$ 999
Fernwood Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Revere Street	Residual paving from prior year main replacement	\$ 80,100	Nashua	Yes	\$ 29.82	\$ 2,389
Stevens Street	Residual paving from prior year main replacement	\$ 102,100	Nashua	Yes	\$ 29.82	\$ 3,045
Evergreen Street	Residual paving from prior year main replacement	\$ 26,000	Nashua	Yes	\$ 29.82	\$ 775
Morton Street	Residual paving from prior year main replacement	\$ 45,000	Nashua	Yes	\$ 29.82	\$ 1,342
Park Avenue	Residual paving from prior year main replacement	\$ 38,000	Nashua	Yes	\$ 29.82	\$ 1,133
Northwest Water Main Improvements	Residual paving from prior year main replacement	\$ 35,000	Nashua	Yes	\$ 29.82	\$ 1,044
Lake Street	Residual paving from prior year main replacement	\$ 330,000	Nashua	Yes	\$ 29.82	\$ 9,841
Coburn Woods (all side streets)	Residual paving from prior year main replacement	\$ 175,700	Nashua	Yes	\$ 29.82	\$ 5,239
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch	\$ 255,600	Nashua	Yes	\$ 29.82	\$ 7,622
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL	\$ 47,400	Nashua	Yes	\$ 29.82	\$ 1,413
Ash Street	Replace 510 LF of 6 inch CI with 8 inch DIPCL	\$ 115,600	Nashua	Yes	\$ 29.82	\$ 3,447
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL	\$ 95,000	Nashua	Yes	\$ 29.82	\$ 2,833
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL	\$ 21,000	Nashua	Yes	\$ 29.82	\$ 626
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL	\$ 151,900	Nashua	Yes	\$ 29.82	\$ 4,530
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL	\$ 56,000	Nashua	Yes	\$ 29.82	\$ 1,670
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	\$ 5,500,000	Merrimack	Yes	\$ 28.17	\$ 154,935
Twin Ridge Station Improvements	Twin Ridge Station Improvements	\$ 330,000	Plaistow	Yes	\$ 28.39	\$ 9,369
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 24,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Bowers Dam Spillway reconstruction	Bowers Dam Spillway reconstruction	\$ 900,000	Various	Yes	\$ 28.85	\$ 25,965
Carbon media changeout-filters 1 & 3	Carbon media changeout-filters 1 & 3	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Desktop PC Replacements	Desktop Replacements	\$ 80,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellanious Projects - Run Rate	Other Miscellanious IT Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2019 Total Capital Expenditure Budget -		\$ 11,604,200	Projected Property Tax Expense associated with QCPAC projects -			\$ 301,601

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
10 New Services	Single Family, Owner Build, New Homes	\$ 46,000	Various	Yes	\$ 29.13	\$ 1,340
20 Renewed Services	Replacement of failed services	\$ 92,000	Various	Yes	\$ 29.13	\$ 2,680
10 Hydrants	Replacement of non functional hydrants	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
10 Valve Replacements	Replacement of Failed Gate Valves	\$ 30,000	Various	Yes	\$ 29.13	\$ 874
Replace failed radio meter readers	Replace out of warrantee failed radio meter readers (280)	\$ 50,000	Various	Yes	\$ 29.13	\$ 1,457
250 New Meters (growth) 5/8"-2" (CORE & CWS)	250 New Meters (growth) 5/8"-2" (CORE & CWS)	\$ 65,000	Various	Yes	\$ 29.13	\$ 1,893
270 New Meters for PT exchanges 5/8"-6'	270 New Replacement Meters for PT's 5/8"-6'	\$ 27,000	Various	Yes	\$ 29.13	\$ 787
Metal Detectors (6)	Ongoing small equipment replacement - run rate	\$ 7,000	Merrimack	No	\$ 28.17	\$ -
Ferromagnetic Pipe locators (3)	Ongoing small equipment replacement - run rate	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Service Pick Up replacement (#20)	Replace 2008 with projected 136,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Pick Up replacement (#95)	Replace 2008 with projected 130,000+ miles	\$ 60,000	Merrimack	No	\$ 28.17	\$ -
Meter Van replacement (#27)	Replace 2011 with projected 135,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Meter Reading SUV replacement (#21)	Replace 2011 with projected 140,000+ miles	\$ 35,000	Merrimack	No	\$ 28.17	\$ -
Mud Pump Replacements (3)	Mud Pump Replacements (3)	\$ 4,000	Merrimack	No	\$ 28.17	\$ -
Radio Replacements (2850)	Complete with PT's, Replace aging radios	\$ 270,000	Various	Yes	\$ 29.13	\$ 7,865
Brook Street	Residual paving from prior year main replacement	\$ 128,700	Nashua	Yes	\$ 29.82	\$ 3,838
Hamilton Street	Residual paving from prior year main replacement	\$ 40,900	Nashua	Yes	\$ 29.82	\$ 1,220
Ash Street	Residual paving from prior year main replacement	\$ 58,300	Nashua	Yes	\$ 29.82	\$ 1,739
Burritt Street	Residual paving from prior year main replacement	\$ 47,800	Nashua	Yes	\$ 29.82	\$ 1,425
Burritt Street	Residual paving from prior year main replacement	\$ 18,100	Nashua	Yes	\$ 29.82	\$ 540
Verona Street	Residual paving from prior year main replacement	\$ 76,500	Nashua	Yes	\$ 29.82	\$ 2,281
Sarasota Ave	Residual paving from prior year main replacement	\$ 28,200	Nashua	Yes	\$ 29.82	\$ 841
Fields Grove Park Crossing (Chestnut to Lawndale)	Add 750 LF of 16 inch HDPE (stream crossing)	\$ 441,800	Nashua	Yes	\$ 29.82	\$ 13,174
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL	\$ 127,000	Nashua	Yes	\$ 29.82	\$ 3,787
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL	\$ 219,200	Nashua	Yes	\$ 29.82	\$ 6,537
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL	\$ 39,200	Nashua	Yes	\$ 29.82	\$ 1,169
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL	\$ 51,100	Nashua	Yes	\$ 29.82	\$ 1,524
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL	\$ 49,300	Nashua	Yes	\$ 29.82	\$ 1,470
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL	\$ 23,800	Nashua	Yes	\$ 29.82	\$ 710
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL	\$ 47,000	Nashua	Yes	\$ 29.82	\$ 1,402
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL	\$ 83,000	Nashua	Yes	\$ 29.82	\$ 2,475
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL	\$ 63,000	Nashua	Yes	\$ 29.82	\$ 1,879
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	\$ 181,000	Nashua	Yes	\$ 29.82	\$ 5,397
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL	\$ 637,000	Nashua	Yes	\$ 29.82	\$ 18,995
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL	\$ 360,600	Nashua	Yes	\$ 29.82	\$ 10,753
Taylor Road (Lynn St to	Replace 725 LF of 8 inch CI with 12 inch DIPCL	\$ 241,200	Nashua	Yes	\$ 29.82	\$ 7,193
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL	\$ 301,400	Nashua	Yes	\$ 29.82	\$ 8,988
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL	\$ 91,400	Nashua	Yes	\$ 29.82	\$ 2,726
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement	\$ 3,080,000	Nashua	Yes	\$ 29.82	\$ 91,846
Outside GIS Consulting Services	Outside GIS Consulting Services	\$ 18,000	Merrimack	No	\$ 28.17	\$ -
Water Modeling Consulting	Water Modeling Consulting	\$ 10,000	Merrimack	No	\$ 28.17	\$ -
Water Level Well Monitoring Equipment	Water Level Well Monitoring Equipment	\$ 5,000	Various	No	\$ 28.85	\$ -
Replace SUV	Replace SUV	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Replace Pickup	Replace Pickup	\$ 30,000	Merrimack	No	\$ 28.17	\$ -
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	\$ 60,000	Various	Yes	\$ 28.85	\$ 1,731
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	\$ 15,000	Various	Yes	\$ 28.85	\$ 433
Misc. Structural Improvements	Misc. Structural Improvements	\$ 20,000	Various	Yes	\$ 28.85	\$ 577
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	\$ 20,000	Various	Yes	\$ 28.85	\$ 577

Project Name/Description	Project Description	Approved Budgeted Amount	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	\$ 30,000	Various	Yes	\$ 28.85	\$ 866
Well Rehabilitation	Well Rehabilitation	\$ 50,000	Various	Yes	\$ 28.85	\$ 1,443
WTP Structural/HVAC	WTP Structural/HVAC	\$ 10,000	Nashua	Yes	\$ 29.82	\$ 298
Purchase new lab equipment	Purchase new lab equipment	\$ 20,000	Nashua	No	\$ 29.82	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	\$ 10,000	Various	Yes	\$ 28.85	\$ 289
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 65,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Replace Vehicle	Run Rate Replacement of Water supply vehicles	\$ 40,000	Nashua	No	\$ 29.82	\$ -
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4	\$ 550,000	Nashua	Yes	\$ 29.82	\$ 16,401
Work Order and Asset Management (Synergen upgrade)	Upgrade WAM to new infrastructure and interface	\$ 90,000	Merrimack	Yes	\$ 28.17	\$ 2,535
Miscellaneous Hardware	Miscellaneous Hardware	\$ 15,000	Merrimack	No	\$ 28.17	\$ -
Miscellaneous Software	Miscellaneous Software	\$ 12,000	Merrimack	No	\$ 28.17	\$ -
Other IT Miscellaneous Projects - Run Rate	Other IT Miscellaneous Projects - Run Rate	\$ 275,000	Merrimack	No	\$ 28.17	\$ -
Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -		\$ 8,731,500	Projected Property Tax Expense associated with QCPAC projects -			\$ 235,407

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000