2021 QCPAC - Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-1 Witness: Donald L. Ware

### **REQUEST:**

### **Re:** Company's Response to DOE 1-4:

- a) Please provide documentation in support of the Company's prior purchase of 569,005 gpd of MSDC capacity.
- b) Please provide documentation in support of the requirement on the Company to purchase additional MSDC capacity at \$3.79 per gpd.

#### **RESPONSE:**

- a) Please see Attachment DOE DR 2-1a). Please see the 2016 tab of the Excel Spreadsheet attachment (Page 5 of 9 in PDF copy) in support of the Company's prior purchase amount of 569,005 gallons MSDC capacity. This spreadsheet is prepared annually by Manchester Water Works (MWW) and is based on the meter readings and the resultant usage at each of PWW interconnections with Manchester Water Works. The meter readings from each metered location between MWW and PWW are found in the lower portion of the spreadsheet.
- b) Please see Attachment DOE DR 2-1b which is a copy of the MWW-PWW Purchase Water Agreement. In regard to the MSDC requirement, please see Article 3, Section 303 (Pages 14-15 of the Attachment) for the obligation of PWW to pay MWW for incremental increases in the MSDC usage at the MSDC rate in effect that the incremental increase occurs. The MSDC charge in 2020 was \$3.90 per gallon. Please see Attachment DOE 2-1c) specifically page 39 of Manchester Water Works tariff (Page 11 of the Attachment) which defines the MSDC charges in effect at the end of 2020. This was a 3% increase over the rate charged for MSDC in 2019 of \$3.79 per gallon.

2021 QCPAC – Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-2 Witness: John J. Boisvert

#### **REOUEST:**

### **Re:** Company's Response to DOE 1-8:

- a) How many feet of interconnecting main are involved in each case?
- b) Has the cost of water to be purchased from Plaistow been established? Please explain.
- c) Has a cap on the amount of water to be purchased been established? Please explain.
- d) Will payment of an additional MSDC fee be required? Please explain.

#### **RESPONSE:**

a) Sweet Hill: Approximately 1,500 linear feet plus a meter vault.

Twin Ridge: Approximately 300 linear feet plus a meter vault.

- b) No. Final water rates for what Plaistow will charge the Company have not been established because Plaistow has not completed all system improvements and has not yet hired a system operator. Both of these projects require the Company to submit a financing petition with the Commission. Plaistow has not been ready/available to discuss rates and fees. The Company will include those, once determined, as part of the financing petition.
- c) A volume cap remains a subject for discussion/agreement. The results of that discussion/agreement will be included with the financing petition.
- c) Yes. All usage from the Southern New Hampshire Regional Pipeline are subject to MSDC charges.

Note: Due to delays in Plaistow completing work to establish their public water system, the earliest the two projects could go to construction would be in the second half of 2022, pending financing approvals and closing on the NHDES SRF loan.

2021 QCPAC – Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-3 Witness: Donald L. Ware

#### **REOUEST:**

**Re:** Company's Response to DOE 1-10: Please explain why it appears that the changes indicated in the Company's response were not included in revised Exhibit DLW-1, Page 4. Specifically:

- a) The schedule still appears to indicate that the Merrimack River Watershed Council (Grant Match) for \$40,000 (Line 37) will be funded via the 2021 Bond instead of 0.1-DSRR funds.
- b) 'Column H' still appears to indicate that the two vehicle replacements of \$55,000 and \$40,000 (Lines 63-64), as well as the Infoview Licenses for \$65,000 (Line 70) are not QCPAC eligible.

#### **RESPONSE:**

- a) Please see Attachment DOE DR 2-3 for a correction of this apparent oversite to the Merrimack River Watershed Council (Grant Match) (Line 58). Attachment DOE DR 2-3 is built upon the Company's recently submitted 6-30-2021 PWW QCPAC Update, Exhibit DLW-1 Pages 1-6.
- b) Please see Attachment DOE DR 2-3 for a correction of this apparent oversite to the vehicle replacements (Lines 88-89) and Infoview Licenses (Line 97). Attachment DOE DR 2-3 is built upon the Company's recently submitted 6-30-2021 PWW QCPAC Update, Exhibit DLW-1 Pages 1-6.

2021 QCPAC – Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-4 Witness: Donald L. Ware

### **REQUEST:**

### **Re:** Attachment DOE 1-13 (apparently mislabeled from DOE 1-15):

If the descriptions in the last two lines of the spreadsheet remain in place, please confirm the numbers (5.23, 2.4) should be swapped.

#### **RESPONSE:**

Please find Attachment DOE DR 2-4, which is a revised and corrected version of Attachment DOE 1-13 with various corrections made to row labels. The correct Attachment details a change of a complete carbon changeout as \$1,650,000 versus the original amount in Attachment DOE 1-13 of \$2,250,000 which resulted from a formula error which used the estimated cost to change out 2 of the 6 carbon beds as \$750,000 instead of the current, actual projected amount of \$550,000 to change out 2 of the 6 carbon beds. The bottom line of the Attachment DOE DR 2-4 is that the use of Pennichuck Brook as the primary raw water supply, based on PFOA treatment, is about 2.1 times more expensive than using the Merrimack River as the primary raw water supply.

2021 QCPAC - Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-5 Witness: John J. Boisvert

### **REQUEST:**

### Re: Company's Response to DOE 1-16 b):

The partial listing of 2020 main replacements on pages 9 and 10 of Mr. Boisvert's testimony appears to add to 4,582 linear feet. Please explain why a smaller number of feet (4,237) was actually replaced.

#### **RESPONSE:**

In order to clarify the data in regards to water main replacement in 2020, please see attachment DOE DR 2-5 for a compilation of water main replaced in 2020 (Please see yellow highlighted cells). Per the attachment, a total of 4,786 LF of water main was replaced and supplemented with 4,996 LF of new water main at a total cost of \$1,415,039.

2021 QCPAC - Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-6 Witness: John J. Boisvert

#### REQUEST:

### Re: Company's Response to DOE 1-18 c):

Was the consultant chosen on qualifications alone, or was the work put out to bid? Please explain.

#### **RESPONSE:**

The consultant, Geosyntec, was selected based on qualifications and a review of comparable hourly billing rates of similar consultants working for the Company to establish that billing rates were comparable. Since there was no required scope of work or defined contents of the Modified Source Water Protection Plan from the NHDES, there was no way to define what was to be "bid". The consultant had to be engaged to work with the company to negotiate/define the scope with the NHDES, then carry out the work as mutually agreed.

2021 QCPAC - Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-7 Witness: Donald L. Ware

#### **REQUEST:**

**Re:** Company's Response to DOE 1-21: Please revise Exhibit DLW-1, Page 4 to reflect the inclusion of the anticipated short-term interest that will be incurred relative to the Company's 2021 CapEx. If this amount is different from the amount of \$128,379 indicated in the Company's previous response, please provide supporting documentation for the revised amount.

#### **RESPONSE:**

A line has been added to Attachment DOE DR 2-3 DLW Exh 1, Page 4 to reflect a projected \$128,379 in FALOC interest.

2021 QCPAC - Qualified Capital Project Adjustment Charge Responses to DOE Data Requests –Set 2

Date Request Received: 8/11/21 Date of Response: 9/1/21 Request No. DOE 2-8 Witness: Donald L. Ware

### **REOUEST:**

### Re: Cover letter to August 9, 2021 quarterly update:

- a) Please provide documentation of the reclassification of Bowers Dam as a high hazard.
- b) Please explain how rebuilding of the Bowers Dam will reduce or eliminate work on the two downstream dams (Harris and Supply).

#### **RESPONSE:**

- a) The Bowers Dam has always been classified as a High Hazard Dam (See attachment DOE DR 2-8a). Based on the last round of inspections by the NHDES Dam Bureau and changes due to the flow that a high hazard dam must pass (Return Year storm flows have been increased by the NHDES due to climatic changes and impacts on rainfall amounts). The increased flows resulted in the need to increase the spillway capacity of Pennichuck's dams to pass these flows. In response to the NHDES changes the Company hired H.L Turner (HLT) to assess the Company's options in regard to improvements to its dams to bring them into compliance with the new high flow passage requirements. HLT initially believed that if the Bower's Pond dam could be reclassified from a High Hazard to a Significant Hazard dam, the Company could reduce the overall cost of the required improvements to the Supply Pond, Harris Pond and the Bowers Dams. Based upon a more detailed analysis and interaction with the NHDES, it was ultimately determined that the least cost solution to the required improvements to the Dams was not to change the Hazard classification of Bowers. Please see Attachment DOE DR 2-8b which details that the estimated cost of improvements required to the Supply Pond, Harris Pond and Bower's Pond dams, if Bowers was reclassified from a High Hazard to a Significant Hazard, would be \$2,693,500. If the classification of Bowers Dam remains as a High Hazard, there would only be improvements required to the Bowers Dam and a small portion of Harris Dam with a projected cost of \$1,762,800. Based on HLT's estimates, the Company abandoned the reclassification of the Bowers Pond Dam from a High Hazard to a Significant Hazard Dam since the overall improvements required to the dams were the least if Bowers was not reclassified.
- b) Under the initial scenario, the reclassification of the Bowers Dam from a High Hazard to a Significant hazard, the Harris and Supply spillways and earthen structures needed to be improved to bypass the high flows associated with a failure of the Bowers Dam. If Bowers Dam is rebuilt to pass the High Hazard flows, rather than fail during those flows, then the Harris and Supply Pond Dams, which have already been built to pass these flows will not need to be rebuilt.

#### Manchester Water Works

2020						
	Tot	tal	PEU	Portion	P١	VW Portic
Average Daily Flow (Gal.) - Max. allowed -	2,	100,000				
Average Daily Flow (Gal.) -	1,3	356,078		787,073		569,0
Average Daily Flow (Gal.) -	1,	436,355		863,900		572,4
Increase in 2020 (Gal.) -		80,277		76,827		3,4
Current MSDC rate per gallon -	\$	3.79	\$	3.79	\$	3.
MSDC additional charge (Paid from Collected MSDC fees) -	\$	304,250	\$	291,174	\$	13,0
MSDC Flow purchased as of 12/20/2020 (Gal.) -	1,4	436,355		863,900		572,4
MSDC utilized in 2020 (Gal) -	1,	513,757		897,411		616,3
Additional MSDC that must be purchased for 2020 (Gal) -		77,402		33,511		43,8
MSDC additional 2020 charge -	\$	293,355	\$	127,008	\$	166,3

MSDC additional charge (Paid from Collected MSDC fees) - \$ 304,250 \$ 291,174 \$ 13,076 MSDC Flow purchased as of 12/20/2020 (Gal) - 1,436,355 863,900 572,455 MSDC utilitized in 2020 (Gal) - 1,513,757 887,411 616,346 Additional MSDC that must be purchased for 2020 (Gal) - 77,402 33,511 43,891 MSDC additional 2020 (Gal) - 77,402 33,511 43,891 MSDC additional 2020 (Gal) - 293,355 12,700 \$ 166,346							
Total Total Consumption (Gal.): # days in Consumption PWW PEU Consumption	PWW PEU Two (2) month Two (2) month Two (2) month PWW PEU Average Average Average Onsumption CP Consumption Daily flow Daily flow Daily flow						
March         31         17,155,280         3,059,320         14,095,960         16,122,279           April         30         18,383,446         3,27,680         14,455,766         17,155,280           May         31         28,475,363         8,825,221         19,690,161         18,383,446           June         30         45,503,335         18,129,909         27,622         24,475,363           July         31         46,589,813         19,554,270         22,815,343         46,580,333           Suptamber         30         37,399,074         15,427,76         21,974,798         47,483,342           Cotober         31         26,204,478         7,096,509         19,107,970         37,339,074           November         27         17,132,940         3,419,856         13,713,084         26,04,478	3,764,853 16,755,383 610,709 109,457 501,251 2,802,887 13,319,682 554,626 97,688 456,928 3,093,220 14,095,960 582,602 114,541 468,061 3,927,880 14,455,766 788,177 209,064 559,113 8,225,221 19,550,141 1,214,847 441,881 772,967 118,129,509 27,500,826 1,1508,196 617,767 890,429 118,129,509 27,500,826 1,1508,196 617,767 890,429 118,129,509 27,500,826 1,1513,757 616,346 89,411 0,151,151,177 616,346 89,411 0,151,177 616,346	77.402					
Cust #95593   Cust #95593   Cust #95594   Cust #95694   Cust #95694   Cust #95696   Cust #956966   Cust #956966   Cust #95696   Cust #95696   Cust #956966   Cust #95696   Cust #95696	Pennichuck Water Works, Inc. (PWW)   PWW & PEU   Cust #95683   Cust #107225   Cust #07687   PWW   CF   Gallons   CF   CF   CF   Country Rd.   Donald Street   Total   Total   Month   Total   Total   Month   Total   Total   Month   Total   Total   Total   Total   Total   Month   Total	Cust #95563	762 728 861 842 1.195 624 1.744 1,264 1,776 695 1,831 998 1,453 845 1,152 758	Wellington Tank	Cust #107225 Londonderry Loc #200376 Tank CCF CCF CCF CCF Total  3,945 21,359 769 3,088 17,827 619 3,446 17,847 728 125 126 126 126 126 126 126 126 126 126 126	Low Service Tank CCF Total  5,306 3,308 4,200 5,309 4,200 5,24,439 26,342 25,176 20,804 9,672 4,746  142,075	
Cust #95593	Days	30 33 32 32 Days Days Nov Dec 28 3 27 31 27 -	Usage Jan Feb		ay June July	Usage Usage Usage August Sept Oct	Usage Nov Dec 560
Cust #95583   Date   Date   Date   Days   CCF   Jan   Feb   Mar   Apr	Days May         Days June         Days July         Days August         Days Sept         Days Oct           27 4         26 4         24 7         25 6         29 1           31         30         31         31         30	Days Days Days Dec		Usage Usage Us Mar Apr M 	ay June July	Usage August Sept Usage August Sept Oct	Usage Nov Dec  - 2,145 - 2,311 - 2,628 - 3,710 - 7,057 - 4,383 - 5,690 - 4,431 - 2,256 - 2,033,10 - 2,259 - 2,033,10 - 3,474
Cust #98615   Beg   Date   Date   Days   CCF   Days   Feb   Mar   Apr	Days May         Days June         Days July         Days August         Days Sept         Days Oct           27 4         26 4         24 7         25 6         29 1           31         30         31         31         30	Days Days Dec			y June July	Usage August Sept Oct	Usage Nov Dec 14,400
Cust #86741   Date   Date   Date   Days   CF   Days   Da	Days   Days   Days   Days   Days   Days   Days   Oct	Days Days Dae	Usage Usage Ban G94.00	2 	nge Usage June July	Usage Usage Oct	Usage Usage Nev Dec 694
Cust #143619   Loc #207920   Ze-Duc   Ze-A-Jan   Ze-A	Days   Days   Days   Days   Days   Days   Days   Oct	Days Days Dec	Usage Jan Feb 234.00 133.94 27.00	Usage Usage Usage Mar Apr M	Usage  By June	Usage August Sept Oct	Usage Nov Dec  234 173 162 174 205 170 246 216 171 171 173.70 - 174 215 - 174 215

	Beg	End				Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days
Cust #95683	Date		Days	_	CCF	Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec
Loc #69736	26-Dec	24-Jan	24	24	930	24											
Patten and	24-Jan	24-Feb	31	31	700	7	24										
County Rd.	24-Feb	25-Mar	30	30	700		5	25 6									
with fire protection	25-Mar	24-Apr	30	30	500			6	24								
	24-Apr	27-May	33	33	2,100				6	27							
	27-May	6-Jul	40	40	6,760					4	30	6					
	6-Jul	24-Jul	18	18	4,600							18					
	24-Jul	25-Aug	32	32	6,030							7	25				
	25-Aug	29-Sep	35	35	5,600								6	29			
	29-Sep	28-Oct	29	29	2,500									1	28		
	28-Oct	27-Nov	30	30	1,580										3	27	
	27-Nov	26-Dec	29	-													
					32,000	31	29	31	30	31	30	31	31	30	31	27	
Cust #107225 Loc #200376 Donald Street w/o fire protection	Beg Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr	End Date 24-Jan 24-Feb 25-Mar 24-Apr 27-May	Days 24 31 30 30 33	24 31 30 30 30 33	3,200 3,300 3,200 3,700 8,300	Days Jan 24 7	Days Feb 24 5	Days Mar 25 6	Days Apr 24 6	Days May	Days June	Days July	Days August	Days Sept	Days Oct	Days Nov	Days Dec
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun	24 31 30 30 33 33	31 30 30 33 30	3,200 3,300 3,200 3,700 8,300 19,600	Jan 24	Feb 24	Mar 25	Apr 24	May	June 26	July					
Loc #200376 Donald Street	26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul	24 31 30 30 33 30 31	31 30 30 33 30 31	3,200 3,300 3,200 3,700 8,300 19,600 16,900	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June	July 27	August _				
Loc #200376 Donald Street	26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul	Date 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug	24 31 30 30 33 30 31 29	31 30 30 33 30 31 32	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June 26	July	August _	Sept			
Loc #200376 Donald Street	26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep	24 31 30 30 33 30 31 29 35	31 30 30 33 30 31 32 35	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June 26	July 27	August _	Sept 29	Oct		
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24 31 30 30 33 30 31 29 35 29	31 30 30 33 30 31 32 35 29	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900 6,800	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June 26	July 27	August _	Sept	Oct	Nov	
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct 27-Nov	24 31 30 30 33 30 31 29 35 29 30	31 30 30 33 30 31 32 35	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June 26	July 27	August _	Sept 29	Oct		
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24 31 30 30 33 30 31 29 35 29	31 30 30 33 30 31 32 35 29	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900 6,800 3,500	Jan 24 7	Feb 24 5	Mar 25 6	Apr 24 6	May 27 4	June 26 4	July 27 7	August	<b>Sept</b> 29 1	Oct 28 3		
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct 27-Nov	24 31 30 30 33 30 31 29 35 29 30	31 30 30 33 30 31 32 35 29	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900 6,800	Jan 24	Feb 24	Mar 25	Apr 24	May 27	June 26	July 27	August _	Sept 29	Oct	Nov	
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct 27-Nov	24 31 30 30 33 30 31 29 35 29 30	31 30 30 33 30 31 32 35 29	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900 6,800 3,500	Jan 24 7	Feb 24 5	Mar 25 6	Apr 24 6	May 27 4	June 26 4	July 27 7	August	<b>Sept</b> 29 1	Oct 28 3		Dec
Loc #200376 Donald Street	Date 26-Dec 24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct	24-Jan 24-Feb 25-Mar 24-Apr 27-May 26-Jun 27-Jul 25-Aug 29-Sep 28-Oct 27-Nov	24 31 30 30 33 30 31 29 35 29 30	31 30 30 33 30 31 32 35 29	3,200 3,300 3,200 3,700 8,300 19,600 16,900 18,600 18,900 6,800 3,500	Jan 24 7	Feb 24 5	Mar 25 6	Apr 24 6	May 27 4	June 26 4	July 27 7	August	<b>Sept</b> 29 1	Oct 28 3		Dec

Usage	Usage Feb	Usage Mar	Usage Apr	Usage Mav	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	
<b>Jan</b> 930.00			· · · · · · · · · · · · · · · · · · ·									
930.00		-	-	-	-	-	-	-	-	-	-	930
158.06	541.94		-	-	-	-	-	-	-	-	-	700
-	116.67	583.33	*	-	-	-	-	-	-	-	-	700
-	-	100.00	400.00	<del></del>	-	-	-	-	-	-	-	500
-	-	-	381.82	1,718.18	-	-	-	-	-	-	-	2,100
-	-	-	-	676.00	5,070.00	1,014.00	-	-	-	-	-	6,760
-	-	-	-	-	-	4,600.00	-	-	-	-	-	4,600
-	-	-	-	-	-	1,319.06	4,710.94	-	-	-	-	6,030
-	-	-	-	-	-	-	960.00	4,640.00	-	-	-	5,600
-	-	-	-	-	-	-	-	86.21	2,413.79	-	-	2,500
-	-	-	-	-	-	-	-	-	158.00	1,422.00	-	1,580
-	-	-	-	-	-	-	-	-	-	-	-	-
1,088	659	683	782	2,394	5,070	6,933	5,671	4,726	2,572	1,422		32,000
Usage Jan	Usage Feb	Usage Mar	Usage Apr	Usage May	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec_	
3,200.00	-	-	-	-	-	-	-	-	-	-	-	3,200
745.16	2,554.84	-	-	-	-	-	-	-	-	-	-	3,300
-	533.33	2,666.67	-	-	-	-	-	-	-	-	-	3,200
-	-	740.00	2,960.00	-	-	-	-	-	-	-	-	3,700
-	-	-	1,509.09	6,790.91	-	-	-	-	-	-	-	8,300
-	-	-	-	2,613.33	16,986.67	-	-	-	-	-	-	19,600
-	-	-	-	-	2,180.65	14,719.35	-	-	-	-		16,900
-	-	-	-	-	-	4,489.66	16,034.48	-	-	-	-	20,524
-	-	-	_	-	_	-	3,240.00	15,660.00	-	-	_	18,900
-	-	-	-	-			-	234.48	6,565.52	_		6,800
-	-	-	-	-	-	-	-		350.00	3,150.00		3,500
-	-	-	-	-	-	-	-	-	-			-
3,945	3,088	3,407	4,469	9,404	19,167	19,209	19,274	15,894	6,916	3,150		107,924

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 2 of 9

Manchester Water Works Schedule of Pennichuck 60 day average daily of 2019

Average Daily Flow (Gal.) - Max. allor Average Daily Flow (Gal.) -Average Daily Flow (Gal.) Increase in 2016 (Gal.) Current MSDC rate per gallon -MSDC additional charge 502.704 Purchased 1.356.078 in 2016 3.37 3.37 Two (2) month Average Daily flow # days in billing cycle current period 19,955,072 15,697,874 16,912,032 17,179,673 20,962,960 24,398,148 33,702,665 30,274,427 25,277,860 18,397,060 14,905,324 Month:
January
February
March
April
May
June
July
August
Septembe
October
November
December 665,169 614,706 582,320 577,825 605,439 708,767 937,110 1,147,275 1,053,459 896,005 693,253 528,609 19.955.072 19,955,072 15,697,872 16,912,032 17,179,673 20,962,960 24,398,148 33,702,665 33,986,570 30,274,427 25,277,860 18,397,060 Chuck East Utility, Inc. (PEU)

Cust #95593 Cust #95563 Cust #95615
Loc #69634 Loc #69604 Loc #69656 Loc #69656 Cust #95741
Loc #64798 Rockingham @ Coteville Rd Water Works, Inc. (PWW)
Cust #95683 Cust #107225
Loc #69736 Loc #200376
Patten and
County Rd. Donald Street Pennichu
Cust #143619
Loc #207920
Pine Ave.
Meter Pit Wellington Tank Cust #95593 Loc #69634 Joanne Dr. Cust #95741 Loc #64798 Rockingham @ Coteville Rd Cust #95683 Loc #69736 Patten and County Rd. Cust #95615 Cust #143619 Loc #207920 Pine Ave. Meter Pit Cust #107225 Wellington Tank CCF Total Low Service Tank CCF Total Tank CCF Month: 2019 January February March April May June July August Septembe October November 3,537 2,301 2,531 2,545 3,255 4,290 2,901 1,599 3,363 3,009 2,429 2,188 33,947 19,955,072 15,697,874 16,912,032 17,179,673 20,962,960 24,398,148 33,702,665 33,986,570 30,274,427 20,274,627 14,905,324 271,649,664 January
February
March
April
May
June
July
August
Septembe
October
November
December 5,220 4,079 4,407 4,840 7,801 11,396 17,125 18,492 15,154 11,182 6,111 4,006 865 667 651 665 660 807 848 871 735 676 632 562 3,537 2,301 2,531 2,545 3,255 4,290 2,901 1,599 3,363 3,009 2,429 2,188 33,947 16,026 13,181 14,576 14,537 15,904 15,665 23,548 23,411 20,283 18,147 14,839 12,581 3,958 3,052 3,240 3,595 6,199 10,108 15,539 16,910 13,767 9,878 4,935 3,019 21,610 17,052 18,407 18,308 20,420 21,369 28,108 27,138 25,496 22,826 18,676 16,069 5,068 3,935 4,203 4,659 7,605 11,249 16,949 18,299 14,978 10,968 5,919 3,858 107,690 16,026 13,181 14,576 14,537 15,904 15,665 23,548 23,411 20,283 18,147 14,839 12,581 202,700 1,030 758 445 380 406 460 635 1,063 938 780 585 590 8,070 865 667 651 665 660 807 848 871 735 676 632 562 8,640 1,110 882 963 1,065 1,406 1,141 1,410 1,389 1,212 1,089 984 839 13,490 3,958 3,052 3,240 3,595 6,199 10,108 15,539 16,910 13,767 9,878 4,935 3,019 94,200 20,593 16,241 17,552 17,463 19,565 20,415 27,084 26,073 24,585 21,936 17,852 15,359 865 667 651 665 660 807 848 871 735 676 632 562 8,640 1,030 758 445 380 406 460 635 1,063 938 780 585 590 8,070 1,110 882 963 1,065 1,406 1,141 1,410 1,389 1,212 1,089 984 839 8,640 33,947 365 End Date 25-Jan 25-Feb 26-Mar 25-Apr 24-May 25-Jun 26-Jul 26-Aug 25-Sep 25-Oct 25-Nov 26-Dec 26-Jan Beg Date 27-Dec 25-Jan 25-Feb 26-May 25-Jun 26-Jul 26-Aug 25-Sep 25-Oct 25-Oct 25-Dec 720 750 600 680 570 860 840 890 750 660 650 670 720 750 600 680 570 860 840 890 750 660 650 670 537.93 113.33 566.67 98.28 471.72 188.13 671.88 135.48 704.52 143.55 746.45 125.00 625.00 110.00 524.19 108.06 632.26 561.94 651.26 659.85 871.45 735.00 675.81 End Date

25-Jan

25-Feb

26-Mar

25-Apr

24-May

25-Jun

26-Jul

26-Aug

25-Sep

25-Oct

25-Nov

26-Jan Usage Jan 3,043.20 493.70 Beg Date 27-Dec 25-Jan 25-Feb 26-Mar 25-Apr 24-May 26-Jul 26-Aug 25-Sep 25-Oct 25-Nov 26-Dec CCF 3,043 2,551 2,357 2,554 2,657 1,498 6,551 1,225 3,429 3,033 2,490 2,609 Usage Feb Cust #95563 Loc #69604 Harvey Rd. with fire protection 3,043 2,551 2,357 2,504 2,657 1,498 6,551 1,225 3,429 3,033 2,490 2,609 2,057.10 243.85 2,113.35 417.33 2,086.67 458.14 2,199.06 327.60 727.89 1,170.00 3,119.52 2,703.59 1,027.42 571.50 197.58 2,857.50 505.50 2,527.50 481.94 2,300.95 2,530.69 2,544.80 3,254.55 1,598.92 3,363.00 3,009.44 2,428.87 Usage Jan 13,200.00 2,825.81 End
Date

25-Jan
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25-Oct
25-Nov
26-Dec
26-Jan Beg Date 27-Dec 25-Jan 25-Feb 26-Mar 25-Apr 24-May 25-Jun 26-Aug 25-Sep 25-Oct 25-Oct 25-Dec CCF 13,200 14,600 13,600 14,300 15,200 23,500 23,500 23,800 20,700 18,200 15,400 Usage Feb 13,200 14,600 13,600 14,300 15,200 15,200 23,500 23,800 20,700 18,200 15,400 15,000 11,774.19 1,406.90 12.193.10 11,916.67 2,620.69 2,383.33 12,579.31 3,325.00 11,875.00 3,790.32 19,709.68 3,838.71 19,961.29 3,450.00 17,250.00 3,033.33 15,166.67 2,980.65 12,419.35 2,419.35 12,580.65 14,838.71 End Date 25-Jan 25-Feb 26-Mar 25-Apr Beg Date 27-Dec 25-Jan 25-Feb 26-Mar Usage Jan 859.00 171.48 Usage Feb Usage Mar Usage Oct 859 886 425 381 714.52 43.97

25-Apr 24-May 25-Jun 26-Jul 26-Sep 25-Sep 25-Oct 25-Nov 26-Dec	24-May 29 25 25-Jun 32 32 26-Jul 31 3: 26-Aug 31 3: 25-Sep 30 30 25-Oct 30 31 3: 26-Dec 31 3: 26-Jan 31 3:	2 475 1 550 1 1,075 0 966 0 800 1 584 1 704	0 0 0 0 0 0 35	0 0	0 0	0	24 7 0	25 5 0 0 0 0 0 0 0 0	26 5	26 5	25 5	0 25 6	0 25 5 30	26 4 30	- - - - - - - - - 1,030	- - - - - - - - - - 758	- - - - - - - - - - - 445	62.93	302.07 103.91 - - - - - - - - - - - - - - - - - - -	371.09 88.71 - - - - - - - 460	461.29 173.39 - - - - - - - - - - - - - - -	901.61 161.00	805.00 133.33 - - - 938	666.67 113.03 - - 780	470.97 113.55	- - - - - 590.45 - 590	365 475 550 1,075 966 800 584 704
Cust #143619 Date Loc #207920 27-Dec Pine Ave. 25-Feb with fire protection 26-Aug 25-Sep 25-Oct 25-Nov 26-Dec	25-Feb 31 3: 26-Mar 29 2: 25-Apr 30 30 24-May 29 2: 25-Jun 32 3: 26-Jul 31 3: 26-Aug 31 3: 25-Sep 30 30 25-Oct 30 3: 25-Nov 31 3: 25-Nov 31 3: 26-Dec 31 3:	1 154 9 195 0 176 9 196 2 152 1 172 1 197 0 169 0 210 1 202	Days Jan 29 6 0 0 0 0 0 35	Days Feb 25 3 3 0 0 0	Days Mar - 26 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Days Apr - 25 5 0	Days May	Days June -  - 25 5 0 0 0 0 0 0	Days July	Days August - 26 5	Days Sept	Days Oct - 0 25 6	Days Nov - 0 25 5 0 30	Days Dec - 0 26 4 30	Usage Jan 122.00 29.81	Usage Feb	Usage Mar	Usage Apr	Usage May	Usage June	Usage July 144.26 31.77	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	122 154 195 176 196 152 172 197 169 210 202 176
Cust #95683 Date Loc #69736 27-Dec Patten and County Rd. 25-Feb with fire protection 26-Mar 25-Apr 24-May 25-Jul 26-Aug 25-Sep 25-Oct 25-Nov 26-Dec	25-Apr 30 3/ 24-May 29 25 25-Jun 32 3/ 26-Jul 31 3/ 26-Aug 31 3/ 25-Sep 30 3/ 25-Oct 30 3/ 25-Nov 31 3/ 26-Dec 31 3/	1 980 9 890 9 990 9 1,390 2 1,170 1 1,410 0 1,240 0 1,070 1 1,020 1 1,000	Days	Days Feb - 25 3 3 0 0	Days Mar - 26 5 0 0 0 0	Days Apr - 25 5	Days May	Days June  25 5 0 0 0 0 0 30	Days July	Days August 26 5	Days Sept	Days Oct - 0 25 6	0 25 5 0 30 30	0 26 4 30	Usage Jan 920.00 189.68	Usage Feb - 790.32 92.07	Usage Mar	Usage Apr	Usage May	Usage June 914.06 227.42 1,141	Usage July	Usage August	Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov	Usage Dec	920 980 890 990 1,390 1,170 1,410 1,410 1,070 1,020 1,000
Cust #107225 Date Loc #20376 27-Dec Donald Street W/o fire protection 25-Apr 24-May 25-Apr 24-May 25-Sup 26-Aug 25-Sep 25-Oct 25-Nov 26-Dec	25-Feb 31 3: 26-Mar 29 2: 25-Apr 30 30 24-May 29 2: 25-Jun 32 3: 26-Jul 31 3: 26-Aug 31 3: 25-Sep 30 33	1 3,400 9 3,000 9 4,900 2 9,800 1 15,200 1 17,300 0 14,400 0 10,600 1 5,400 1 3,600	Days Jan 29 6 0 0 0 0 0 35	Days Feb - 25 3 0 0 0	Days Mar - 26 5 0 0 0	Days Apr - 25 5	Days May	Days June	Days	Days August  26 5	Days Sept	Days Oct -	0 25 5 5 30	0 26 4 30	Usage Jan 3,300.00 658.06 - - - - - - - - - - - - -	Usage Feb	Usage Mar - 2,689,66 550.00 - - - - - - - - - - - - - - - - -	Usage Apr - - 2,750.00 844.83 - - - - - - - - - - - - - 3,595	Usage May	Usage June	Usage July - - - - - - - - - - - - - - - - - - -	Usage August - - - - 14,509.68 2,400.00 - - - - 16,910	Usage Sept	Usage Oct	Usage Nov	Usage Dec	3,300 3,400 3,000 3,300 4,900 9,800 15,200 17,300 14,400 10,600 5,400 3,600
			245 35.00	196 28.00	217 31.00	210 30.00	224 32.00	235 33.57	217 31.00	217 31.00	210 30.00	217 31.00	210 30.00	210 30.00													

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 3 of 9

	Manchester water W Schedule of Pennichi 2018  Average Daily Flow (G Average Daily Flow (G Increase in 2016 (Gal Current MSDC rate p MSDC additional cha	huck 60 d (Gal.) - M (Gal.) - (2 (Gal.) al.) per gallor arge	Max. allowed (2016)	Total 2,100,000 1,356,078 - \$ 3.37 \$ - \$ Consumption current period		_	Purchased 1,356,0	)78 in 2016																				
2018	January February March April May June July August September October November December		30 28 28 31 32 32 30 29 32 30 33 30	18,055,454 15,015,058 16,166,134 18,203,118 26,470,628 29,610,463 37,858,823 27,943,644 27,558,366 18,410,348 16,100,606 14,675,087	18,055,454 15,015,058 16,166,134 18,203,118 26,470,628 29,610,463 37,858,823 27,943,644 27,558,366 18,410,348 16,100,606	601,848 570,181 556,807 582,530 709,107 876,267 1,088,214 1,115,296 909,869 741,431 547,793 488,503																						
	Pei Month:	7	Cust #95593 Loc #69634 Joanne Dr. Smythwoods	Cust #95563 Loc #69604 Harvey Rd.	Cust #95615 Loc #69656 Mammoth Rd.	Cust #95741 Loc #64798 Rockingham @ Coteville Rd	Cust #143619 Loc #207920	Cust #95683 Loc #69736 Patten and County Rd.	Cust #107225 Loc #200376 Donald Street	PEU CCF Total	PWW CCF Total	Gallons Total		Month:		ndonderry Tank Cust #95563 Loc #69604 Harvey Rd.	Cust #95615 Loc #69656	Cust #95741 Loc #64798 Rockingham @	Cust #95593	ow Service Tanks  Cust #143619  Loc #207920  Pine Ave.  Meter Pit	Cust #95683 Loc #69736 Patten and	Cust #107225 Loc #200376	Londonderry Tank CCF Total	Wellington Tank CCF Total	Low Service Tank CCF Total			
	January February March April May June July August September October November December	30 28 28 31 32 32 30 29 32 30 33 30 365	559 508 555 571 738 920 935 811 790 699 743 648 8,478	3,051 2,449 2,723 2,807 3,631 4,930 4,646 3,562 3,411 2,440 2,310 1,888 37,849	13,917 12,757 13,526 14,141 18,303 25,552 23,522 20,023 19,855 14,821 13,285 12,060 201,763	927 792 840 965 1,365 1,321 1,663 1,237 1,117 626 461 761	190 153 166 158 176 206 193 171 169 168 170 149	1,977 250 487 1,347 2,771 4,759 4,004 300 1,231 1,048 922 873 19,969	3,518 3,164 3,316 4,346 8,404 1,898 15,660 11,254 10,270 4,811 3,633 3,240 73,513	18,643 16,659 17,810 18,643 24,213 32,930 30,950 25,804 25,342 18,754 16,970 15,506 262,223	5,495 3,414 3,803 5,693 11,176 6,656 19,664 11,553 11,551 5,859 4,555 4,113 93,482	18,055,454 15,015,058 16,166,134 18,203,118 26,470,628 29,610,463 37,858,823 27,943,644 27,558,366 18,410,348 16,100,606 14,675,087 266,067,728		January February March April May June July August September October November December		3,051 2,449 2,723 2,807 3,631 4,930 4,646 3,562 3,411 2,440 2,310 1,888 37,849	13,917 12,757 13,526 14,141 18,303 25,552 23,522 20,023 19,855 14,821 13,285 12,060 201,763	927 792 840 965 1,365 1,321 1,653 1,237 1,117 626 461 761	559 508 555 571 738 920 935 811 790 699 743 648 8,478	190 153 166 158 176 206 193 171 169 168 170 149	1,977 250 487 1,347 2,771 4,759 4,004 300 1,231 1,048 922 873 19,969	3,518 3,164 3,316 4,346 8,404 1,898 15,660 11,254 10,270 4,811 3,633 3,240 73,513	17,894 15,998 17,999 17,914 23,299 31,803 29,821 24,822 24,383 17,887 16,056 14,709 251,676	559 508 555 571 738 920 935 811 790 699 743 648	5,685 3,568 3,968 5,851 11,351 6,863 19,857 11,725 11,670 6,026 4,726 4,262 95,551			
	proof	-	8,478 365	37,849	201,763	12,064	2,069	19,969	73,513	30	29	32	30	·	roof 30							-						
Beg Date 27-Dec 26-Jar 23-Fel 23-Ma 25-Ma; 26-Jur 26-Jur 26-Jur 25-Ser 25-Oc 27-Noc 27-Dec	23-Feb 28 b 23-Mar 28 r 23-Apr 31 r 25-May 32 y 26-Jun 32 n 26-Jul 30 u 24-Aug 29 g 25-Sep 32 p 25-Oct 30 tt 27-Nov 33 v 27-Dec 30	28 28 31 32 32 30 29 32 30 33 30	540 510 500 560 710 980 930 750 870 820 720	Days	Days Feb - 23 5 0 0	Days Mar - 23 8	Days Apr 23 7	Days May	Days June 26 4 0 0 0	Days July -	Days August	Days Sept -	Days Oct -	Days Nov	Days	Usage Jan 468.00 91.07	Usage Feb	Usage Mar  - 410.71 144.52	Usage Apr	Usage May	Usage June - - - - 796.25 124.00 - - -	Usage July	Usage August - - - - - - 620.69 190.31	Usage Sept	Usage Oct	Usage Nov	Usage	468 510 500 560 710 980 930 750 870 660 820 720
Beg	End	_	8,550	31_	28 Days	31_	30_	31_	30	31	31	30 _	31 Days	Days	31 Days	559.07 Usage	508.21 Usage	555.23 Usage	570.80 	738.44 Usage	920.25 Usage	935.31 Usage	811.00 Usage	789.69 Usage	699.09 Usage	742.91 Usage	648.00 Usage	8,478
Date 27-Dece 26-Jai 23-Fel 23-Ma 23-Ap 25-Ma 26-Jui 26-Jui 24-Au 25-Sel 25-Oc 27-Dece	23-Feb 28 b 23-Mar 28 r 23-Mpr 31 r 25-May 32 y 26-Jun 32 n 26-Jul 30 il 24-Aug 29 g 25-Sep 32 p 25-Oct 30 tv 27-Nov 33 v 27-Dec 30	28 28 31 32 32 30 29 32 30 33 33	CCF 3,015 2,451 2,439 2,788 3,377 5,295 4,708 3,284 3,861 2,368 2,567 2,098	26 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		23 8 0 0	23 7 0	25 6 0	June	26 5 5	24 7 31	25 5 5	Oct - 0 25 6 31	27 3 0	0 27 4 31	Jan 2,613,00 437,68 - - - - - - - - - - - - - - - - - - -	Feb - 2,013.32 435.54	Mar 	2,068.52 738.72 	2,638.28 992.81 	4,302.19 627.73 - - - - - - - - - - - - -	July	August 2,717.79 844.59 3,562.39	Sept	Oct	Nov	Dec	2,613 2,451 2,439 2,788 3,377 5,295 4,708 3,284 3,881 2,368 2,567 2,098
Beg Date	End Date Days	<u> </u>	CCF	Days Jan	Days Feb	Days Mar	Days Apr	Days May	Days June	Days July	Days August	Days Sept	Days Oct	Days Nov	Days Dec	Usage Jan	Usage Feb	Usage Mar	Usage Apr	Usage May	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	44 642
27-Dec	23-Feb 28 b 23-Mar 28 r 23-Apr 31 r 25-May 32 y 26-Jun 32 n 26-Jul 30 il 24-Aug 29 g 25-Sep 32 p 25-Oct 30 t 27-Nov 33 v 27-Dec 30	28 28 31 32 32 30 29 32 30 33 33	13,400 12,900 12,100 13,900 17,500 24,700 23,500 18,300 22,300 14,600 13,400	0 0 0 0 31	0 0	23 8 0 0	23 7	25 6 0	- - - 26 7	26 5	24 7	25 5 30	0 25 6		0 27 4 31	11,613,33 2,303,57	10,596.43 2,160.71	9,939.29 3,587.10 - - - - - - - - - - - - - - - - - - -	10,312.90 3,828.13 - - - - - - - 14,141.03	13,671.88 4,631.25 - - - 18,303.13	20,068.75 5,483.33	20,366.67 3,155.17	15,144.83 4,878.13 	17,421.88 2,433.33 -	12,166.67 2,654.55	11,945,45 1,340.00	12,060.00	11,613 12,900 12,100 13,900 17,500 24,700 25,850 18,300 22,300 14,600 13,400
Beg Date 27-Dec 26-Jar 23-Fel 23-Ma	n 23-Feb 28	28	CCF 904 802 744 886	Days Jan 26 5	Days Feb - 23 5	Days Mar - 23 8	Days Apr	Days May	Days June - - -	Days July -	Days August	Days Sept -	Days Oct -	Days Nov	Days Dec	Usage 	Usage Feb - 658.79 132.86	Usage Mar - - 611.14 228.65	Usage Apr - - - - 657.35	Usage May - - - -	Usage June - - -	Usage July - - - -	Usage August - - -	Usage Sept - - -	Usage Oct - - -	Usage Nov - - - -	Usage Dec - - - -	783 802 744 886

	23-Apr 14-Jun 26-Jun 26-Jul 24-Aug 25-Sep 25-Oct 27-Nov 27-Dec	26-Jun 26-Jul 24-Aug 25-Sep 25-Oct 27-Nov 27-Dec	52 52 12 12 30 30 29 29 32 32 30 30 33 33 30 30 30 4	2,289 705 1,678 1,153 1,291 651 460 845	0 0 0 0 0 0 0 31	0 0	0 0	0	0 31 31	14 12 0 0 0 0 0 0 26	26 5	24 7	25 5	0 25 6	0 27 3	27 4 31	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - 792	- - - - - - - - - - 840	308.13 - - - - - - - - - - - - - - - - - -	1,364.60 - - - - - - - - - - 1,365	616.27 705.00 - - - - - - - - 1,321	1,454.27 198.79 - - - - 1,653	954.21 282.41 - - - - 1,237	1,008.59 108.50 - - - 1,117	542.50 83.64 - - 626	376.36 84.50 -	760.50	2,289 705 1,454 1,153 1,291 651 460 845
Cust #143619 Loc #207920 Pine Ave. Meter Pit	Beg Date 27-Dec 26-Jan 23-Feb 23-Mar 25-May 26-Jun 26-Jun 24-Aug 25-Sep 25-Oct	26-Jan 23-Feb 23-Mar 23-Apr 25-May 26-Jun 26-Jul 24-Aug 25-Sep 25-Oct 27-Nov	30 30 28 28 28 28 31 31 31 32 32 32 32 30 30 29 29 32 32 30 30 30 33 33 33	CCF 187 154 151 161 177 199 191 159 182 160 188	Days	Days Feb - 23 5	Days Mar - 23 8	Days Apr - 23 7	Days May - - 25 6	Days June - - - - 26 7	Days July -	Days August	Days Sept -	Days Oct -	Days Nov	Days Dec	Usage Jan 162.07 27.50	Usage Feb 126.50 26.96	Usage Mar	Usage Apr	Usage May  138.28 37.31	Usage June	Usage July	Usage August - - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Oct - - - - - - - - 133.33 34.18	Usage Nov	Usage Dec	162 154 151 161 177 199 210 159 182 160 188
Cust #95683 Loc #69736 Patten and County Rd.	27-Nov 27-Dec Beg Date 27-Dec 26-Jan 23-Mar 23-Mar 23-Mar 25-May 26-Jun 26-Jun	End Date D 26-Jan 23-Mar 23-Mar 25-May 26-Jun 26-Jul 24-Aug	30 30 4	2,075  CCF 2,230 500 1,090 2,460 4,530 4,620 - 1,370	0 0 31 Days Jan 26 5 - - - 0 0	Days Feb - 28 - 0 0	Days Mar - 23 - 8	Days Apr - 23 7	Days May - 25 6	Days June	Days July -	Days August	Days Sept	Days Oct	3 0 30 Days Nov	27 4 31 Days Dec	Usage June 1,932.67 44.64	250.00	205.36 	158 Usage Sept	Usage Sept	Usage June	Usage July	Usage August	Usage Sept	Usage Sept - - - - - -	Usage Sept	149.40	1,933 500 1,990 2,460 4,530 5,082
Cust #107225 Loc #200376 Donald Street	24-Aug 25-Sep 23-Oct 27-Nov 27-Dec Beg Date 27-Dec 26-Jan 23-Feb 23-Mar 23-Apr	23-Oct 27-Nov 27-Dec 26-Jan End Date D 26-Jan 23-Feb 23-Mar 23-Apr 7-Jun	28 30 35 35 35 30 30 30 30 4 — — — — —————————————————————————	900 1,070 970 19,740 19,740 3,400 3,200 3,000 3,300 12,200	0 0 31 Days Jan 26 5	28  Days Feb	Days Mar - 23 8	Days Apr - 23 7	Days May	Days June	Days July	31 Days August	30 Days Sept	25 8 33 Days Oct	27 3 0 30 30 Days Nov	27 4 31 Days Dec	1,977 Usage June 2,946,67 571.43	Usage July 2,628.57 535.71	Usage August - - 2,464.29 851.61	1,347 Usage Sept - - 2,448.39 1,897.78	2,771  Usage Sept	4,759 Usage June - - - 1,897.78	- - - 4,004 Usage July - - -	Usage August	Usage Sept	803.57 244.57 - - - 1,048 Usage Sept - - -	825.43 97.00 922 Usage Sept	873.00 	964 1,070 970 - 19,969 2,947 3,200 3,000 3,300 12,200
	7-Jun 26-Jun 26-Jul 24-Aug 25-Sep 25-Oct 27-Nov 27-Dec	26-Jul 24-Aug 25-Sep 25-Oct 27-Nov 27-Dec	19 19 30 30 29 29 32 32 32 30 30 30 30 30 4	11,500 16,000 10,400 12,100 4,900 4,000 3,600	0 0 0 0 31 217 31.00	28 196 28.00	31 217 31.00	30 210 30.00	31 217 31.00	0 0 0 26 211 30.14	26 5 31 217 31.00	24 7 31 217 31.00	25 5 30 - 210 30.00	0 25 6 31 219 31.29	0 27 3 30 210 30.00	27 4 31 217 31.00	3,518	3,164	- - - - - - - - - 3,316	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - 8,404	- - - - - - - - 1,898	13,866.67 1,793.10 - - - - - - - 15,660	8,606.90 2,646.88 - - - - - - - - - - - - - - - - - -	9,453.13 816.67 - - - - - - - - - - - - - - - - - - -	4,083.33 727.27 - - 4,811	3,272.73 360.00 3,633	3,240.00	13,867 10,400 12,100 4,900 4,000 3,600 73,513

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 4 of 9

21-023 2021 QCPAC himent DOE DR 2-1a) 4 4 of 9	Manchester Water W Schedule of Pennich 2017 Average Daily Flow ( Average Daily Flow ( Average Daily Flow ( Increase in 2016 (Ca	cuck 60 day average (Gal.) - Max. allowed (Gal.) - (2016) (Gal.) I.)	Total 2,100,000 1,356,078	718,602		Purchased 1,356,	078 in 2016																				
20	Current MSDC rate p MSDC additional cha  Consumption (Gal.):  Month:  January March April May June July August September October November December	arge	17,425,209 12,913,237 15,362,601 15,640,712 20,894,561 27,549,052 30,853,311 28,935,429 26,403,735 21,791,585 15,864,609	\$ 3.37 \$ - Consumption prior period 17,425,209 12,913,237 15,362,601 15,640,712 20,844,516 20,845,3311 28,935,429 26,403,735 21,791,585 15,864,609	\$ 3.37 \$ 1 Two (2) month Average Daily flow 562,104 514,211 479,251 598,939 794,158 957,416 964,335 907,199 790,087 617,315 612,369																						
		cnnichuck East Utility, Cust #95593 Loc #69634 Joanne Dr.	Cust #95563 Loc #69604	Cust #95615 Loc #69656	Cust #95741 Loc #64798 Rockingham @	Cust #143619 Loc #207920 Pine Ave.	Cust #95683 Loc #69736 Patten and	Cust #107225 Loc #200376	PEU CCF	PWW CCF	Gallons		Wd-		Loc #69604	Cust #95615 Loc #69656	Cust #95741 Loc #64798 Rockingham @	Wellington Tank  Cust #95593  Loc #69634  Joanne Dr.	Cust #143619 Loc #207920 Pine Ave.	Cust #95683 Loc #69736 Patten and	Cust #107225 Loc #200376	Londonderry Tank CCF	Tank CCF	Low Service Tank CCF			
	Month:  January February March April May June July August September October November December	Smythwood:  31 439 28 324 31 420 30 414 31 477 30 555 31 653 30 604 31 581 30 599 31 493 365 6,109	1,664 1,271 1,530 2,415 3,259 2,974 1,754 3,542 3,262 2,587 3,408	15,443 11,606 13,757 13,281 15,545 18,174 19,919 19,088 17,482 15,602 12,615 13,331 185,854	720 521 614 643 928 1,306 1,431 1,374 904 941 686 799 10,866	158 112 142 147 157 171 152 174 185 168 178 180 202 1,979	County Rd.  833 891 831 957 1,482 2,017 2,527 2,608 2,199 1,738 1,214 6,852 23,949	Donald Street  4,040 2,738 3,244 3,924 6,922 11,367 13,577 13,011 10,399 6,832 3,419 3,644 83,118	Total  18,423 13,835 16,463 16,029 19,529 23,446 25,143 23,065 22,701 20,564 16,577 18,234 234,008	Total  4,873 3,429 4,076 4,881 8,405 13,384 16,105 15,619 12,598 8,570 4,632 10,496 107,067	Total 17,425,209 12,913,237 15,362,601 15,640,712 20,894,561 27,549,052 30,853,311 28,935,429 26,403,735 21,791,585 15,864,609 21,489,874 2655,123,913		Month: January February March April May June July August September October November December	oof	Harvey Rd.  1,664 1,271 1,550 1,550 1,553 2,415 3,259 2,974 1,754 3,542 3,262 2,587 3,408 29,200	Mammoth Rd.  15,443 11,636 13,757 13,281 15,545 18,174 19,919 19,098 17,482 15,602 12,615 13,331 185,854	720 521 614 643 928 1,306 1,431 1,374 904 941 686 799	Mythwoods  439 324 420 414 471 555 653 604 581 509 493 6,109	158 112 142 147 157 171 152 174 185 188 178 180 202 1,979	County Rd.  833 691 831 957 1,482 2,017 2,527 2,608 2,199 1,738 1,214 6,852 23,949	Donald Street  4,040 2,738 3,244 3,924 6,922 11,367 13,577 13,011 10,399 6,832 3,419 3,644 83,118	Total  17,827 13,398 15,901 15,458 18,887 22,739 24,324 22,227 21,928 19,804 15,888 17,539 225,920	Total  439 324 420 414 471 555 645 663 604 581 509 493 6,109	Total 5,030 3,541 4,217 5,038 8,576 13,536 16,279 15,804 12,767 8,747 4,812 10,698 109,046			
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24 27 25 31. 23 2. 24. 25	te         Date         Days           Doc         23-Jan         31           Jan         24-Feb         32           Feb         27-Mar         31           Mar         25-Apr         29           Apr         31-May         36           May         23-Jun         23           Jun         24-Jul         31           I-Jul         24-Aug         31           Aug         25-Sep         32           Sep         24-Oct         29	23 1,761 32 1,429 31 1,546 29 1,327 36 2,804 23 2,470 31 3,495 31 1,186 32 3,822 29 3,227 35 2,956 29 3,229	8 - - 0 0 0 0 0	Days Feb 24 4 0 0	Days Mar - 27 4 0 0	Days Apr - 25 5 5	Days May	Days June  23 7 0 0 0 0 0 30	Days July - 24 7	Days August	Days Sept	Days Oct .	0 28 2 0 30	0 27 4 31	Usage Jan 1,306.55 357.25 - - - - - - - - - - - - - - - - - - -	Usage Feb	Usage Mar - - 1,346.52 183.03 - - - - - - - - - - - - - - - - - - -	Usage Apr - - 1,143,97 389,44 - - - - - - - - - - - 1,1533,41	Usage May	Usage June	Usage July	Usage August - - - - - - 918.19 836.06 - - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Oct	Usage Nov	Usage Dec	1,307 1,429 1,546 1,327 2,804 2,470 3,495 1,186 3,822 3,227 2,956 3,229 402 29,200
24 27 25 26 23 2. 24 25 24	te         Date         Days           Dec         23-Jan         31           Jan         24-Feb         32           Feb         27-Mar         31           Mar         25-Apr         29           Apr         26-May         31           May         23-Jun         28           Jun         24-Jul         31           -Jul         24-Aug         31           Aug         25-Sep         32           Sep         24-Oct         29	32 13,100 31 13,800 29 12,600 31 15,000 28 16,600 31 20,100 31 19,300 32 19,000 29 15,300 35 14,700 29 12,400	8 - - 0 0	Days Feb - 24 4 0 0 0	Days Mar - 27 4 0 0 0	Days Apr - 25 5	Days May	Days June	Days July - 24 7	Days August	Days Sept	Days Oct -	Days Nov - 0 28 2 0 30	Days Dec	Usage Jan	Usage Feb - 9,825.00 1,780.65 - - - - - - - - - - - - - - - - - - -	Usage Mar - - 12,019.35 1,737.93 - - - - - - - - - - - - - - - - - - -	Usage Apr - - - 10,862.07 2,419.35 - - - - - - - - - - 13,281.42	Usage May - - - 12,580.65 2,964.29 - - - - - - - - - - - - - - - - - - -	Usage June - - - - 13,635.71 4,538.71 - - - - - - - - - - - - - - - - - - -	Usage July - - - - 15,561.29 4,358.06 - - - - - - - - - - - - - - - - - - -	Usage August - - - - 14,941,94 4,156.25 - - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov	Usage Dec	12,168 13,100 13,800 12,600 15,000 16,600 20,100 19,300 19,000 15,300 14,700 12,400 1,787
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Cust #143619 Loc #207920 Pine Ave. Meter Pit	23-Jan 23-Jan 24-Feb 24-Feb 27-Mar 24-Apr 24-Apr 26-May 23-Jun 24-Jul 24-Jul 24-Jul 24-Aug 25-Sep 25-Sep 24-Oct 24-Nov 27-Dec 27-Dec 27-Dec 24-Nov 27-Dec	CCC		23 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Days Feb - 24 4 0 0	Days Mar - 27 4 0 0	Days	Days May 26 5 0	Days June	Days July 24 7	Days August  24 7	Days Sopt	Days Oct - 0 24 7	0 24 6 0 30 -	Days Dec	Usage Jan 126.13 31.50 - - - - - - - - - - - - - - - - - -	Usage Feb - 94.50 17.94	Usage Mar - - 121.06 20.57 - - - - - - - - - - - - - - - - - - -	Usage Apr	Usage May	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	126 128 139 144 180 138 170 189 179 165 182 216 25 1,979
Cust #95683 Loc #69736 Patten and County Rd.	23-Jan 23-Jan 23-Jan 24-Feb 24-Feb 25-Mpr 25-Apr 26-May 23-Jun 24-Jul 24-Jul 24-Aug 25-Sep 25-Sep 24-Oct 28-Nov 28-Nov 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 27-Dec 28-Nov 28-Nov 27-Dec 28-Nov 28-Nov 27-Dec 28-Nov 28-Nov 27-Dec 28-Nov 28-Nov 27-Dec 28-Nov	30 28 31 31 31 31 32 32 29 29 35 35 29 29 30 4		Days Jan  23 8 0 0 0 0 31	Days Feb - 24 4 0 0	Days Mar - 27 4 0 0	Days	Days May	Days June	Days July - 24 7	Days August	Days Sept	Days Oct - 0 24 7	0 28 2 0 30 30	0 27 4 31	Usage June 638.06 195.00	Usage July	Usage August - - - 714.19 117.24          -	Usage Sept	Usage Sept	Usage June	Usage July	Usage August - - - - - - 2.082.58 525.00 - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Sept	Usage Sept	Usage Sept	638 780 820 850 1,390 1,773 2,480 2,690 2,400 1,880 910 7,040 297 23,949
Cust #107225 Loc #200376	Beg End Date Date D	ays CC		Days Jan	Days Feb	Days Mar	Days Apr	Days May	Days June	Days July	Days August	Days Sept	Days Oct	Days Nov	Days Dec	Usage June 3,264.52	Usage July	Usage August	Usage Sept	Usage Sept	Usage June	Usage July	Usage August	Usage Sept	Usage Sept	Usage Sept	Usage Sept	3,265 3,100

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Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 5 of 9

21-023 2021 OCPAC chambent DOE DR 2-1a) = 5 of 9	February	# days in billing cycle  # days in billing cycle  # days in billing cycle  # days in cycle  # days in days in cycle  # days in	Total 2,100,000 1,221,306 1,356,078 134,772 \$ .3,37 \$ .454,182  Consumption current period 14,537,131 13,309,144 14,205,246 15,242,434 26,623,996 39,843,351 42,877,420 37,666,737 329,953,003 17,969,054 14,737,320 16,249,140  Pennic Cust #95563 Loc #69604 Harvey Rd. 1,318 1,124	718,602 787,073 68,471 \$ 3,37 \$ 230,747  Consumption prior period  14,537,131 13,309,144 14,205,246 15,242,434 42,672,396 39,843,351 42,877,420 37,666,073 29,953,003 17,969,054 14,737,320  chuck East Utility, Cust #95615 Loc #69656 Mammoth Rd.  12,681 11,670	569,005 66,301 \$ 3,37 \$ 223,435 Two (2) month Average Daily flow  466,940 471,971 466,346 482,749 686,335 1,089,629 1,586,078 1,299,089 785,607 785,607 536,170 507,975  Loc #64798 Cots #95741 Loc #64798 Coteville Rd	Cust #143619 Loc #207920 Pine Ave. Meter Pit 150 129	Pennichuck Wate Cust #95683 Loc #89736 Patten and County Rd. 732 793	er Works, Inc. (PWW)  Cust #107225  Loc #200376  Donald Street  3,572 3,117	PEU CCF Total 15,130 13,884	PWW CCF Total 4,304 3,909	Gallons Total 14,537,131 13,309,144		<u>Month:</u> January February		Cust #95563 Loc #69604 Harvey Rd. 1,318 1,124	Loc #69656 F Mammoth Rd. 12,681 11,670	Cust #95741 Loc #64798 Rockingham @ Coteville Rd	Wellington Tank Cust #95593 Loc #96934 Joanne Dr. Smythwoods 407 431	Cust #143619 Loc #207920 Pine Ave. Meter Pit	Patten and County Rd. 732 793	Cust #107225 Loc #200376 Donald Street 3,572 3,117	Londonderry Tank CCF Total 14,573 13,323	Tank CCF Total 407 431	Low Service Tank CCF Total 4,455 4,039			
	April May June July August September October November December	31 379 30 382 31 576 30 782 31 842 31 669 30 553 31 384 30 360 31 397 366 6,163	1,455 2,734 4,192 4,322 3,498 2,657 1,375 1,175 1,473 26,573	12,229 12,332 17,184 23,613 26,715 24,861 20,315 14,058 12,917 14,429 203,003	591 684 1,236 1,620 1,691 1,599 1,263 807 752 470 11,816	136 133 158 189 220 265 46 151 137 147 1,863	891 1,182 2,205 3,616 3,589 2,995 2,525 1,244 839 912 21,524	3,516 4,209 11,500 19,255 19,943 16,469 12,684 6,004 3,523 3,895 107,687	14,584 14,987 21,888 30,396 33,791 30,892 24,835 16,775 15,340 16,916 249,417	4,407 5,391 13,706 22,871 23,532 19,464 15,209 7,248 4,362 4,807 129,211	14,205,246 15,242,434 26,623,996 39,843,351 42,877,420 37,666,073 29,953,003 17,969,054 14,737,320 16,249,140 283,213,314		March April May June July August September October November December	proof	1,250 1,455 2,734 4,192 4,322 3,498 2,657 1,375 1,175 1,473 26,573	12,229 12,332 17,184 23,613 26,715 24,861 20,315 14,058 12,917 14,429 203,003	591 684 1,236 1,620 1,691 1,599 1,263 807 752 470 11,816	379 382 576 782 842 669 553 384 360 397 6,163	136 133 158 189 220 265 46 151 137 147 1,863	891 1,182 2,205 3,616 3,589 2,995 2,525 1,244 839 912 21,524	3,516 4,209 11,500 19,255 19,943 16,469 12,684 6,004 3,523 3,895 107,687	14,070 14,472 21,154 29,425 32,728 29,958 24,235 16,239 14,843 16,371 241,391	379 382 576 782 842 669 553 384 360 397 6,163	4,543 5,524 13,864 23,059 23,752 19,729 15,256 7,399 4,499 4,955 131,073			
Cust #95593 Loc #69634 Joanne Dr. Smythwoods	28-Jan 26-Feb 29 28-Feb 29-Mar 32 29-Mar 29-Apr 31 29-Apr 27-May 28 28-Jun 32 28-Jun 27-Jul 29 27-Jul 26-Aug 30 26-Aug 26-Sep 31 26-Sep 24-Oct 28 24-Oct 38	28 4400 29 4440 32 399 31 390 28 450 32 830 32 830 32 830 32 830 30 660 31 600 28 3500 30 360 8 470 4,440	Days Jan 28 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29 Days Feb 26 3 3	31 Days Mar - 29 2 0 0	30 Days Apr	31 Days May -	30 Days June - - - - - - - - - - - - - - - - - - -	31 Days July -	31 Days August -	30 Days Sept	31 Days Oct -		31 Days Dec -	Usage Jan 361.29 45.52	Usage Feb 394.48 36.56	Usage Mar	Usage Apr	Usage May 472.50 103.75	Usage June 	Usage July	Usage August	Usage Sept	Usage Oct - - - - - - - 300.00 84.00 - - - 384	Usage Nov	Usage Dec	361 440 390 390 490 830 810 660 600 350 360 360 360 360
Cust #95563 Loc #69604 Harvey Rd.	28-Jan 26-Feb 29 28-Feb 28-Mar 31 28-Mar 28-Apr 31 28-Apr 27-May 29 28-Jun 32 28-Jun 27-Jul 29 27-Jul 26-Aug 30 26-Aug 23-Sep 28 23-Sep 24-Oct 31 24-Oct 33-Nov 30	28 1,331 29 1,121 31 1,230 31 1,433 29 2,37 32 4,464 30 3,451 28 2,840 31 1,433 30 1,128 30 1,128 30 1,128 30 1,761	3 - - 0 0 0 0	Days Feb - 26 3 0 0 0	Days Mar - 28 3 0 0	Days Apr	Days May	Days     June	Days July - 27 4	Days August	Days Sept	Days Oct -	0 23 7 30	Days Dec 0	Usage Jan 1,202.19 115.97 15.9	Usage Feb 1,005.03 119.03	Usage Mar	Usage Apr	Usage May - - - 2.175.83 558.00 - - - - - - - -	Usage June - - - - 3,906.00 286.07 - - - - - - - - - - - - - - - - - - -	Usage July - - - - 3,861.93 460.13 - - - - - - - - - - - - - - - - - - -	Usage August	Usage Sept	Usage Oct	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,202 1,121 1,230 1,433 2,337 4,464 4,148 3,451 2,840 1,436 1,128 1,328 454 26,573
Cust #95615 Loc #69666 Mammoth Rd.	28-Jan 26-Feb 29 26-Feb 28-Mar 31 28-Mar 28-Apr 31 28-Apr 27-May 29 27-May 28-Jun 32 28-Jun 27-Jul 29 27-Jul 26-Aug 30 26-Aug 23-Sep 28 23-Sep 24-Oct 31	28 12,700 29 11,700 31 12,200 29 15,100 29 25,000 30 24,400 30 28,000 30 12,800 30 12,800 30 13,300 8 16,400 216,400	3 - - 0 0	Days Feb - 26 3 0 0 0	Days Mar - 28 3 0 0 0	Days Apr - 28 2 2	Days May - 27 4 0	Days June	Days	Days	Days Sept 23 7	Days Oct - 0 24 7	0 23 7	Days Dec  0  23 8 31	Usage Jan 11,470.97 1,210.34	Usage Feb	Usage Mar	Usage Apr	Usage May	Usage June	Usage July - - - - 23,462.07 3,253.33 - - - - 26,715	Usage August - - - - - 21,146.67 3,714.29 - - - 24,861	Usage Sept	Usage Oct	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,471 11,700 12,200 12,500 15,100 25,000 24,400 20,800 14,300 12,800 13,300 4,232 203,003
Cust #95741 Loc #69798 Z Rockingham @ Coteville Rd	28-Jan 26-Feb 29	28 575 29 527 31 582 31 674	Days 28 3 - -	Days Feb	Days Mar -	Days Apr	Days <u>May</u>	Days June - - - -	Days July -	Days August -	Days Sept -	Days Oct -	Days Nov	Days Dec	Usage <u>Jan</u> 519.35 54.52 -	Usage Feb - 472.48 56.32 -	Usage Mar - - 525.68 65.23	Usage Apr - - - - 608.77	Usage May - - - -	Usage June - - - -	Usage July - - - -	Usage August - - - -	Usage Sept - - - -	Usage Oct - - - -	Usage Nov 0 0 0 0	Usage   0   0   0   0   0   0   0   0   0	519 527 582 674

28-Apr 27-May 28-Jun 27-Jul 26-Aug 23-Sep 24-Oct 23-Nov 23-Dec	24-Oct 31 3 23-Nov 30 3	1,726 19 1,591 10 1,572 18 1,324 11 779 10 873 10 353	0 0 0 0 0 31	0 0	0 0	0	27 4 0	28 2 0 0 0 0 30	27 4	26 5	23 7 30	0 24 7	0 23 7 	0 23 8 31	- - - - - - - - - - 574	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	75.59 - - - - - - - - - - - - - - - - - - -	1,020.41 215.75 - - - - - - - - - - - - - - - - - - -	1,510.25 109.72 - - - - - - - - - - 1,620	1,481.28 209.60 - - - - - 1,691	1,362.40 236.43 	1,087.57 175.90 - - - 1,263	603.10 204 - - 807	0 0 0 0 0 0 669 82 -	0 0 0 0 0 0 - 271 199 470	1,096 1,726 1,591 1,572 1,324 779 873 353 199
Cust #143619	27-May 29 29 28-Jun 30 3 27-Jul 29 29 26-Aug 30 3 23-Sep 28 29 24-Oct 31 3 23-Nov 30 30 23-Dec 30 3	134 111 136 129 143 122 188 129 193 100 303 128 14 111 154 100 138	Days Jan 27 4 0 0	Days Feb - 26 3 3	Days	Days Apr - 28 2	Days May	Days June 28 2	Days July - 27 4	Days August	Days Sept -	Days Oct - 0 24 7	Days Nov - 0 0 23 7	Days Dec -	Usage Jan	Usage Feb	Usage Mar	Usage Apr 122.84 9.86	Usage May	Usage June	Usage 	Usage August 262.60 2.50	Usage Sept	Usage Oct	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	132 134 136 136 143 201 193 303 14 154 138
Cust #95683 Date Loc #99736 28-Dec Patten and County Rd. 26-Feb 29-Mar 28-Apr 27-May 28-Jun 27-Jul 26-Aug 23-Sep 24-Oct 23-Nov 23-Dec	End Days  28-Jan 31  26-Feb 29 22  29-Mar 32 33  28-Apr 30 32  27-May 29 22  28-Jun 30 32  27-Jul 30 22  28-Jug 20 22  28-Jug 30 31  23-Sep 28 22  24-Oct 31 32  23-Nov 30 33  23-Nov 30 30  23-Dec 30 30	28 720 99 790 10 1,130 12 3,620 12 3,620 10 2,900 11 1,360 10 2,900 11 1,360 10 2,900 11 1,360 10 2,900 11 1,360 10 2,900 10 3,200 10 3,20	Days June 28 3 0 0 0 31	29  Days July  26 3  0 0 0	29 2 0 0	Days Sept - 28 2 0	Days Sept 27 4 0	Days June	27 4	Days August  26 5	Days Sept 23 7	Days Sept -	Days Sept 0 23 7	Days Sept 0  23 8 31	Usage June 650.32 81.72	Usage July - 708.28 84.38	Usage August - 815.63 75.33	Usage Sept	Usage Sept	Usage June	Usage July	265  Usage August 2,513.33 482.14 2,995	Usage Sept	Usage Sept	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	44 1,863 650 790 900 1,130 1,850 3,861 3,440 2,900 2,700 1,360 820 900 222 21,524
Cust #107225 Date Loc #20376 28-Dec Donald Street 28-Jan 28-Jan 28-Jan 27-Jul 26-Aug 23-Sep 24-Oct 23-Nov 23-Dec	28-Apr 30 31 27-May 29 29 28-Jun 32 33 27-Jul 29 29	3,100 3,600 3,800 9,600 12 20,500 19 19,100 10 16,200 11 6,700 10 6,700 10 3,500	Days June 28 3 0 0 0 31	Days July 26 3 3	Days August - 29 2 0 0	Days	Days	Days June  28 2 0 0 0 0 30	Days July - 27 4	Days August	Days Sept	Days Sept -	Days Sept  0 23 7	Days Sept - 0 23 8 31	Usage June 3,251.61 320.69 - - - - - - - - - - - - - - - - - - -	Usage July 2,779.31 337.50 - - - - - - - - - - - - - - - - - -	Usage August - 3,262.50 253.33 - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Sept	Usage June - - - - - - - - - - - - - - - - - - -	Usage July -     17,782,76 2,160,00 -     19,943	Usage August 14,040.00 2,428.57	Usage Sept	Usage Sept	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,252 3,100 3,600 3,800 9,600 17,938 19,100 16,200 13,600 6,700 3,500 3,600 1,135

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 6 of 9

'21-023 2021 QCPAC abthment DOE DR 2-1a) ge 6 of 9	Ave Ave Ave Ave Incr Cur MSI  2015  Mor 2015  Jan May Jun July Aug Sepe Oct	rage Daily Flow (Ga rage Daily Flow (Ga rage Daily Flow (Ga rage Daily Flow (Ga sase in 2016 (Ga) see in 2016 (Ga) see in 2016 (Ga) sumption (Gal.): tth: uary uary ch l g ust tember	al.) - Max. allowed al.) - (2011) al.) gallon -2016	Total 2,100,000 1,221,306 1,139,622 \$ \$	718,602 644,305 \$ 3.37 \$ -	9WW Portion  502,704 495,316  \$ 3.37 \$ -  Two (2) month Average Daily flow  473,810 466,711 478,376 525,557 776,009 1,017,710 1,043,941 1,126,522 1,139,622 850,542 553,411 467,825																						
			Cust #95593 Loc #69634 Joanne Dr.		chuck East Utility, Cust #95615 Loc #69656	Inc. (PEU)  Cust #95741  Loc #64798  Rockingham @	Cust #143619 Loc #207920 Pine Ave.	Pennichuck Water Cust #95683 Loc #69736 Patten and	Works, Inc. (PWW Cust #107225 Loc #200376	PEU CCF	PWW CCF	Gallons				Cust #95563	Loc #69656		Wellington Tank  Cust #95593  Loc #69634  Joanne Dr.		ow Service Tanks Cust #95683 Loc #69736 Patten and	Cust #107225 Loc #200376	Londonderry Tank CCF	Wellington Tank CCF	Low Service Tank CCF			
	Jan Feb Mar Apr May Jun Jun Aug Sep Oct	ruary ch I I se ust tember ober ember ember and 3	31 420 28 377 31 433 30 446 31 739 31 680 30 727 31 33 31 31 331 31 36 56 66 66 56 56 56 56 56 56 56 56 56 56	1,324 1,083 1,248 1,462 3,165 3,237 3,292 3,615 2,895 1,604 1,008 1,149 25,081	12,185 10,838 12,793 13,258 18,384 19,455 19,180 21,506 19,961 15,327 11,845 12,610 187,342	Coteville Rd  892 840 1,083 1,133 1,487 1,165 1,510 1,272 1,468 713 533 581 12,677	Motor Pit  150 129 143 140 178 176 174 188 160 163 146 153 1,899	County Rd.  782 618 992 1,151 2,520 2,345 2,418 3,417 2,601 1,523 905 1,036 20,309	3,883 3,291 3,865 4,713 14,588 14,909 15,806 19,444 14,932 6,978 3,608 3,781 109,797	Total  14,971 13,267 15,689 16,439 23,874 24,759 24,896 27,394 25,150 18,179 13,939 14,883 233,451	Total  4,665 3,909 4,858 5,864 17,107 17,255 18,224 22,861 17,533 8,501 4,512 4,817 130,105	Total  14,688,108 12,947,818 15,376,375 16,682,598 30,655,923 31,426,377 32,254,027 37,590,334 31,926,580 19,956,462 19,956,462 14,735,738 271,939,953		Month:  January February March April May June July August September October November December		1,324 1,083 1,248 1,462 3,165 3,237 3,292 3,615 2,895 1,604 1,008 1,149 25,081		892 840 1,083 1,183 1,165 1,510 1,272 1,468 713 533 581 12,677	420 377 433 446 660 727 739 814 666 372 407 391 6,452	Meter Pit  150 129 143 140 178 176 174 188 160 163 146 153 1,899		3,883 3,291 3,865 4,713 14,588 14,909 15,806 19,444 14,932 6,978 3,608 3,781 109,797	Total  14,402 12,761 15,123 15,853 23,036 23,856 23,852 26,392 24,323 17,644 13,386 14,340 225,100	Total  420 377 433 446 660 727 739 814 666 372 407 391 6,452	Total  4,815 4,038 5,000 6,003 17,285 17,430 18,399 23,049 17,693 8,664 4,659 4,970 132,005			
Joanne Dr. Smythwoods		27-Feb 29 27-Mar 28 27-Apr 31 28-May 31 30-Jun 33 28-Jul 28 28-Aug 31 25-Sep 28 28-Oct 33 27-Nov 30	365 CCF 29 420	31 Days Jan 29 2 0 0 0 0 0 0 0	28 Days Feb - 27 1 0 0	31 Days Mar - 27 4 0 0 0	30 Days Apr - 27 3 0	20,309  31  Days  May  -  28  3  0	30 Days June	28 31 31 31	31 Days August	30 Days Sept	Days Oct -	30 Days Nov	31 Days Dec	Usage Jan 392.90 26.90	Usage Feb 363.10 13.93 	Usage Mar 376.07 56.77	Usage Apr	Usage May	Usage June	Usage July	Usage August - - - - - - - - - - - - - - - - - - -	Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov 0 0 0 0 0 0 0 0 0 0 - - - - - - - - -	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	393 390 390 440 650 800 660 820 680 390 410 390 39
Loc #69604 Harvey Rd.		27-Feb 29 27-Mar 28 27-Apr 31 28-May 31 30-Jun 33 28-Jul 28 27-Aug 30 25-Sep 29 27-Oct 32 27-Nov 31 28-Dec 31	CCF 29 1,333 29 1,120 28 1,136 31 1,329 31 3,146 33 3,561 28 2,937 30 3,550 29 3,550 29 3,550 21 1,743 31 1,032 31 1,032 31 1,331 26,369	- 0 0 0 0 0 0	Days Feb 27 1 0 0 0	Days Mar 27 4 0 0 0	Days Apr - 27 3 0	Days May	Days June 30 0 0 0 0 0 0 0 30	Days July - 28 3	Days August	Days Sept	Days Oct - 0 27 4	0 27 3 0 30	Days Dec	Usage Jan  1,247.00 777.24	Usage Feb	Usage Mar	Usage Apr	Usage May	Usage June	Usage July - - - - - 2,937.00 355.00 - - - - - - 3,292	Usage August - - - - - 3,195.00 419.59 - - - - - - 3,615	Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 898.838797 109.2580645	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,247 1,120 1,116 1,329 3,146 3,561 2,937 3,550 3,042 1,743 1,032 1,129 129 25,081
Mammoth Rd.	Beg Date 29-Dec 29-Jan 27-Feb 27-Mar 27-Apr 28-May 30-Jun 28-Jul 27-Aug 25-Sep 27-Oct 27-Nov 28-Dec	27-Feb 29 27-Mar 28 27-Apr 31 28-May 31 30-Jun 33 28-Jul 28 27-Aug 30 25-Sep 29 27-Oct 32 27-Nov 31 28-Dec 31	28 11,500 31 13,200 31 18,200 33 21,400 28 17,100 30 20,800 29 20,200 32 16,300 31 12,200	Days Jan  29  2  -  0  0  0  0  0  0  31	Days Feb 27 1 0 0 0 0	Days Mar - 27 4 0 0 0	Days Apr - 27 3 0	Days May	Days	Days July -	Days August	Days Sept	Days Oct -	0 27 3 0	Days Dec	Usage Jan 11.412.90 772.41	Usage Feb  10,427.59 410.71	Usage Mar	Usage Apr	Usage May	Usage June	Usage July -    17,100.00 2,080.00    19,180	Usage August	Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 10625.80645 1219.354839 	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11,413 11,200 11,500 13,200 18,200 21,400 17,100 20,800 20,200 16,300 12,200 12,600 1,229 187,342
Rockingham @ Coteville Rd	Beg Date 29-Dec 29-Jan 27-Feb 27-Mar	End Date Days 29-Jan 31 27-Feb 29 27-Mar 28 27-Apr 31	28 972	Days Jan 29 2	Days Feb - 27 1	Days Mar - 27 4	Days Apr -	Days May -	Days June - - - -	Days <u>July</u> -	Days August -	Days Sept -	Days Oct -	Days Nov -	Days Dec	Usage <u>Jan</u> 832.58 59.66 -	Usage Feb - 805.34 34.71	Usage Mar - - 937.29 146.06	Usage Apr - - - - 985.94	Usage May - - - - -	Usage June - - - - -	Usage July - - - -	Usage August - - - -	Usage Sept - - - -	Usage Oct - - - -	Usage Nov 0 0 0 0	Usage	833 865 972 1,132

	Cust #107225 Loc #200376 Donald Street	Cust #95683 Loc #69736 Patten and County Rd.	Cust #143619 Loc #207920 Pine Ave. Meter Pit	
	Date  29-Dec 29-Jan 27-Feb 27-Mar 27-Apr 28-May 30-Jun 28-Jul 28-Aug 25-Sep 28-Oct 27-Nov 28-Dec	Beg Date 29-Dec 29-Jan 27-Feb 27-Mpr 28-May 30-Jun 28-Jul 27-Aug 25-Sep 28-Oct 27-Nov 28-Dec	Beg Date  29-Dec 29-Jan 27-Feb 27-Mar 27-Apr 27-Apr 28-Jun 28-Jul 27-Aug 25-Sep 27-Oct 27-Nov 28-Dec	27-Apr 28-May 26-Jun 28-Jul 27-Aug 25-Sep 27-Oct 27-Nov 28-Dec
	End Day 29-Jan 3 27-Feb 27-Mar 27-Apr 38-May 3 30-Jun 328-Aug 28-Sep 28-Oct 33-28-Dec 38-Jan 33-Jan 38-Jan	27-Aug 30 25-Sep 29 28-Oct 33	End Date Day 29-Jan 3 27-Feb 2: 27-Mar 2: 27-May 3: 26-Jun 3: 28-Jul 3: 27-Aug 3: 27-Aug 3: 27-Aug 3: 27-Det 3: 27-Oet 3: 27-Oet 3: 27-Does 3: 27-Jan 3:	28-May 3: 26-Jun 2: 28-Jul 3: 27-Aug 3: 25-Sep 2: 27-Oct 3: 27-Nov 3: 28-Dec 3: 28-Jan 3:
_	9 29 3 28 1 31 3 33 3 28 1 31 3 33 3 28 3 31 3 30 3 31 3 31	29 29 3 28 3 31 3 33 38 28 3 30 30 30 30 31 31 31 31 31 31 31 31 31 31 31 31 31	29 29 30 28 31 30 30 30 29 32 32 32 32 31 31 31 31 31	2 32 30 30 9 29 2 32 1 31 1 31
113,300	3,900 3,400 3,500 3,800 14,500 16,400 13,900 19,700 15,400 7,800 3,600 3,600 113,300	CCF 790 630 890 1,040 2,530 2,580 2,080 3,380 2,720 1,690 890 1,070 720 21,010	150 134 129 141 177 178 185 155 170 151 153 147 2,041	1,523 1,077 1,592 1,173 1,565 761 547 582 575
31_	Days June 29 2 0 0 0 0 0 0 0 31	Days June 29 2 0 0 0 0 0 0 31	Days Jan 29 2 0 0 0 0 0 0 31	0 0 0 0 0 0 0 0 0
28_	Days July - 27 1 0 0	Days July 27 1 0 0 28	Days Feb 27 1 1 0 0 0	0 0
31	Days	Days August - 27 4 0 0	Days Mar - 27 4 0 0 0	31
30	Sept 27	Days Sept 27 3	227 33	
<u>J</u> 31_		Days Sept	Days May	3 28 3 0 0 0 31
3	Days June	Days June	Days June	3
<u> </u>	Days July 0 0 0 0 0 0 0 0	Days July	Days July	- 26 4 28 0 3 0 0 0 0 0 0 0 0 0 3 1
31_	Days August 28 3	Days August - 27 4	Days August - 27 4	
30_	Days Sept -			25 5
31	Days Sept -	Days Sept -	Days Oct	0 27 4
30_	Days Sept -	Days Sept	Days Nov -	0 0 7 4 27 3 0 30
31_	Days Sept  0  28 3 31	Days Sept  0  28 3 31	0 28 3 31	0 - \frac{28}{3} 31
3,883	June 3,648.39 234.48	Usage June 739.03 43.45 - - - - - - - - - - - - - - - - - - -	Usage Jan 140.32 9.24	- - - - - - - - - - - - - - - - - - -
3,291	July 3,165.52 125.00	Usage     July     586.55     31.79     -    -    -     -     -     -     -     -     -     -     -     -     -	Usage Feb  124.76 4.61	- 840
3,865	Usage August	Usage August - - - - - - - - - - - - - - - - - - -	Usage Mar	- - - - - - - - - 1,083
4,713	Usage Sept	Usage Sept - - - 905.81 244.84 - - - - - - - 1,151	Usage Apr	147.39 - - - - - - - - 1,133
14,588	Usage Sept	Usage Sept	Usage May	1,375.61 111.41 - - - - - - - - 1,487
14,909	Usage June	Usage June	Usage June 153.40 22.25 176	965.59 199.00 - - - - - - - - 1,165
15,806	Usage July	Usage July 2,080.00 338.00	Usage July	1,393.00 117.30 - - - - - 1,510
19,444	Usage August	Usage August - - - - - - 3,042.00 375.17 - - - 3,417	Usage August -    - 166.50 21.38   - 188	1,055.70 215.86 - - - - 1,272
14,932_	Usage Sept	Usage Sept	Usage Sept	1,349.14 118.91 - - - 1,468
6,978	Usage Sept	Usage Sept	Usage Oct	642.09 70.58 -
3,608	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Sept  0 0 0 0 0 0 0 0 0 0 0 0 1 103.5483871	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 0 131.516129 14.80645161	0 0 0 0 0 0 476.4193548 56.32258065
3,781	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Sept 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Dec  0 0 0 0 0 0 0 0 0 0 0 0 0 138.1935484 14.70 153	0 0 0 0 0 0 0 525.6774194 55.65 581
109,797	3,648 3,400 3,500 3,800 14,500 16,400 13,900 19,700 15,400 7,800 3,600 3,800 348	739 630 890 1,040 2,530 2,580 2,080 3,380 2,720 1,690 890 1,070 20,309	140 134 129 141 171 177 178 185 155 170 151 153 15 1,899	1,523 1,077 1,592 1,173 1,565 761 547 582 56

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page7 of 9

Manchester Water Works Schedule of Pennichuck 60 day average daily consumption 2014

Beg End Date Date 2-Dec 2-	2-Jan 31- 31-Jan 3- 3-Mar 2- 2-Apr 2-1 2-May 30-1 30-Jun 31- 31-Jul 29- 29-Aug 29- 29-Oct 28-1 28-Nov 29-1	2-Dec 2- 2-Jan 31- 31-Jan 3-1 31-Jan 3-1 3-Mar 2- 2-Apr 2-1 2-May 30- 30-Jun 31- 31-Jul 29- 29-Aug 29- 29-Oct 29- 29-Oct 29- 28-Nov 29- 28-Nov 29-	Beg End Date Date	2-Jan 31- 31-Jan 4-l 4-Mar 2- 2-Apr 2-l 2-May 30-l 30-May 30- 30-Jun 31- 31-Jul 29- 29-Aug 29- 29-Sep 29- 29-Oct 28-l 28-Nov 29-l	January February March April May June July August Septembi October Novembe	<u>Month</u>	Month: 2014 January February March April May June July August Septembl October Novembe		Average I Increase Current N	Average I	
<u>Days</u> Jan 31 2	Days  Jan 31 29 29  Mar 31 31  Apr 30 30  May 30 30  May 28 28  Jun 31 31  Aug 29 29  Sep 31 31  Oct 30 30  Nov 30 30	Jan 31 2 Jan 29 29 Mar 31 31 31 Apr 30 30 May 28 28 Jun 31 31 Aug 29 29 Sep 31 31 Oct 30 30 Obec 31 31 Jan 31 2	Days		31 30 31 30 31 31 31 er 30	<u>ı:</u>	er er	ption (Gal.):	Daily Flow (Gal.) in 2016 (Gal.) MSDC rate per gall Iditional charge	Daily Flow (Gal.) -	Daily Flow (Gal.) -
CCF	12,300	1,334 1,324 1,332 1,427 1,430 1,930 3,852 3,652 3,040 2,749 1,739	CCF	365 CCF 460 440 460 420 810 730 710 560 380	470 403 449 440 525 784 730 746 537 393	Cust #95593 Loc #69634 Joanne Dr. Smythwoods	31 28 31 30 31 30 31 31 30 31 30 31	# days in billing cycle		(2011)	
Days Jan	Days Jan 29 0 0 0 0 0 0 0 0 0 0 0 0 0	2 29 9 - - - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Days Jan	31 Days Jan 2 2 29 - - - 0 0 0 0 0 0 0 0 0	1,410 1,203 1,461 1,430 2,150 3,728 3,652 3,217 2,630 1,790 1,634 1,619 25,923	Pennic Cust #95563 Loc #69604 Harvey Rd.	17,227,526 15,403,045 16,912,476 15,551,293 22,274,799 32,383,815 33,974,908 31,197,053 27,070,751 21,917,397 14,400,557 14,871,229	Consumption current period	1,087,848 - \$ 3.37 \$ -		7otal 2,100,000 1,221,306
Days Feb	Days Feb  28 0 0 0	28 0 0	Days Feb	28 Days Feb - 28 - 0	15,200 14,000 15,407 13,500 16,700 21,194 21,800 19,400 17,840 13,547 11,807 12,294 192,687	chuck East Utility, I Cust #95615 Loc #69656  Mammoth Rd.	17,227,526 15,403,045 16,912,476 15,551,293 22,274,739 32,383,815 33,974,908 31,197,053 27,070,751 21,917,397 14,400,557	Consumption prior period	\$ 3.37 \$ -		
Days Mar	Days Mar  3 28 0 0 1	0 0	Days Mar	31 Days Mar - 4 27 - 0 0	1,186 1,014 772 660 958 1,493 1,246 1,218 1,107 719 777 671 11,821	Cust #95741 Loc #64798 Rockingham @ Coteville Rd	555,727 553,061 547,721 532,193 620,099 396,042 1,087,848 1,051,161 955,210 803,084 595,376 479,865	Two (2) month Average Daily flow	\$ 3.37 \$ -		PWW Portion 502,704
Days Apr	Days	0	Days Apr	30 Days Apr	117 116 114 136 136 166 163 144 141 140 148 159 1,682	Cust #143619 Loc #207920 Pine Ave. Meter Pit					
Days May	Days May  - 2 28 1 0	2 28 1	Days May	31 Days May	793 1,032 1,310 2,090 2,330 1,975 1,851 1,107	Pennichuck Wate Cust #95683 Loc #69736 Patten and County Rd.					
Days June	Days June  30 0 0 0 0 0 0 0 0 30	- - - - 30 0 0 0 0 0 0 0 0 0 0	Days June	30 Days June	3,739 3,252 3,615 3,593 8,001 13,839 15,500 15,006 12,085 11,605 3,698 3,806 97,740	Cust #107225 Loc #200376					
Days July	Days	31 0	Days July	31 Days July - - 31	18,383 16,736 18,202 16,165 20,468 27,365 24,726 22,254 16,559 14,748 15,173 238,400	PEU CCF Total					
Days August	Days	29 2	Days August	31 Days August	4,648 3,857 4,408 4,625 9,311 15,929 17,830 16,982 13,936 12,712 4,504 4,709	PWW CCF Total					
Days Sept	29 1 30	29 1	Days Sept	30 Days Sept	17,227,526 15,403,045 16,912,476 15,551,293 22,274,739 32,383,815 33,974,908 31,197,053 27,070,751 21,917,397 14,400,557 14,871,229 263,184,789	Gallons Total					
Days Oct	Days Oct - 0 29 2	0 29 2	Days Oct	31 Days Oct - 0 0 29 2 2							
Days Nov	0 0 28 2 0 30	0	Days Nov	Days Nov	January February March April May June July August September October November December	Month:					
Days Dec	0 29 2 31	0 29 2 31	Days Dec	31 Days Dec 0	proof						
Usage 	Usage Jan 980.65 15,200.00	86.06 1,324.00 - - - - - - - - - - - - - - - - - -	Usage Jan	Usage Jan 29.68 440.00 	1,410 1,203 1,461 1,430 2,150 3,728 3,652 3,217 2,630 1,790 1,634 1,619 25,923	Cust #95563 Loc #69604 Harvey Rd.					
Usage Feb	Usage Feb	1,203.10	Usage Feb	Usage Feb	15,200 14,000 15,407 13,500 16,700 21,194 21,800 17,840 13,547 11,807 12,294	Londonderry Tank Cust #95615 Loc #69656 Mammoth Rd.					
Usage Mar	Usage Mar	128.90 1,331.87 - - - - - - - - - - - - - - - - - - -	Usage Mar	Usage Mar	1,186 1,014 772 660 958 1,493 1,246 1,218 1,107 719 777 671 11,821						
Usage Apr	Usage Apr	95.13 1,334.67 - - - - - - - - - - - - - - - - -	Usage Apr	Usage Apr	470 403 449 440 525 784 730 746 537 393 382 429 6,287	Wellington Tank Cust #95593 Loc #69634 Joanne Dr. Smythwoods					
Usage May	Usage May	95.33 1,930.00 124.26 	Usage May	Usage May	117 116 114 136 136 166 163 144 141 140 148 159	Cust #143619 Loc #207920 Pine Ave. Meter Pit					
Usage June	Usage June	3,727.74	Usage June	Usage June 783.87	910 605 793 1,032 1,310 2,090 2,330 1,975 1,851 1,107 805 902 15,711	ow Service Tanks Cust #95683 Loc #69736 Patten and County Rd.					
Usage July	Usage	3,652.00	Usage July	Usage July -    - 730.00     - 730.70	3,739 3,252 3,615 3,593 8,001 13,839 15,500 12,085 11,605 3,698 3,896						
Usage August	Usage August 	3,040.00	Usage August	Usage August - - - - - - - - - - - - - - - - - - -	17,796 16,217 17,640 15,589 19,807 26,415 26,698 23,835 21,577 16,056 14,217 14,584 230,432	Londonderry Tank CCF Total					
Usage Sept	Usage Sept	2,571.65 57.97 -	Usage Sept	Usage Sept	470 403 449 440 525 784 730 746 537 393 382 429 6,287	Wellington Tank CCF Total					
Usage Oct	Usage Oct	1,681.03 109.13	Usage Oct	Usage Oct	4,766 3,972 4,522 4,761 9,447 16,095 17,993 17,126 14,077 12,852 4,652 4,868 115,133	Low Service Tank CCF Total					
Usage Nov	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 11,013.33 793.55	1,527.87 105.74	Usage Nov	Usage Nov 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
Usage Dec	Usage Dec - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Usage Dec	Usage Dec 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
74	981 15,200 15,500 14,900 13,400 15,100 21,800 18,200 18,600 13,200 11,800 787 193,668	86 1,324 1,332 1,427 1,430 3,852 3,652 3,040 2,749 1,739 1,637 1,639 86 25,923		30 440 460 420 440 470 810 730 710 560 380 430 437 6,287							

29 - 28 3 - 28 - 28 - 28 - 29 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28 2 - 28 - 28 - 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	31 0 29 2 29 1	1,112.00 1,112.00 1,112.00	1,014.32 108.68	0 0 0 1,112 0 0 0 1,123 0 0 0 1,123 0 0 0 7123 0 0 0 756 0 0 0 864 0 0 0 1,543 1,246,00 0 0 0 1,246 - 1,143,00 0 0 0 1,246 - 1,143,00 1,143 - 74,77 1,084,23 1,143 - 74,77 1,084,23 1,143 - 23,00 667,00 690 52,47 734,53 - 787 52,47 734,53 - 787 52,47 734,53 - 787 52,47 734,53 - 787 52,47 734,53 - 787 52,47 734,53 - 787 57,42 57 57,42 57
Days Days Feb Mar  2	Days May June	Days	Days Oct         Days Nov         Days Dec         Usage Jan           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           0         0         0         -           29         -         -           2         28         -           2         29         -           0         2         -           31         30         31         117	Usage Feb         Usage Mar         Usage Apr         Usage May         Usage June           1         -         -         -         -           115.61         12.39         -         -         -         -           -         101.73         7.27         -	Usage July         Usage August         Usage Sept         Usage Oct         Usage Nov         Usage Dec           -         -         -         0         0         109           -         -         -         0         0         128           -         -         -         0         0         128           -         -         -         0         0         138           -         -         -         0         0         138           -         -         -         0         0         121           6-         -         -         0         0         172           163.00         -         -         -         0         0         172           163.00         -         -         -         0         0         172           163.00         135.00         -         -         -         135           -         9.42         136.58         -         -         -         146           -         -         4.50         130.50         -         -         135           -         -         -         9.87         138.13         -
Days August  2 28 3 28 28 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Days Sept Days Sept Sept June	Days Days Days Sept S	Days Sept         Days Sept         Days Sept         Usage June           -	Usage July         Usage August         Usage Sept         Usage Sept         Usage June           605.16         64.84 728.00         -         -         -           -         728.00         52.00 980.00         70.00 70.00         -           -         -         -         1,170.00 -         -           -         -         -         69.68         2,090.32           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         - <th>Usage July         Usage August         Usage Sept         Sept         Sept         Description         Sept         Sept         Description         Sept         Description         Sept         Sept         Sept         Description         Sept         Description         Sept         Description         Sept         Description         Sept         Description         Description         Sept         Description         Sept         Description         Desc</th>	Usage July         Usage August         Usage Sept         Sept         Sept         Description         Sept         Sept         Description         Sept         Description         Sept         Sept         Sept         Description         Sept         Description         Sept         Description         Sept         Description         Sept         Description         Description         Sept         Description         Sept         Description         Desc
Days July August  2		Days Days Sept S	Days Sept         Days Sept         Days Sept         Usage June           -         -         -         238.71           3,500.00         -         -           -         -         -           -         -         -           0         0         0         -           29         -         -           2         28         -         -           2         29         -           0         2         -         -           31         30         31         3,739	Usage July         Usage August         Usage Sept         Usage Sept         Usage June           3.251.61         348.39         -         -           3.266.67         233.33         -         -           -         -         7.300.00         -           -         -         -         461.29         13,838.71           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -	Usage July         Usage August         Usage Sept         239         239         239         239         245         245         265         245         261         262         261         262         261         262         261         262         261         262         261         262         261         262         261         262         262         261         262         262         261         262 <t< th=""></t<>
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Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page 8 of 9

Manchester Water Works Schedule of Pennichuck 60 day average daily consumption 2013

20	Schedule of Pennichuci 2013  Average Daily Flow (Ga Increase in 2016 (GaL))  Current MSDC rate per MSDC additional charge  Consumption (GaL):  Month: January February March April May June July August September October November December	l.) - Max. allowed l.) - (2011) l.) gallon -2016	Total 2,100,000 1,221,306 1,068,220 5 3.37 \$	718,602 663,496 \$ 3.37 \$ -	502,704 404,724 \$ 3.37 \$																						
	February March April May June July August September October November December	Cust #95593 Loc #89634 Joanne Dr. Smythwoods 31 468 28 413 30 527 31 642 30 598 31 661 31 651 30 495 31 444 30 495 31 444	Cust #95563 Loc #69604 Harvey Rd. 2,780 5,965 10,425 11,547 (12,523) (1,610) 3,753 3,422 2,249 1,689 1,394 3,554	Loc #69656 Mammoth Rd. 15,125 13,548 15,317 15,951 19,882 19,600 21,643 22,341 20,616 17,498 14,303 15,168	Cust #95741 Loc #64798 Rockingham @ Coteville Rd  517 469 583 734 1,176 1,042 1,035 1,217 1,142 984 882 1,132	Meter Pit  102 93 105 110 131 123 135 133 137 131 128	Cust #95683 Loc #69736 Patten and County Rd. 1,299 1,114 1,303 1,520 2,176 2,127 2,207 2,445 2,308 1,727 1,307 807	F Works, Inc. (PWW)  Cust #107225 Loc #200376  Donald Street  3,214 2,813 3,267 4,727 11,087 10,953 13,760 15,135 10,742 5,954 3,637 3,700	PEU CCF Total 18,991 20,488 26,873 28,868 9,408 19,752 27,754 24,638 20,746 17,124 20,441	PWW CCF Total 4,513 3,927 4,569 6,247 13,264 13,080 15,967 17,579 13,050 7,681 4,944 4,507	Gallons Total 17,581,114 18,262,647 23,518,691 26,265,767 16,958,369 24,558,524 32,313,112 33,916,534 28,190,896 21,262,795 16,506,917 18,660,573		Month: January February March April May June July August September October November December	1	2,780 5,965 10,425 11,547 (12,523) (1,610) 3,753 3,422 2,249 1,689 1,394 3,554	Loc #69656  Mammoth Rd.  15,125 13,548 15,317 15,951 19,982 19,600 21,643 22,341 20,616 17,498 14,303 15,168	Cust #95741 Loc #64798 Rockingham @ Coteville Rd 517 469 563 734 1,176 1,042 1,035 1,217 1,142 984 892 1,132	### Smythwoods  ### 468  ### 413  ### 463  ### 527  ### 642  ### 598  ### 666  ### 651  ### 495  ### 447  ### 457	Cust #143619 Loc #207920 Pine Ave. Meter Pit  102 93 105 110 131 123 135 133 137 131 128 129	Loc #89736 Patten and County Rd. 1,299 1,114 1,303 1,520 2,176 2,127 2,207 2,445 2,308 1,727 1,307 807	Cust #107225 Loc #200376 Donald Street 3,214 2,813 3,267 4,727 11,087 10,953 13,760 15,135 10,742 5,954 3,837 3,700	Londonderry Tank CCF Total 18,422 19,983 26,305 28,232 8,636 19,032 26,431 26,980 24,007 20,171 16,589 19,884	Wellington Tank CCF Total  468 413 463 527 642 598 666 651 495 444 407 457	Low Service Tank CCF Total  4,614 4,020 4,674 6,356 13,394 13,202 16,103 17,712 13,187 7,811 5,072 4,636			
Cust #95593 Da	Beg End   Date   Days   5-Dec   4-Jan   30   4-Jan   4-Feb   31   4-Feb   6-Mar   30   6-Mar   5-Apr   30   5-Jun   3-Jul   28   3-Jul   2-Aug   30   2-Aug   3-Sep   32   3-Oct   1-Nov   29   1-Nov   2-Dec   31	655 6,229 6,229  365 CCF 4 4400 31 4400 30 4400 30 450 30 650 30 650 30 650 32 670 30 480 30 490 30 490 30 490 30 490 30 490 30 650	31 Days Jan 4 27 - - 0 0 0 0 0	211,093 211,093 28 Days Feb 4 24 0 0	10,903 10,903 31 Days Mar - 6 6 25 - 0	1,455 1,455 30 Days Apr - 5 25 -		88,988  88,988  30  Days June  5 25 0 0 0 0 0 0 30	262,325  31  Days  July  -  3  28  0	109,328  31 Days August - 2 29 0	277,995,939  30  Days Sept	31 Days Oct	30 Days Nov	31 Days Dec	Usage Jan 58.67 409.35 	Usage Feb - 60.65 352.00	Usage Mar	Usage Apr 	Usage May	Usage June	Usage July	Usage August	6,229  Usage Sept	Usage Oct - - - - - - - - - - - - - - - - - - -	Usage Nov - 0 0 0 0 0 0 0 0 0 0 0 - 14.14 392.90 1	Usage Dec	59 470 440 450 560 640 550 670 480 410 420 430
Cust #95563 Da Lo. #69604 5 6 6 6 6 6 6 7 7 7 6 6 6 6 6 6 6 6 6 6	4-Feb 6-Mar 30 6-Mar 5-Apr 30 5-Apr 6-May 31 6-May 7-Jun 32 7-Jun 3-Jul 26 3-Jul 5-Aug 33 3-Sep 3-Oct 30 3-Oct 1-Nov 29 1-Nov 2-Dec 31 2-Dec 2-Jan 31	CCF  4 2,360 31 2,830 30 7,000 30 10,830 31 12,080 22 [19,022] 26 2,884 33 4,031 29 3,136 30 2,138 30 2,138 31 1,434 29 3,700 34,929	Days Jan 4 27 - - 0 0 0 0 0 0 0 0 0 0 0 0	Days Feb 4 24	Days Mar  - 6 25 - 0 0 0	Days Apr - 5 25 - 0	Days May  -  6 25 0 0	Days June  7 23 0 0 0 0 0 0 30	Days July 31	Days August	Days Sept	Days Oct - 3 3 28 0	0 1 29 0 0 0 30 -	0 0 2 29 0 31	Usage Jan 314.67 2,464.84	Usage Feb	Usage Mar	Usage Apr	Usage May - - - - 2,338.06 (14,860.94) - - - - - - - - - - - - - - - - - - -	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	315 2,830 7,000 10,830 12,080 (19,022) 2,884 4,031 3,136 2,138 1,528 1,434 3,461
Cust #95615 Da Loc #59656 5	4-Feb 6-Mar 30 6-Mar 5-Apr 30 5-Apr 6-May 31 6-May 5-Jun 30 5-Jun 3-Jul 28 3-Jul 2-Aug 30 2-Aug 32	31 <b>14,700</b>	Days Jan 4 27 - - 0 0 0 0 0 0 0 0 0 0 0	Days Feb 4 24 - 0 0 0	Days Mar - 6 6 25 - 0 0 0	Days Apr - 5 25 - 0	Days May - 6 25 0	Days June	Days July - 3 28 0	Days	Days Sept	Days Oct	Days Nov	Days Dec - 0 2 29 0 31	Usage Jan 1,973.33 13,151.61	Usage Feb - 1,948.39 11,600.00	Usage Mar	Usage Apr	Usage May 	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov - 0 0 0 0 0 0 0 0 0 0 0 - 551.72 13,751.61	Usage Dec - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,973 15,100 14,500 14,900 16,700 20,100 21,100 23,100 20,500 16,000 14,700 14,219
Cust #95741 Da	Seg End late Date Days 5-Dec 4-Jan 30	4 CCF 509	Days Jan 4	Days Feb	Days Mar	Days Apr	Days May	Days June	Days July	Days August	Days Sept _	Days Oct	Days Nov	Days Dec	Usage Jan 67.87	Usage Feb	Usage Mar -	Usage Apr -	Usage May -	Usage June -	Usage July _	Usage August	Usage Sept -	Usage Oct	Usage Nov -	Usage Dec -	68

4	6	- 449.42 66.58 0 0 516 - 402.40 10.60 0 0 503 462.50 92.50 0 0 503 641.13 153.87 0 0 0 795 0 0 0 1,227 934.27 66.73 0 0 0 1,001 1,150.03 118.97 1,269 0 0 1,137 1 1,269 0 0 0 1,137 1
Days Days Apr  4	Days May         Days June         Days July         Days August         Days Sept         Days Oct         I           - <td< th=""><th>Days Nov         Days Dec         Usage Jan         Usage Feb         Usage Mar         Usage May         Usage June         Usage June         Usage June         Usage Sept         Usage Oct         Usage Nov         Usage Dec           Nov         14.53         -</th></td<>	Days Nov         Days Dec         Usage Jan         Usage Feb         Usage Mar         Usage May         Usage June         Usage June         Usage June         Usage Sept         Usage Oct         Usage Nov         Usage Dec           Nov         14.53         -
Days August Sept  4	Days Sept         Days June         Days July         Days August         Days Sept	Days Sept         Usage June         Usage July         Usage August         Usage Sept         Usage July         Usage July         Usage Sept         Usage July         Usage July         Usage Sept         Sept         Usage Sept         Sept         Usage Sept         Usage Sept         Sept         Sept         Usage Sept         Usage Sept         Usage Sept         Usage Sept         Sept         Usage Se
Days July         Days August         Days Sept           4         -         -           24         6         -         25         5           -         25         -         25         -           0         0         0         0         0           0         0         0         0         0           28         31         30         30	Days   Days   Days   Days   Days   Sept	Days Sept Sept Sept Sept Sept Sept Sept Sept
	- 25 5 - 25 - 25 - 25 - 25 - 25 - 25 - 2	- 25

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Attachment DOE DR 2-1a) Page9 of 9

Manchester Water Works Schedule of Pennichuck 60 day average daily consumption 2013

	2013			daily consumption Total	PEU Portion	PWW Portion																						
	Average I Average I Increase	Daily Flow (Gal.) Daily Flow (Gal.) in 2016 (Gal.)	)	2,100,000 1,221,306 1,212,233	718,602 728,877	483,356																						
	MSDC ad	MSDC rate per ga ditional charge		\$ 3.37	\$ 3.37	\$ 3.37 \$ -																						
2012	Month:	otion (Gal.):	# days in billing cycle		Consumption prior period	Average Daily flow 527,042																						
2012	February March April		28 31 30	15,406,284 16,757,501 21,873,373	16,338,293 15,406,284 16,757,501	538,044 545,149 633,293																						
	May June July August		31 30 31 31	24,981,623 30,340,633 40,446,694 34,711,737	21,873,373 24,981,623 30,340,633 40,446,694	768,115 906,922 1,160,448 1,212,233																						
	Septembe October Novembe Decembe	er	30 31 30 31	26,492,252 19,252,099 16,609,067	34,711,737 26,492,252 19,252,099 16,609,067	1,003,344 749,907 587,888 556,633																						
			Cust #95593	Cust #95563		Cust #95741	Cust #143619	Cust #95683	r Works, Inc. (PWW Cust #107225							Cust #95563	Londonderry Tank Cust #95615	Cust #95741	Wellington Tank	Cust #143619	ow Service Tank	Cust #107225		Wellington	Low Service			
	Month		Loc #69634 Joanne Dr. Smythwoods		Mammoth Rd.	Loc #64798 Rockingham @ Coteville Rd	Meter Pit	Loc #69736 Patten and County Rd.	Loc #200376  Donald Street	PEU CCF Total	PWW CCF Total	Gallons Total		Month:			Mammoth Rd.	Loc #64798 Rockingham @ Coteville Rd	Smythwoods	Loc #207920 Pine Ave. Meter Pit	Loc #69736 Patten and County Rd.	Loc #200376  Donald Street	Tank CCF Total	Tank CCF Total	Tank CCF Total			
	January February March April	3 <sup>.</sup> 29 3 <sup>.</sup> 30	9 <b>420</b> 1 <b>471</b> 0 <b>443</b>	1,663 2,551	14,632 15,141	467 640 1,066 3,756	80 78 82 93	1,320 1,182 1,278 1,737	3,053 2,860 3,211 5,520	17,470 16,554 17,914 21,985	4,373 4,043 4,489 7,257	16,338,293 15,406,284 16,757,501 21,873,373		January February March April		2,213 2,522 1,663 2,551	14,282 12,894 14,632 15,141	467 640 1,066 3,756	428 420 471 443	80 78 82 93	1,320 1,182 1,278 1,737	3,053 2,860 3,211 5,520	16,962 16,055 17,361 21,448	428 420 471 443	4,453 4,121 4,571 7,351			
	May June July August	3 <sup>,</sup> 3 <sup>,</sup> 3 <sup>,</sup>	0 728 1 881	3,738 4,171 6,284 4,553	16,939 19,068 23,069 21,468	1,938 993 1,313 1,187	247 648 520 390	1,881 2,390 3,426 2,765	8,101 12,564 18,579 15,294	23,416 25,608 32,068 28,347	9,982 14,954 22,005 18,059	24,981,623 30,340,633 40,446,694 34,711,737		May June July August		3,738 4,171 6,284 4,553	16,939 19,068 23,069 21,468	1,938 993 1,313 1,187	553 728 881 749	247 648 520 390	1,881 2,390 3,426 2,765	8,101 12,564 18,579 15,294	22,616 24,233 30,667 27,208	553 728 881 749	10,229 15,602 22,525 18,449			
	Septembe October Novembe Decembe	er 30 31 er 30	0 598 1 457 0 420	3,500 2,410	18,487 16,349 14,661	931 562 475 520	309 135 106 112	2,137 1,474 1,272 1,181	9,455 4,351 3,177 3,290	23,825 19,913 17,756 18,719	11,593 5,825 4,449 4,471	26,492,252 19,252,099 16,609,067 17,345,571		September October November December	•	3,500 2,410 2,093 2,392	18,487 16,349 14,661 15,243	931 562 475 520	598 457 420 451	309 135 106 112	2,137 1,474 1,272 1,181	9,455 4,351 3,177 3,290	22,918 19,321 17,229 18,155	598 457 420 451	11,902 5,961 4,555 4,583			
	Decembe	366 proof		38,090	202,234	13,849	2,801	22,045	89,455 89,455	263,574	111,500	280,555,127			proof	38,090	202,234	13,849	6,600	2,801	22,045	89,455	254,172	6,600	114,301			
Beg Date			366 CCF	31 Days	Days	31 Days Mar	30 Days Apr	31 Days Mav	30 Days June	31 Days July	31 Days	30 Days Sept	31 Days	Days	31 Days	Usage	Usage Feb	Usage Mar	Usage	Usage May	Usage	Usage	Usage	Usage Sept	Usage Oct	Usage Nov	Usage Dec	
2-D 9-J s 9-F	0ec 9- lan 9- eb 9-	Jan 38 9 Feb 31 3 Mar 29 29	9 460 1 450 9 420	22	9 20	- 9			- June		August -	-	Oct -	Nov -	Dec -	108.95 319.35	130.65 289.66	130.34	Apr - - -		June - - -	July - - -	August - - -	- - -	- - -	- 0 0	- 0 0	109 450 420 480
9-M 9-A 8-M 7-J	Apr 8-I lay 7-	Apr 31 3 <sup>-</sup> May 29 29 Jun 30 30 -Jul 29 29	9 <b>420</b> 0 <b>570</b>	:	-	-	9 21 -	8 23 0	- - 7 23	6						-	-	340.65 - - -	139.35 304.14 -	115.86 437.00	- 133.00 594.83	- - - 155.17	-	-	-	0 0 0	0 0 0 0	420 570 750
6-A 6-A 5-S 4-C	ug 5- iep 4-	Aug 31 3° Sep 30 30 Oct 29 29 Nov 32 32	0 <b>690</b> 9 <b>560</b>	0 0 0	0	0	0	0	0 0 0	25 0	6 25 0	5 25 0	4 27	0	0	-	-	-	-	-	-	725.81 - -	174.19 575.00	115.00 482.76	- - 77.24 379.69	0 - - 70.31		900 690
5-N 5-D 4-J	lov 5- Dec 4-	Dec 30 30 Jan 30 26 Jan 18	0 420	0 0		24			0 0 0	31	21		31		5 26 0 31	428	- 420	- - - 471	443	- - - - 553	728		749	- - - - 598	- - - - 457	350.00	70.00 381.33 - 451	560 450 420 381 - 6,600
Beg	End			Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	0,000
Date 2-D 10-J 14-F	Date Dec 10- lan 14-	Days Jan 39 10 Feb 35 35 Mar 24 24	5 2,710	Jan 10 21	Feb	Mar - 9	Apr -	May -	June -	July -	August	Sept -	Oct -	Nov -	Dec -	587.18 1,626.00	1,084.00 1,437.50	Mar - - 862.50	Apr - -	May - -	June - -	July - -	August -	Sept -	Oct -	Nov - 0	Dec 0	587 2,710 2,300
9-M 11-A 8-M	Mar 11- Apr 8-I Iay 12-	Apr 33 33 May 27 23 Jun 35 35	3 1,200 7 3,057 5 4,310		-	22	11 19 -	8 23	12							-	1,457.50 - -	800.00	400.00 2,151.22	905.78 2,832.29	1,477.71	-	-	-	-	0 0	0	1,200 3,057 4.310
12-J 10-J 9-A 5-S	Jul 9-	-Jul 28 28 Aug 30 30 Sep 27 27 -Oct 29 29	0 <b>6,840</b> 7 <b>3,070</b>	0 0 0	0	0	0	0	18 0 0 0	10 21 0	9 22 0	5 25	4	0	0		-	:			2,693.57	1,496.43 4,788.00 -	2,052.00 2,501.48	- 568.52 2,931.03	- - - 468.97	0 0 - -	0 0 - -	4,190 6,840 3,070 3,400
5-S 4-C 5-N 5-D 4-J	Oct 5- lov 5- lec 4-	Nov 32 33 Dec 30 30 Jan 30 26 Jan 18	2 <b>2,300</b> 0 <b>2,080</b>	0 0 0					0 0 0			0	27 0	5 25 0	5 26	:	-	:	:		:	-	- - -	- - -	1,940.63 - -	359.38 1,733.33 -	346.67 2,045.33	3,400 2,300 2,080 2,045
		<b>Jul</b> 10	40,107	31	29	31	30	31	30	31	31	30	31	30	31	2,213	2,522	1,663	2,551	3,738	4,171	6,284	4,553	3,500	2,410	2,093	2,392	38,090
Beg Date 2-D	End Date	<u>Days</u> Jan 39 10	CCF 0 12,900	Days Jan	Days Feb	Days Mar	Days Apr	Days May	Days June	Days July	Days August	Days Sept	Days Oct	Days Nov	Days Dec	Usage 	Usage Feb	Usage <u>Mar</u>	Usage Apr	Usage May	Usage June	Usage July	Usage August	Usage Sept	Usage Oct	Usage Nov	Usage Dec	3,308
d. 10-J 10-F 9-M 11-A	lan 10-	Feb 31 31 Mar 28 28 Apr 33 33	1 <b>16,200</b> 8 <b>11,300</b> 3 <b>16,500</b>	21	10 19 -	9 22	- 11 19		• •	-	-	-	-	-	-	10,974.19	5,225.81 7,667.86	3,632.14 11,000.00	5,500.00		-	- - -	- - -	- - -	- - -	0 0 0	0 0 0	16,200 11,300 16,500 13,700
8-M 7-J 6-J	lay 7- ∣un 6 Jul 9-	Jun 30 30 -Jul 29 29 Aug 34 34	0 <b>16,800</b> 9 <b>19,100</b> 4 <b>26,000</b>	- 0 0	0	•	-	23 0	7 23 0	6 25	9						-	-	9,640.74 - - -	4,059.26 12,880.00 - -	3,920.00 15,148.28	3,951.72 19,117.65	- - - 6,882.35	-	-	0 0 0	0 0	16,800 19,100 26,000
9-A 5-S 4-O 5-N 5-D	ua 5-	Sep 27 27 Oct 29 29 Nov 32 32 Dec 30 30	9 17,600	0 0 0	0	0	0	0	0 0 0	0	22 0	5 25 0	4 27 0	0 5 25	0	:	-	:	:		:	-	14,585.19 - -	3,314.81 15,172.41 -	2,427.59 13,921.88	2,578.13 12,083.33	- - - 2,416.67	17,900 17,600 16,500 14,500
5-D 4-J	Dec 4- Jan 22-	Jan 30 26 Jan 18	6 14,800	0 0 31	29	31	30	31	0 0 30	31	31	30	31	0 0	26 0 31	14,282	12,894	14,632	15,141	16,939	19,068	23,069	21,468	18,487	16,349	14,661	12,826.67	12,827
Beg	End	Paus	205	Days	Days	Days	Days	Days	Days	Days	Days	Days	Days Oct	Days	Days	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage Dec	
2-D	Dec 9-	Jan 38	9 517	9	rep	Nar	Apr	May	June	July	August	Sept	Oct	Nov	Dec	122.45	Feb	war	Apr -	May -	June -	July	August -	<b>эер</b> т -	Oct -	- NOV	- Dec	122

9 20 9 - 21 - 21 - 21 - 21 - 21 - 21 - 21 -	8	344.19         140.81         -         -         -         -         0         0         485           -         499.31         224.69         -         -         -         -         -         0         0         724           -         -         841.68         344.32         -         -         -         -         0         0         1,712           -         -         -         -         -         -         -         0         0         4,712           -         -         -         -         -         -         0         0         4,712           -         -         -         -         -         -         0         0         4,712           -         -         -         -         -         -         0         0         1,712           -         -         -         -         -         -         -         0         0         1,712           -         -         -         -         -         -         -         0         0         1,300           -         -         -         -         -         -         -
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# MANCHESTER WATER WORKS

281 LINCOLN ST., MANCHESTER, NEW HAMPSHIRE 03103-5093 Tel. (803) 624-6494

May 19, 2003

Mr. Stephen J. Densberger Executive Vice President Pennichuck Water PO Box 448 Nashua, NH 03061-0448

RE: AMENDED WHOLESALE WATER AGREEMENT

Dear Steve:

Enclosed is a fully executed copy of the subject Agreement.

MWW looks forward to continuing our relationship as your wholesale provider.

Sincerely,

Thomas M. Bowen, P.E.

Director

**Enclosure** 

C. ARTHUR SOUCY President

RAYMOND W. PROVENCHER Clerk

DONALD P. COUTURIER JAMES W. CRAIG PATRICIA H. CORNELL RICHARD M. BUNKER

Ex Officio HON. ROBERT A. BAINES Mayor

THOMAS M. BOWEN, P.E. Director and Chief Engineer

ROBERT BEAURIVAGE, P.E. Asst. Director

## AMENDED PENNICHUCK WATER WORKS, INC. WHOLESALE WATER AGREEMENT

Agreement made and entered into this 21st day of March, 1997 ("Agreement"), and amended as of Feb 3 M, 2003 by and between the MANCHESTER WATER WORKS ("MWW"), a duly established municipal water works, and Pennichuck Water Works, Inc. ("Pennichuck"), a New Hampshire corporation.

### Recitals.

- 1. MWW and Pennichuck have existing waterworks systems;
- 2. Pennichuck desires to purchase from MWW certain volumes of water on a wholesale basis:
- 3. MWW has supplied water to Consumers New Hampshire Water Company and subsequently Pennichuck under a Wholesale Water Contract dated October 29, 1987 amended May 25, 1988, March 25, 1989 and March 21, 1997, and due to expire March 21, 2022, which contract each party wishes to terminate;
- 4. In or around November 1997, Consumers assigned its rights under the Wholesale Water Contract to the Town of Hudson, to which MWW consented. In or around April 1998, the Town of Hudson assigned its rights under the Wholesale Water Contract to Pennichuck, to which MWW consented.
- 5. MWW and Pennichuck have determined to enter into this legally binding Agreement to establish the conditions for wholesale supply of water.
- 6. The terms of this Agreement will be submitted to the NHPUC for and subject to its approval.

NOW THEREFORE, in consideration of the mutual promises and covenants herein set forth, and in order to secure the services described below, the parties hereto, each binding itself, its respective representatives, successors, and assigns, agree as follows:

### ARTICLE 1. SHORT TITLE, DEFINITIONS AND INTERPRETATIONS

Section 101. Short Title. This Agreement may be referred to as the "Pennichuck Wholesale Water Agreement".

Section 102. Meanings and Construction.

102.1. <u>Definitions</u>. For all purposes of this Agreement, including any amendments, the terms shall have the meanings set forth below.

102.1.1. "Anniversary Date" means the day and month on which the Agreement was signed in each year.

102.1.2. "Average Daily Flow" means the total volume of water measured in gallons or cubic feet at a metering station or stations during two consecutive monthly billing periods divided by the actual number of days in the two billing periods.

102.1.3. "Fire Flow" means the flow described in section 201.3.1.

102.1.4. "Maximum Daily Flow" means the highest total volume of water measured in gallons or cubic feet at a metering station or stations over any consecutive twenty-four (24) hour period.

102.1.5. "MSDC" means the Merrimack Source Development Charge which is a capital charge for contribution for the development of new water sources to maintain and extend service in circumstances of growing demand.

102.1.6. "NHPUC" means the Public Utilities Commission of the

State of New Hampshire.

102.1.7. "Period" means any length of time.

102.1.8. "Person" means any individual, firm, company, association, society, corporation, political subdivision, fire district, or group.

102.1.9. "<u>Waterworks</u>" means facilities for collection, storage, supply, distribution, treatment, pumping, metering, or transmission of water.

Section 103. <u>Construction</u>. This Agreement, except where the context clearly indicates otherwise, shall be construed as follows:

103.1 Definitions include both singular and plural;

103.2 Pronouns include both singular and plural and include both genders.

Section 104. <u>Governing Law</u>. This Agreement shall be governed by the laws of the State of New Hampshire.

#### ARTICLE 2. TERMS OF SUPPLY

Section 201. <u>Obligations of Pennichuck</u>. Pennichuck agrees to the following obligations and limitations made in return for MWW's agreement to permit connection and supply of water into Pennichuck's waterworks.

- 201.1. <u>Limitation of Rights</u>. Nothing in this Agreement is intended as a grant by MWW of any exclusive right or privilege.
- 201.2. <u>Charges and Fees</u>. Pennichuck shall make timely payment of all charges described in this Agreement in accordance with Sections 305, 306 and 307 below.

201.3 <u>Quantity of Water</u>. Pennichuck shall limit its usage of MWW's waterworks to the following:

Average Daily Flow - 2.1 Million Gallons Per Day

Maximum Daily Flow - 3.5 Million Gallons Per Day

MWW shall have no responsibility to supply water in excess of these stated amounts.

201.3.1 <u>Fire Flow</u>. In consideration of the rate per million gallons charged to Pennichuck pursuant to Section 302.1, MWW shall take reasonable measures to provide Fire Flow to Pennichuck of 750 gallons per minute. MWW shall have no obligation to provide Fire Flows in excess of 750 gallons per minute nor does it guarantee adequate Fire Flow or any aspect of fire service.

201.4 <u>Assignment and Sale</u>. Pennichuck may (i) assign its contract right to the quantities of water specified in Section 201.3 to another Person or (ii) sell water purchased pursuant to this Agreement to Persons located outside of or transporting water outside of the geographic areas for which it has or obtains NHPUC water service franchise authority, only with MWW's written consent, which consent shall not be unreasonably withheld.

201.5. <u>Control of System Leaks and Wasteful Use</u>. Pennichuck shall operate and maintain its waterworks in accordance with customary engineering practices and with the guidelines set forth below.

201.5.1. Pennichuck shall minimize any wasteful use of water within its service area.

201.5.2. In any period in which Pennichuck receives water pursuant to this Agreement, Pennichuck shall impose the same voluntary or mandatory restrictions on water use by its customers (e.g. sprinkling bans) as MWW shall impose on its customers within one week of such imposition by MWW. The imposition and re-

moval of any restrictions shall be within the sole and exclusive discretion of MWW, but nothing in this Agreement shall prevent Pennichuck from imposing its own restrictions which are more restrictive than those imposed by MWW.

that its customers and any private water systems connected to Pennichuck waterworks comply with all applicable laws of the United States and of the State of New Hampshire, including but not limited to all rules and regulations of the New Hampshire Department of Environmental Services, and all applicable rules and regulations of the NHPUC. If Pennichuck fails to comply with this Section 201 after written notice from MWW, MWW may discontinue all services to Pennichuck until such time as Pennichuck demonstrates its compliance with this Section.

201.7. Quality of Water. MWW shall supply water meeting the drinking water quality criteria established from time to time by the United States Environmental Protection Agency and the State of New Hampshire.

Section 202. <u>Obligations of MWW</u>. MWW agrees to the following obligations and limitations in return for the timely payment by Pennichuck of the charges specified in this Agreement.

- 202.1. <u>Metering Point</u>. MWW shall supply water to Pennichuck at one or more of the following locations subject to the limitations contained herein.
  - A. The intersection of Joanne Dr. and Londonderry Turnpike, Hooksett.
  - B. The intersection of Harvey Rd. and Burton Dr., Londonderry.
  - C. The intersection of Mammoth Rd. and Rockingham Rd., Londonderry.
  - D. The intersection of Seasons Lane and Rockingham Rd., Londonderry.

- E. The intersection of County Road and Patton Road, Bedford.
- F. To the east of the intersection of Donald Street and Route 114 at the Donald Street pumping station, Bedford.

Additional metering points may be added by mutual agreement and subject to the provisions of this Agreement.

202.2 <u>Measurement of Flows</u>. The measurement of water delivered to Pennichuck shall be undertaken by MWW. Such flow measurements shall be made by one or more metering devices placed at locations selected by MWW.

202.3. Construction of Connection. Any and all connections between MWW's waterworks and Pennichuck's waterworks, including modifications or upgrades which may be necessary to effectuate this Agreement, including but not limited to meter vaults and metering devices, shall be designed by MWW, reviewed with Pennichuck for reasonableness, and constructed by MWW, and/or any subcontractors as MWW shall choose to employ, such decision to be made at MWW's sole discretion. The cost of all construction undertaken to construct, modify or upgrade the connection of MWW's waterworks to Pennichuck's waterworks, including the purchase of metering devices and appurtenances, shall be paid by Pennichuck. The necessity of and selection of all materials and equipment and the location thereof shall be within the sole discretion of MWWW.

202.4. Ownership of Connection Facilities. MWW shall own all pipes laid from its presently existing waterworks to within ten (10) feet of the outside wall of the metering vault and it shall own the metering device. All other waterworks, piping, and vaults constructed to make the connection necessary to effectuate this Agreement shall be the property of Pennichuck and shall be maintained by Pennichuck in a manner satisfactory to MWW.

### 202.5. Maintenance of Metering Devices.

202.5.1. Any and all metering devices installed pursuant to this Agreement shall be inspected and calibrated in the manner provided by regulations of the NHPUC at MWW expense. A copy of any inspection and calibration reports shall be filed at MWW's offices and shall be available for examination by Pennichuck at the offices of MWW during normal business hours.

202.5.2. Pennichuck may request MWW to test and certify as to the accuracy of any metering device at any time. If the metering device reads within specifications accepted by the NHPUC, the cost of such tests shall be borne by Pennichuck. If the average error over different test rates is greater than that allowed by the NHPUC, the cost of the tests shall be paid by MWW. Any adjustments will be made in accordance with NHPUC regulations.

202.5.3. In the case of missing or inaccurate flow records, due to faulty metering device operation or other circumstances, an estimate of flow shall be made by MWW based on past records for a comparable period. The estimates shall be used by MWW to calculate the payments due from Pennichuck. Such payments shall be subject to the provisions of Sections 303, 304, 305, 306 and 307 hereof below.

of all financial transactions with Pennichuck, and these records shall be available for inspection by Pennichuck or any customer of Pennichuck at the office of MWW during normal business hours. Said records shall be available for inspection by other parties only upon presentation to MWW of a written authorization from Pennichuck. The financial statements of MWW shall be available for inspection by Pennichuck within a reasonable time after it has been accepted by the MWW's Board of Water Commissioners.

Section 203. Responsibility for System Operation and Maintenance. MWW assumes no responsibility for operation and maintenance of waterworks constructed and owned by Pennichuck including those described in Sections 202.3 and 202.4 hereof. MWW's sole duty hereunder shall be to supply water up to the maximum amounts specified in Section 201.3 at the locations specified in Section 202.1 subject to the terms and conditions contained herein.

Section 204. Limitation of Liability.

204.1 <u>Liability for Non-Negligent Acts</u>. If MWW shall be unable to supply some or all of the water demanded by Pennichuck under this Agreement for any reason other than MWW's own negligence, MWW shall not be liable to Pennichuck for any damages arising out of such failure to supply water. Pennichuck hereby waives any rights it might have to any damages.

Impairment of Supply. Existing customers of MWW have first right to any water supplied by MWW, and this Agreement shall not impair the supply of water to them. If MWW is unable to supply both its other customers and Pennichuck with water for any reason other than the negligence of MWW, Pennichuck cannot compel MWW to supply it with water, nor shall it be entitled to any damages as a result of MWW's failure to supply it with water. In addition, MWW cannot be compelled to furnish Pennichuck with water if MWW's waterworks or the source upon which MWW is dependent for its supply of water is impaired, and Pennichuck shall be entitled to no damages as a result of MWW's failure to supply it with water. MWW shall be the sole judge as to whether the water available to it is adequate to supply both Pennichuck and MWW's other customers and whether MWW's waterworks or source of supply is impaired. MWW judgment shall be reasonable. MWW's decision shall be final and binding on Pennichuck. Notwithstanding the foregoing, if MWW reduces the amount of

water which it supplies to Pennichuck pursuant to this Section 204.2, such reduction shall be proportionally equal to reductions made to other wholesale customer of MWW, based on the average amount of water received by each wholesale customer during the ninety (90) days preceding such reduction.

in damages or otherwise for failure to perform any obligation under this Agreement, which failure is occasioned by or in consequence of any act of God, act of public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, drought, fires, storms, floods, winter freeze, washouts, vandalism, arrests and restraints of rulers and peoples, civil disturbances, labor strikes, power failures, explosions, breakage or accident to machinery or lines of pipe, failure or want of water supply, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause, whether of the kind herein enumerated or otherwise, not within the control of such party and which act, omission or circumstances such party is unable to prevent or overcome by the exercise of reasonable care.

204.4 <u>Liability Resulting from Negligence</u>. Neither Pennichuck nor MWW shall be relieved of liability for loss resulting from its negligence, intentional actions, or its failure to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting performance relieve Pennichuck from its obligations to make payments of amounts then due with respect to water theretofore supplied.

204.5 Pennichuck's <u>Liability for Capital Expenditures and for Water Supplied</u>. Nothing herein shall be construed as relieving Pennichuck under any circum-

stances from its duty to pay for capital expenditures made by MWW pursuant to Section 202.3 hereof or for water supplied pursuant to this Agreement.

Section 205. Indemnification and Insurance. Pennichuck shall exonerate, indemnify and save harmless MWW from all claims and demands for injuries to Persons. loss of life, damage to property or other losses arising out of or connected with the performance of this Agreement in Londonderry and Hooksett. New Hampshire, which MWW is legally bound to pay excepting, however, such claims and demands as shall result from negligence on the part of MWW. The phrase "claims and demands" shall include, but shall not be limited to, damages, judgments, settlements, costs and defense of legal actions, claims or proceedings and appeal therefrom. Pennichuck shall maintain liability insurance in the amount of \$1,000,000 bodily injury and property damage (each occurrence), together with a \$1,000,000 umbrella policy. Pennichuck agrees to furnish certificate(s) of the above-mentioned insurance to the City of Manchester within fourteen (14) days from the date of this agreement and, with respect to the renewals of the current insurance policies, at least thirty (30) days in advance of each renewal date. Such certificates shall name the City of Manchester and the Manchester Water Works as an additional insured (except Workers Compensation) and shall state that in the event of cancellation or material change, written notice shall be given to the City of Manchester, Manchester Water Works, 281 Lincoln Street, Manchester, New Hampshire, 03103, at least thirty (30) days in advance of such cancellation or change. For its part, MWW agrees to and does exonerate, indemnify and save harmless Pennichuck from all claims or demands for injuries to Persons, loss of life, damage to property or other losses arising out of or connected with the performance of this Agreement to the extent such claims and demands resulted from the negligence or fault of MWW.

Section 206. Notices. All notices and other writings sent pursuant to this

Agreement shall be addressed to the Director of MWW at:

Manchester Water Works Attention: Director 281 Lincoln Street Manchester, NH 03103

and to Pennichuck at:

Pennichuck Water WorksAttention: President 4 Water Street P.O. Box 448

Nashua, NH 03061-0448

or at such other address as is indicated by written notice to the other party.

**ARTICLE 3. PAYMENTS FOR SERVICES** 

Section 301. <u>Basis for Payments</u>. Pennichuck shall pay MWW for each gallon of water supplied to Pennichuck at the locations stated in Section 202.1 hereof at the rate specified in Section 302 and 304 and subject to the Merrimack Source Development Charge (MSDC) specified in Section 303 hereof. Payment shall be made in accordance with the provisions of Sections 305, 306 and 307 hereof. The volume of water supplied to Pennichuck shall be determined by means of one or more metering devices which shall meet all the requirements of Federal and State law, and which shall be owned, installed and maintained by MWW at one or more locations selected by it in its discretion.

Section 302. Rates.

302.1 Rate Per Gallon. The rate charged for water supplied to Pennichuck shall be \$0.778 per hundred cubic feet (\$1,040.13 per million gallons) at those sites where MWW provides Fire Flow capacity and shall be \$0.596 per hundred cubic feet (\$796.86 per million gallons) at those sites where MWW does not provide Fire Flow capacity.

At such time as Pennichuck constructs facilities for the purpose of providing its own Fire Flow capacity such that it no longer requires the Fire Flow established in Section 201.3.1 at a site, the rate charged for water at that site shall be adjusted to a rate of \$0.595 per CCF (\$796.07 per million gallons). Pennichuck shall provide to MWW written documentation of the completion of such construction and of the date of its completion.

302.2 <u>Service Charge</u>. The monthly charge shall be as follows in accordance with MWW rate schedule and based upon the size of the meter or meters required by Pennichuck.

3"	\$ 24.95
4"	\$ 35.53
6"	\$ 59.14
8"	\$100.25

302.3 Adjustments in Rate. The rates and charge established in Section 302.1 and 302.2 shall be adjusted each time MWW establishes a new permanent rate for MWW's customers being served outside the City of Manchester. The adjustment in the rate charged under this Agreement shall be equal to the percentage by which the order of the MWW Board of Water Commissioners increases or decreases the monthly total of the metered water rate and other charges that would be charged to an industrial customer of MWW located outside the City of Manchester who uses 2.1 million gallons per day and whose water from MWW is metered at a single location by the same number and size of water meters that are used to meter the water transported to Pennichuck by MWW at the date of the order of the MWW Board of Water Commisioners. Such increases in the rate charged under the Agreement shall be effective as of the same date on which the increase in rates charged to customers residing outside the City of Manchester is effective.

Section 303. MSDC. Pennichuck shall pay MWW a source development charge of \$1.14 for each gallon of the 2.1 million gallons of the average daily flow specified in Section 201.3 ("MSDC"), in accordance with and subject to the following:

303.1 Payment. Beginning in 1997 and for the duration of this Agreement, Pennichuck shall pay MSDC annually, on or before January 15 of each year, for additional Average Daily Flow at a rate of \$1.14 per gallon. Such amount shall be determined annually based upon Pennichuck's estimate of the increase in the Average Daily Flow from the Average Daily Flow for which Pennichuck has previously made MSDC payment, but in no event shall the estimated increase in Average Daily Flow equal less than 3% of the Average Daily Flow for which Pennichuck has previously made MSDC payment. Should the actual Average Daily Flow for which payment was made in January of that year exceed the estimated Average Daily Flow for which payment was made in January of that year, Pennichuck will promptly pay MSDC for the full amount of the difference between the estimated increase and the actual increase in Average Daily Flow. Should the actual increase in Average Daily Flow be less than the estimated increase, the difference between the two will be credited against the MSDC payment for the succeeding year. Payments shall be made by Pennichuck for the duration of this Agreement until the contractual limit of Average Daily Flow capacity is reached.

The 1997 refund, if any, due Pennichuck from MWW pursuant to the October 29, 1987 Wholesale Water Agreement, as amended, shall be made within forty-five (45) days of receipt of notice of NHPUC approval of this Agreement. Except as specified in the preceding sentence and in paragraph 303.3 of this Agreement, no refund of MSDC payments shall be required of MWW.

303.2 It is intended that the total payments to MWW under this Section

303 shall not exceed \$2,394,000, representing 2.1 MGD unless the \$1.14 per gallon rate is adjusted by the MWW Board of Water Commissioners for all customers subject to the MSDC. MWW shall provide Pennichuck ninety (90) days written notice of any proposed change to the MSDC rate. Within this 90 day period, Pennichuck shall have the option to purchase any or all of its remaining 2.1 MGD allotment at the rate of \$1.14 per gallon.

303.3 Under no circumstances shall Pennichuck be entitled to any reimbursement of any payment made under this Section 303, except to the extent and in the manner that customers of MWW receive reimbursement of the Merrimack Source Development Charge or in accordance with an order of the NHPUC.

Section 304. Emergency Use. Should Pennichuck require water from MWW in excess of the limits allocated in Section 201.3 and MWW in its absolute discretion agrees to supply such water to Pennichuck, Pennichuck shall pay a rate equal to two (2) times the rate specified in Section 302.1 for each gallon in excess of the Average Daily Flow or Maximum Daily Flow, as the case may be, allocated in Section 201.3 which Pennichuck consumes. Nothing in this section, however, shall be construed as giving Pennichuck a right to any water in excess of the limits specified. MWW shall have sole and exclusive discretion as to the determination of the availability of water in excess of the amount stated in Section 201.3, and the determination of the length of any prolonged emergency use.

Section 305. <u>Billing Cycle</u>. MWW shall bill Pennichuck on a monthly basis in arrears for amounts due under Section 302. Payment on bills shall be due upon presentation.

Section 306. <u>Delinquent Bills</u>. Bills remaining unpaid for thirty (30) days or longer from the billing date shall be subject to one and one-half (1 1/2) percent interest

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per month on the unpaid balance from the original due date. If bills or payments to be made pursuant to this agreement remain unpaid for thirty (30) days or longer after the due date, MWW may issue a notice of intent to discontinue service to Pennichuck and to the NHPUC. If the bill remains unpaid for five (5) days or longer after the date of the notice of intent to discontinue service described above, all supply of water by MWW to Pennichuck shall cease and said supply shall not be renewed until all outstanding bills are paid in full at the office of MWW. In lieu of such discontinuance, MWW may require Pennichuck to post a deposit and make payments more frequently than at monthly intervals.

Section 307. <u>Charge for Resumption of Service</u>. If MWW ceases to supply water to Pennichuck pursuant to Section 201.6 or Section 306 above, MWW may impose a reasonable charge for resumption of said supply of water.

Section 308. Expansion and/or Upgrading of MWW. In all cases, MWW shall be the sole judge as to all improvements, additions or expansions to its waterworks, provided that the undertaking of such improvements, additions or expansions does not impair the ability of MWW to provide water to Pennichuck pursuant to this Agreement.

Section 309. <u>Capital Expenditures</u>. Pennichuck shall pay for any capital expenditures made by MWW which MWW reasonably believes are necessary or advisable in order to provide or continue services to Pennichuck under this Agreement, whether or not such expenditures are made within or without the boundaries of Pennichuck; provided, however, that MWW shall give written notice to Pennichuck of any such capital expenditure at least six months prior to the need for funds to be available. Said notice shall include a brief description of the purpose of the capital expenditure, its total costs and Pennichuck's pro rata share of the total costs. Pennichuck shall have sixty (60) days from the date of said notice in which to commit itself to pay or to refuse to pay its

Page 1 7of 20<sup>°</sup>

pro rata share of the capital expenditure as stated in said notice. A refusal by Pennichuck to pay its pro rata share of the capital expenditure as stated in said notice must be made in writing in accordance with Section 206 hereof. Failure by Pennichuck to notify MWW in writing within sixty (60) days after the date of said notice that Pennichuck refuses to pay its pro rata share of the capital expenditure as stated in said notice shall constitute a commitment by Pennichuck to pay said pro rata share. If Pennichuck has failed to properly notify MWW and refuses to pay its pro rata share of the capital expenditure, this Agreement shall terminate at the end of the quarter in which such refusal shall be made in accordance with Section 407 hereof.

#### ARTICLE 4. ASSIGNMENT, AMENDMENT AND TERMINATION

Section 401. <u>Amendment</u>. The provisions, terms and conditions of this Agreement may be modified only by written amendments, executed with the same formality as this Agreement.

Section 402. <u>Assignment</u>. Except as provided in section 201.4, no assignment by Pennichuck of its rights or duties under this Agreement shall be binding on MWW, unless MWW consents to such an assignment in writing.

Section 403. <u>Waiver</u>. Failure of either party hereto to exercise any right hereunder shall not be deemed a waiver of such party to exercise at some future time said rights or another right it may have hereunder.

Section 404. <u>Date Effective, Supersession and Duration</u>. Subject to approval of the NHPUC, this Agreement shall be effective as of the date first written above. Upon receipt of NHPUC approval, this Agreement shall supersede and replace all prior agreements between the parties with respect to the subject matter hereto, including the Southern New Hampshire Water Company Wholesale Water Agreement dated October

29, 1987, as amended, which shall be considered terminated and have no further force or effect from the date of execution of this Agreement (or such later date as may be determined by the NHPUC), except with respect to any refund of MSDC payments due in 1997. This Agreement does not supersede and replace the Southern New Hampshire Water Company Wholesale Water Connection Construction Agreement dated as of October 29, 1987. This Agreement shall be in full force and effect and shall be exclusive and binding on the parties for 25 years from , 2003, as long as Pennichuck is not in default of its obligations hereunder. It is the intent of both parties that on or before the expiration of the term of this Agreement, this Agreement will be renegotiated and extended upon terms mutually agreeable to both parties. The parties agree to meet to discuss renewal at least three (3) years in advance of the termination of this Agreement. In the event that the parties cannot agree to terms of renewal, and so long as Pennichuck remains a regulated public utility, the matter shall be submitted to the NHPUC, which may act as a mediator in an effort to have the parties reach an agreement.

Section 405. <u>Termination</u>. In the event of unforeseen circumstances which materially alter the circumstances upon which this Agreement is based, either party shall have the right to terminate this Agreement without liability to the other of any sort upon approval by the NHPUC of a petition requesting authority to so terminate this Agreement. Termination of this Agreement by Pennichuck under this Section 405 shall not relieve Pennichuck of its obligation to pay MWW for any services rendered, capital expenditures made pursuant to this Agreement prior to the date of termination or the MSD charge specified in Section 303.

Section 406. <u>Breach</u>. Either party may terminate this Agreement prior to the time specified in Section 404 if the other party has violated any of the covenants un-

dertaken herein, or any of the duties imposed upon it by this Agreement; provided that the party seeking to terminate for such cause shall give the offending party sixty (60) days written notice, specifying the particulars of the violation claimed; and if at the end of such time the party so notified has not removed the cause of complaint, or remedied the purported violation, then the termination of this Agreement shall be deemed complete.

Section 407. <u>Termination Pursuant to Section 309</u>. If this Agreement is terminated pursuant to Section 309 hereof by Pennichuck's refusal to pay its pro rata share of a capital expenditure, Pennichuck shall not be relieved of its obligation to pay MWW for any services rendered or capital expenditures made pursuant to this Agreement prior to its termination, other than those capital expenditures for which Pennichuck refused to pay pursuant to Section 309.

#### **ARTICLE 5. MISCELLANEOUS PROVISIONS**

Section 501. <u>Severability</u>. If any clause or provision of this Agreement or application thereof shall be held unlawful or invalid, no other clause or provision or its application shall be affected, and this Agreement shall be construed and enforced as if such unlawful or invalid clause or provision had not been contained herein.

Section 502. Exercise of Judgment. Where MWW is directly or implicitly authorized to exercise its judgment under this Agreement, its judgment shall be valid unless clearly unreasonable.

Section 503. <u>Status of Legal Representatives, Successors, and Assigns</u>. The benefits and burdens of this Agreement shall inure to and be binding upon the respective legal successors to the parties hereto.

Section 504. Third Parties. MWW assumes no responsibility for any facility not included in its waterworks, and in the event that a facility of a third party shall be involved in the furnishing of service to, or the receipt of service from Pennichuck, Pennichuck shall look solely to such third party for any such services. Pennichuck assumes sole responsibility for compliance with this Agreement by all third party users or customers of its waterworks. MWW shall deal directly with Pennichuck which shall, in turn, make certain that all users and customers comply with this Agreement and with all applicable rules and regulations.

Section 505. <u>Disputes, Arbitration</u>. Disputes, including but not limited to those related to supply of water, connection facilities, operation and maintenance, impairment of supply, and charges and payment, shall be submitted to the NHPUC.

IN WITNESS WHEREOF, this Amended Agreement is executed in multiple counterparts each of which shall be deemed an original this \_\_\_\_\_\_ day of February\_\_\_\_\_, 2003.

In the Presence of:

PENNICHUCK WATER WORKS, INC.

By its President CED

Witness

MANCHESTER WATER WORKS

By the Board of Water Commissioners

President

Witness

agreemen\pww wholesale agr final4-15

C. Arthur Soucy

#### **GENERAL**

# GENERAL SERVICE, METERED/MANCHESTER RATE SCHEDULE "GM-M"

#### **AVAILABILITY**

These rates are available for general metered service in the City of Manchester.

#### WATER USAGE RATE

\$1.639 per 100 Cubic Feet (CCF)

#### SERVICE CHARGE

Meter Size	Quarterly Billing	Monthly Billing
5/8	\$27.50	\$15.02
3/4	35.34	17.61
1	41.70	19.72
1½	69.82	29.12
2	94.48	37.32
3	127.26	48.27
4	188.42	68.64
6	324.94	114.13
8	562.59	193.38
10	938.40	312.76

#### **TERMS OF PAYMENT**

- (a) Bills shall be rendered either quarterly or monthly and shall be due and payable upon presentation.
- (b) Where a Utility bill exceeds \$1,000 per quarter, or at the sole discretion of the Utility, bills shall be rendered monthly.
- (c) Late payment charges and other expenses shall be computed as specified under Miscellaneous Charges.

#### SENIOR DISCOUNT

A 50% discount shall be applied to qualified low income disabled and elderly customers residing in the City of Manchester in accordance with criteria established by the City of Manchester Assessors Office for property tax exemption.

#### **GENERAL**

#### GENERAL SERVICE, METERED/TOWNS RATE SCHEDULE "GM-T"

#### AVAILABILITY

These rates are available for general metered service in all areas served outside the City of Manchester.

#### WATER USAGE RATE

\$1.877 per 100 Cubic Feet (CCF)

#### SERVICE CHARGE

Meter Size	Quarterly Billing	Monthly Billing
5/8	\$31.62	\$17.27
3/4	40.64	20.25
1	47.95	22.67
1½	80.28	33.48
2	108.64	42.91
3	146.35	55.51
4	216.68	78.92
6	373.68	131.24
8	646.98	222.38
10	1,079.15	359.67

### TERMS OF PAYMENT

- (a) Bills shall be rendered either quarterly or monthly and shall be due and payable upon presentation.
- (b) Where a Utility bill exceeds \$1,000 per quarter, or at the sole discretion of the Utility, bills shall be rendered monthly.
- (c) Late payment charges and other expenses shall be computed as specified under Miscellaneous Charges.

#### **SENIOR DISCOUNT**

A 50% discount shall be applied to qualified low income disabled and elderly customers residing outside the City of Manchester in accordance with criteria established by the City of Manchester Assessors Office for property tax exemption.

### FIRE PROTECTION – PRIVATE/MANCHESTER

#### RATE SCHEDULE - "FP-P-M"

### **AVAILABILITY**

This rate is available for private fire service in the City of Manchester.

#### **RATES**

Rates are based on the size of each fire service pipe as it enters each building and each private fire hydrant on the premises.

	Service Size (in)	Per Quarter	Per Month
For each:	1½ or less	•	\$ 1.24
	2	8.19	2.69
	2½	14.72	4.89
	3	23.83	7.92
	4	50.79	16.90
	5	91.37	30.45
	6	147.59	49.18
	8	314.57	104.83
	10	565.71	188.57
	12	913.80	304.59

#### **TERMS**

- (a) Bills shall be rendered either quarterly or monthly, and shall be due and payable upon presentation.
- (b) Late payment charges and other expenses shall be computed as specified under Miscellaneous Charges.

### **FIRE PROTECTION – PRIVATE/TOWNS**

#### RATE SCHEDULE - "FP-P-T"

### **AVAILABILITY**

This rate is available for private fire service in all areas served outside the City of Manchester.

### **RATES**

Rates are based on the size of each fire service pipe as it enters each building and each private fire hydrant on the premises.

	Service Size (in)	Per Quarter	Per Month
For each:	1½ or less	•	\$ 1.42
	2	9.42	3.09
	2½	16.93	5.62
	3	27.38	9.11
	4	58.41	19.44
	5	105.07	34.99
	6	169.73	56.56
	8	361.76	120.55
	10	650.57	216.86
	12	1,050.87	350.27

### **TERMS**

- (a) Bills shall be rendered either quarterly or monthly, and shall be due and payable upon presentation.
- (b) Late payment charges and other expenses shall be computed as specified under Miscellaneous Charges.

### FIRE PROTECTION - MUNICIPAL/TOWNS

#### RATE SCHEDULE - "FP-M-T"

### **AVAILABILITY**

This rate is available for municipal fire protection in communities served outside of Manchester.

### **RATE**

The charge, billed quarterly in arrears, for municipal fire service to the Town shall be as follows:

#### Rate per Quarter

\$169.74 per Hydrant

#### **TERMS OF PAYMENT**

- (a) Bills shall be rendered quarterly (April, July, October, January), and are due and payable upon presentation.
- (b) Late payment charges and other expenses shall be computed as specified under Miscellaneous Charges.

#### **MISCELLANEOUS SERVICE CHARGES**

#### RATE SCHEDULE - "MSC"

#### 1. Applicability

The charge shall apply to regular service and private fire service provided to all customers.

#### 2. <u>Application Fee for Fire and Domestic Service</u>

(1) Water Service \$100.00(2) Private Fire Protection \$50.00

#### 3. <u>Late Payment Charge</u>

- (a) A late payment charge shall be added to any bill where payment therefor has not been received by the Utility within thirty (30) days of issuance, and shall be five percent (5%) of any unpaid balance of one dollar (\$1.00) or more.
- (b) The late payment charge shall be applied on a monthly or quarterly basis depending upon the customer's regular billing period.
- (c) Bills are due and payable when rendered and subject to the same shutoff provisions as for nonpayment of bills. Terms are Net 30 Days. A finance charge of 1½% (18% per year) will be charged 30 days after the date of bills.

#### 4. <u>Seasonal Use</u>

A charge of fifty-five dollars (\$55.00) shall be applied to the customer's bill for installing the meter and turning on the water, and a separate charge of fifty-five dollars (\$55.00) shall be applied to the customer's bill for removing the meter and turning off the water.

#### 5. Restoration of Service

A charge of seventy-five dollars (\$75.00) will be collected from a customer when water service or private fire service is restored after being shut off for non-payment of a Utility bill, fraudulent use, or for any other reason specified in this tariff.

Restoration of service "after normal work hours" will be collected from a customer at a charge of two hundred twenty-five dollars (\$225.00).

#### 6. Repairs to Frozen Meters

The Customer shall be charged the full costs of repairing a frozen meter located on his premises, but in no case shall such charge be less than one hundred seventy dollars (\$170.00) for each repair.

Issued: November 21, 2019 Effective: November 21, 2019

### 7. <u>Collection of Delinquent Bills</u>

A charge of fifty dollars (\$50.00) will be collected from a customer whenever a Utility agent makes collection at a customer's premises for a delinquent bill.

#### 8. Bad Checks

A charge of thirty dollars (\$30.00) shall be applied to a customer's bill whenever the Utility receive a check which is not immediately cleared for deposit by the Utility's financial institution.

#### 9. Testing of Backflow Prevention Devices

A charge shall be applied to a customer's bill for each test conducted by the Utility of the customer's backflow prevention device as follows:

PVB	\$30.00
RPZ	\$75.00
DCVA	\$75.00

#### 10. <u>Hydrants or Other Temporary Service</u>

(a) The charge for water supplied from the connection in the Utility yard on Lincoln Street or from a hydrant shall be applied as follows:

\$3.00 per 1,000 gallons

In addition, a \$25.00 per load processing charge shall be added to the cost for each load of water taken regardless of the volume.

(b) The charges for use of any hydrant or other temporary water source shall be as follows:

(1)	Application Fee	\$ 15.00

(2) Adapter deposit (excluding pool filling):

(i)	Hydrant meter	\$1,500.00
(ii)	2 ½ inch adapter	\$ 250.00
(iii)	¾ inch adapter	\$ 50.00

(3) Adapter Installation or Removal During Normal Working Hours

(i) All adapters and hydrant meter \$ 30.00

Issued: February 20, 2020 Effective: March 1, 2020

water

#### Manchester Water Works Rules and Regulations

(4) Per diem charges for unmetered use

(i)	3/4 inch adapter	\$ 15.00
(ii)	2½ inch adapter	\$ 45.00
(iii)	Hydrant meter	\$ 20.00 plus

(iv) Water for any other use: the Utility may enter an agreement based on prevailing rates.

(c) Hydrant Flow Test \$200.00

#### 11. Main Extension Charges

(a) Application fee for main installation \$200.00

(b) Administrative fee for non-participating abutters of property under assessment requesting connection to a main pipe previously installed unless covered by specific contract terms and conditions.

\$150.00

used

#### 12. Connection of Service Pipe to a Main Extension

- (A) The following connection charges shall be paid at the time of service application by all customers. The charges, as specified below, shall be based upon the size of the service pipe and meter to be installed.
  - (1) The cost of service pipe installation, including labor, material, equipment and overhead expenses. A deposit reflecting such estimated cost shall be paid at the time of service application and any difference shall be refunded to the customer or billed by the Utility.
  - (2) A charge for installation of the meter are as follows:

Meter Size	<u>Charge</u>	<u>Frozen</u>
5/8 x 3/4 inch	\$ 280.00	\$ 170.00
3/4 inch	\$ 340.00	\$ 230.00
1 inch	\$ 400.00	\$ 300.00
1½ inch	\$1,140.00	\$ 640.00
2 inch	\$1,270.00	\$ 770.00
>2 inch	AT COST	AT COST

For meters larger than 2 inches, the charge shall equal the cost of the meter and the cost of installation of the meter.

(3) For meter interface units, meter horns and check valves, the charge shall equal the cost of the equipment plus 10% markup.

Issued: March 25, 2021 Effective: April 1, 2021

Manchester Water Works Rules and Regulations Page 31

(4) A building charge, representing the cost of water used for a billing period during construction prior to meter installation, as follows:

Meter Size	<u>Charge</u>
5/8 x 3/4 inch	\$ 45.00
3/4 inch	\$ 65.00
1 inch	\$105.00
1½ inch	\$210.00
2 inch	\$340.00
>2 inch	\$500.00

### 13. <u>Miscellaneous Charges</u>

The following charges shall be applied by the Utility for services rendered:

(a)	Final billing on ownership change Final meter reading charge for ownership change Reversal of final bill (in event of change to closing)	\$	30.00 30.00 30.00
(b)	Home inspections – leaks for unaccounted water during Utility's regular working hours (No charge for first visit within the calendar year)	\$	30.00
(c)	Emergency request by customer to turn on or shut off water service outside the Utility's regular working hours	\$	225.00
(d)	Customer requested meter test	\$	50.00
If meter found to over-register by more than 3% of under-register per PUC 605-03(d)		N	o cost
(e)	Duplicate bill fee	\$	30.00
(f)	Special request fee (i.e. payment history for tax prep)	\$	15.00
(g)	Check by phone processing charge	\$	5.00
(h)	Liens –administrative fee Liens – Recording fee Liens – Discharge fee		30.00 12.50 17.50
(i)	Reading – irrigation water meters – cost per reading	\$	2.50
(j)	Photocopying – plans – per sheet	\$	3.00
(k)	2 <sup>nd</sup> no show (once the technician leaves the property)	\$	30.00

Issued: October 24, 2019 Effective: October 24, 2019

## (n) Water samples:

	Method Used	<u>Price</u>	<u>Container</u>	<u>Turnaround</u> <u>Time (normal)</u>
Metals:	014 0440 D	<b>4</b> .07	41 DL ()	7 44 1
By Furnace	SM 3113 B	\$12/sample	1L Plastic	7 – 14 days
By Flame	SM 3111 B	\$12/sample	1L Plastic	7 – 14 days
Inorganics and others	:			
pH	SM 4500 H+ B	\$7/sample	P or G	2 days
Anions (Nitrate	HACH methods	\$7/each	P or G	5 – 10 days
Nitrite, 0-phosphate,				
Sulfate)	014 0540 B	φ <b>-</b> 7/	5 0	0.1
Conductivity	SM 2510 B	\$7/sample	P or G	2 days
Turbidity Color	SM 2310 B HACH Method	\$10/sample \$7/sample	P or G P or G	2 days 2 days
Alkalinity	HACH Method	\$13/sample	P or G	5 – 10 days
Hardness, T	HACH Method	\$13/sample	P or G	5 – 10 days
Hardness, Ca	HACH Method	\$13/sample	P or G	5 – 10 days
Residual Cl2	HACH Method	\$7/each	P or G	On-site
(Free or total)		·		
Mono & NH3	HACH Method	\$10/sample	P or G	On-site
UV-254	HACH Method	\$7/sample	P or G	5 – 10 days
Fluoride	HACH 8029	\$10/sample	Р	5 – 10 days
Microbiology:				
Colilert P/A	SM 9223 + UV	\$13/sample	Sterile bottle	2 days
100 mls	OM 0220 1 0 V	Фтогоаппріо	Otorno Bottio	2 dayo
18 Hour P/A	SM 9223 + UV	\$13/sample	Sterile bottle	2 days
		•	100 mls	,
Colilert MPN	SM 9223 MPN	\$20/sample	Sterile bottle	2 days
			100 mls	
Standard Plate Count	SM 9215 B	\$15/sample	Sterile container	3 days
Carbon analysis:				
Apparent Density		\$55/sample	Plastic	14 – 21 days
lodine Number		\$125/single	Р	14 – 21 days
		\$175/2		•
Ash		\$30/sample		14 – 21 days

### 14. Service Disconnection

Upon request by the customer for termination of service, the Utility shall, in its sole discretion, determine if the disconnection poses risk or liability to either the Utility or the public. If it determines risk or liability is possible, the Utility may, at the Customer's expense, take such actions as may be appropriate to reduce the risk or liability.

Issued: November 29, 2018 Effective: January 1, 2019

#### MERRIMACK SOURCE DEVELOPMENT CHARGE

RATE SCHEDULE - "MSDC"

#### **CHARACTER OF SERVICE**

The Merrimack Source Development Charge ("MSDC") is assessed in accordance with RSA 38:27 and RSA 38:28 for the purpose of constructing, acquiring, improving, enlarging and/or operating the Manchester Water Works' system. Specifically, all funds collected from the Charge will be utilized to develop the Merrimack River as an additional source of supply for the Water Works.

#### **RATES**

The one-time charge will be based on the size of the water meter that is required to meet flow requirements at the installation.

Meter	<u>Size</u>	MSD CHARGE
5/8"		\$1,157
3/4"		\$2,256
1"		\$3,321
1½"		\$8,712
2"		\$15,388

For installations 3" and larger, the charge will be \$3.90 per gallon, per day. The flow, gallons/day, will be determined by the Utility. For installations where an oversized meter is necessary due to pressure considerations, the charge will be based on the size of the meter required under normal pressure conditions, as determined by the Utility. In accordance with the financial plan adopted by the Utility, the MSDC shall be increased 3% annually effective each January 1st.

#### TERMS:

Bills for this service shall be rendered in advance and payment shall be received before main and services are installed.

Issued: December 17, 2020 Effective: January 1, 2021

PWW 2021 QCPAC 21-023\_2022-03-08\_exb\( \) \( \) \( \) DOE DR 2-1 c\) Page 12 of 13

Manchester Water Works Rules and Regulations

WATER USE RESTRICTIONS AND PENALTIES

The following penalties for violations of water use restrictions are applicable only during

a severe drought or other water supply shortage during a declared Emergency or Disaster by

the Board of Water Commissioners of the Manchester Water Works. Once declared, the need

for continuation of such restrictions shall be reviewed monthly by the utility and notice of which

shall be published in the Manchester Union Leader. The primary purpose of such declaration

and issuing penalties by the Board of Water Commissioners shall be to protect, preserve and

maintain the public health, safety and welfare of the customers and communities served.

Declared Emergency –

Level III

After continued violation of restriction confirmed by Manchester Water Works following written warning, the customer shall be assessed a penalty in the amount of \$50.00/day. Continued violations shall result in service

termination in accordance with Commission Rules.

Declared Disaster -

Level IV

After confirmation by Manchester Water Works of violation of restriction, the customer shall be assessed a penalty in the amount of \$100.00/day and

service shall be immediately terminated in accordance with Commission

Rules.

Restrictions that include but shall not be limited or restricted to which may be imposed by the

Board of Water Commissioners depending on the drought severity are lawn irrigation, curbside

vehicle washing, pool filling, hosing of hard surfaces and use of water from public or private hy-

drants for non-emergency purposes.

Issued: May 29, 2002 Effective: May 29, 2002

40

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# **FRONT FOOT CHARGE**

The front foot charge shall be used in conjunction with Article 14 for all Main Pipe Extensions. The charge shall be adjusted annually utilizing the previous December ENR Construction Cost Index.

December 2020 ENR/CCI 2021 Front Foot Charge

11,579

\$44.26

Issued: December 17, 2020 Effective: January 1, 2021

PWW QCPAC Filing Exhibit DLW-1 Page 1

Pennichuck Water Works, Inc. DW 21-023 Computation of QCPAC Surcharge Attachment DOE DR 2-3 8/23/2021

	R	oved DW19-084 evenues per Order#		QCPAC For 2019 Capital Additions	_	C Surcharge for Cap apital Additions	CPAC For 2020 oital Additions pro forma		for 2	AC Surcharge 2020 Capital dditions	Capi	AC For 2021 tal Additions tro forma		PAC Surcharge r 2021 Capital Additions	Capi	AC For 2022 tal Additions ro forma	for 2	AC Surcharge 2022 Capital Addition	Capita	AC For 2023 al Additions o forma	for 2	AC Surcharge 023 Capital dditions
City Bond Fixed Revenue Requirement (CBFRR)	\$	7,729,032		-	\$	7,729,032 \$	-		\$	7,729,032	\$	-	\$	7,729,032	\$	-	\$	7,729,032			\$	7,729,032
DW19-084 Operating Expense Revenue Requirement	\$	21,296,618	(1)	\$ 416,593	\$	21,713,211 \$	155,083	(4)	\$	21,868,294	\$	268,528	(4) \$	22,136,822	(4) \$	290,383	\$	22,427,204	\$	257,112	\$	22,684,316
DW19-084 Annual Principal and Interest Payments	\$	6,176,477	(2)	\$ 854,442	\$	7,030,919 \$	351,395	(5)	\$	7,382,314	\$	637,999	\$	8,020,313	\$	591,984	\$	8,612,297	\$	568,586	\$	9,180,882
Principal and Interest Coverage Requirement		1.10	(3)			1.10				1.10				1.10				1.10				1.10
DW19-084 Principal and Interest Revenue Requirement	\$	6,794,124			\$	7,734,011			\$	8,120,546			\$	8,822,344			\$	9,473,526			\$	10,098,970
DW19-084 Revenue Requirement	\$	35,819,774			\$	37,176,254			\$	37,717,871			\$	38,688,198			\$	39,629,763			\$	40,512,318
DW19-084 Revenue Requirement less Other Revenues	\$	35,399,062	(12)		\$	36,755,541			\$	37,297,159			\$	38,267,486			\$	39,209,050			\$	40,091,606
DW19-084 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$	34,792,618	(8)		\$	36,149,098			\$	36,690,716 (8)	)		\$	37,661,042	(8)		\$	38,602,607			\$	39,485,163
Percent QCPAC Surcharge (9)						3.90%				1.56%				2.79%				2.71%				2.54%
Cumulative QCPAC Surcharge (13)						3.90%				5.46%				8.24%				10.95%				13.49%
Cumulative QCPAC monthly increase in average single family residential bill.					\$	2.17			\$	3.04			\$	4.59			\$	6.09			\$	7.51
Average monthly single family residential bill with QCPAC.	\$	55.65			\$	57.82			\$	58.69			\$	60.24			\$	61.75			\$	63.16

Milford Annual Fixed Chg \$

81,000 A-B Annual Fixed Chg

3.38% for the Merrimakck River Intake project.

year bond with interest rate of

2.704% for the Nothwest system projects and

32,800

420,712

(1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in NHPUC Order #26,425.
(2) Annual Principal and interest payments for PWW debt associated with all plant in service as approved in DW19-084.

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

(4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2020 and 12/31/2020 based on a 30 year bond with a final interest rate of 4.00% for 2021 through 2023 Capital Expenditures unless funding is via an SRF/DWGTF

(6) QCPAC Principal and Interest expenses are based on

(7) QCPAC percent revenue surcharges based on increase in revenues from the revenues granted in DW19-084

(8) Reduction in revenues associated with fixed contracts as follows: Hudson Annual Fixed Chg

30 year bond with interest rate of (9) QCPAC Principal and Interest expenses for DWGTF financing are based on a

(11) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues granted in DW19-084 that are impacted by the QCPAC.

(12) Operating expense revenues approved in DW19-084 less total Other Revenues of (13) QCPAC percent revenue surcharges based on revenues approved in DW19-084.

Impact on Single Family Residential Home:		DW19-084
Monthly meter charge approved in DW19-084 -	\$	24.34
Average Single Family Consumption per DW19-084 (CCF) -		7.77
Volumetric Charge approved in DW#19-084 -	\$	4.03
Ave. Single Family monthly bill with rates approved in DW19-084 -	S	55.65

4.056692%	based on a bond issuance in April 2021	
financing.		
371,430	PEU Annual Fixed Chg	\$ 121,213

Pennichuck Water Works, Inc. DW 21-023 2021 QCPAC Filing 2/11/2021 Revised 5/26/2021 per Staff Technical Session DR

PWW QCPAC Filing Exhibit DLW-1 Page 2

													QCPAC
									Final QCPAC				Eligible Property Tax
							Board Approved		eligible Project				Expense Expense
			Financing	NHPUC	Date of NHPUC	Board Approved		Eligible for 2020	Costs as of				(Based on
Project Name/Description	Project Description	Work Order #	Docket No.	Order No.	Order		Revised 8/24/19	QCPAC Surcharge	12/31/2019	Community	Taxable	Tax Rate (1)	Qrtly Update) Explanation for Change/Addition/Deletion since Petition Filing
New Services (10)	Single Family, Owner Build, New Homes	20 workorders	DW17-183	26,101	2/2/2018	\$ 46,000	46,000	Yes	\$ 69.936	Various	Yes	\$ 27.02	\$ 1.890   12 installed through 12/31.
Renewed Services (20)	Replacement of failed services	21, 22 & 23 workorders	DW17-183	26,101	2/2/2018	\$ 92,000	92,000		\$ 101,648	Various	Yes	\$ 27.02	- /
Hydrants (10)	Replacement of non-functional hydrants	30 & 31 workorders	DW17-183	26,101	2/2/2018	\$ 50,000	50,000	Yes	\$ 40,209	Various	Yes	\$ 27.02	\$ 1,086 7 installed through 12/31.
Gates (10)	Replacement of Failed Gate Valves	12 & 13 workorders	DW17-183	26,101	2/2/2018	\$ 40,000	40,000	Yes	\$ 10,573	Various	Yes	\$ 27.02	\$ 286 4 installed through 12/31.
Radios (2750)	Replace out of warrantee failed radio meter readers.	54 workorders	DW17-183	26,101	2/2/2018	\$ 275,000	30,000	1	\$ 48,942	Various	Yes	\$ 27.02	
Meters (Growth) 5/8"-2" - Core & CWS (480)	Meters (Growth) 5/8"-2" - Core & CWS (480)	50 workorders	DW17-183	26,101	2/2/2018	\$ 48,000	48,000		\$ 207,025	Various	Yes	\$ 27.02	
Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)  Entrance Security Gate & Perimeter Fence	Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)  Entrance Security Gate & Perimeter Fence	50 workorders 1901598	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 300,000 \$ 75,000	300,000 75,000		\$ 66,204	Various Merrimack	Yes Yes	\$ 27.02 \$ 28.86	4 -
Replace 13 vr Vac Trailer - Safety & Maint issue	Replace 13 yr Vac Trailer - Safety & Maintenance issue	1917721	DW17-183	26,101	2/2/2018	\$ 100,000	75,000	Yes	\$ 29,710	Merrimack	Yes	\$ 28.86	T 1)/ 12
Protectus Meter Upgrade	Spitbrook Rd Protectus Meter Upgrade	n/a	DW17-183	26,101	2/2/2018	\$ 21,000	21,000		S -	Nashua	Yes	\$ 26.23	
Pipe Freeze Kits (2)	RoFrost Turbo 2 Electric Pipe Freeze Kts	1915135	DW17-183	26,101	2/2/2018	\$ -	7,400		\$ 6,970	Nashua	No	\$ 26.23	
Plate Compactors (4)	Replacement of failed compactors unable to obtain repair parts.	1918551	DW17-183	26,101	2/2/2018	\$ -	17,500	Yes	\$ 15,888	Nashua	No	\$ 26.23	\$ - Existing units have failed and parts for repair are not available.
Network Digital Display for Distribution Department	Relocate & network display to Assignment room & new 75" display in Conference Room.	1917719	0.1 DSRR				2,700	No	\$ 2,597		No	\$ 28.86	
Poly-Caster Sander	Poly-Caster Sander	1917720	DW17-183	26,101	2/2/2018			Yes	\$ 7,460		No	\$ 28.86	
2018 Dodge Ram 2500 (#313) 2018 Dodge Ram 2500 (#314)	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1907613 1907612	0.1 DSRR 0.1 DSRR			\$ -	1,969 1,969		\$ 1,969 \$ 1,969		No No	\$ 28.86 \$ 28.86	T
2018 Dodge Ram 2500 (#314) 2018 Dodge Ram 2500 (#315)	Carryover Costs to 2018 projects not recovered in prior QCPAC.  Carryover Costs to 2018 projects not recovered in prior OCPAC.	1907615	0.1 DSRR 0.1 DSRR			\$ -	3 2,542		\$ 1,969		No No	\$ 28.86	
2018 Dodge Ram Promaster 1500 Cargo Van (#347)	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1907987	0.1 DSRR			\$ -	1.060	1	\$ 1,060		No	\$ 28.86	7
2018 Dodge Ram Promaster 1500 Cargo Van (#348)	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1907988	0.1 DSRR			\$ -	1,060		\$ 1,060		No	\$ 28.86	
2018 Dodge Ram Promaster 1500 Cargo Van (#349)	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1907989	0.1 DSRR			ş -	1,060	No	\$ 1,060		No	\$ 28.86	\$ -
Meter Data Logging Equipment	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1907885	0.1 DSRR			\$ -	2,849	No	\$ 2,850	Various	Yes	\$ 27.02	\$ 77 Equipment used in leak detection.
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL.	1607377, 1702856,	DW17-183	26,101	2/2/2018	\$ 550,000	615,000	Yes	\$ 661,270	Nashua	Yes	\$ 26.23	Pavement contribution to the City of Nashua paid in 2018 (\$127,264).
	•	1806433, 1901176	1	-,	7-7	,	,/	· ·	,=. 0		1	1	\$ 17,345
Elm Street	Replace 875 LF of 6 inch CI with 12 inch DIPCL.	1702871, 1812907, 1901599	DW17-183	26,101	2/2/2018	\$ 559,350	255,000	Yes	\$ 373,328	Nashua	Yes	\$ 26.23	Pavement contribution to City of Nashua of \$67,650 included.
		1702866, 1812908,	1					+	1			1.	7,772
Monroe Street	Replace 310 LF of 4 inch CI with 8 inch DIPCL.	1901602	DW17-183	26,101	2/2/2018	\$ 122,270	120,000	Yes	\$ 97,541	Nashua	Yes	\$ 26.23	\$ 2,558 Pavement contribution to City of Nashua of \$18,000 included.
	n i Ture collette i la i i proce i la collette i i i i i i i i i i												Connecting Nashua City Hall sprinkler connection that was missed during the Elm St project. Also replace
Garden Street	Replace 74 LF of 8" CIP with 8 inch DIPCL and reconnect City Hall Fire serviced missed during Elm St work.	1918487	DW17-183	26,101	2/2/2018	\$ -	-	Yes	\$ 61,918	Nashua	Yes	\$ 26.23	a portion of the Garden Street water main. Per City almost all work had to be performed on Sunday nights
	Emil St WOLK.												\$ 1,624 Final paving in Spring 2020 \$18,000 not included.
W.Pearl Street	Replace 340 LF of 8" CIP with 120 LF of 12" DIPCL and 220 LF of 8" DIPCL.	1702869, 1812909,	DW17-183	26,101	2/2/2018	\$ 138,050	140,000	Yes	\$ 178,120	Nashua	Yes	\$ 26.23	Pavement contribution to City of Nashua of \$27,200 included.
н 10.		1901603 1814742, 1901604		26 101				V	· ·	N: 1	V		\$ 4,672
Harvard Street West Hollis Street Check Valve Pit	Replace 800 LF of 8 inch CI with 8 inch DIPCL.  Install at the int of W. Hollis St and Panther Dr.	n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 247,500 \$ 88,000	249,200	Yes Yes	\$ 259,668	Nashua Nashua	Yes Yes	\$ 26.23 \$ 26.23	
	Instan at the lift of W. Froms St and Pantiler Dr.	1	DW17-163	20,101	2/2/2016		, -			<u> </u>	165		Added security fence replacement (1,700 LF) along Manchester Street - some work will carry over into 2020
NWS Improvements - Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.	1806805, 1900422				\$ 660,000	660,000	Yes	\$ 507,141	Nashua	Yes	\$ 26.23	\$ 13,302 included.
NWS Improvements -Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop.	1806810, 1901607	DWGTE			\$ 550,000	550,000	Yes	\$ 548,252	Nashua	Yes	\$ 26.23	
,	· ·	1702835, 1806434,	DWGTF Financing	26,197	12/3/2018							\$ 26.23	
NWS Improvements - Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL.	1900421	DW18-133	20,177	12/3/2010	\$ 522,500	522,500	Yes	\$ 369,378	Nashua	Yes		\$ 9,689 Adjusted cost based on final installed materials in 2020 - some work will carry over into 2021.
NWS Improvements - Deerwood Drive & Amherst St. Intersection	Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL.	1806808, 1901609	4			\$ 467,500	467,500		\$ 158,469	Nashua	Yes	\$ 26.23	
NWS Improvements - Deerwood Dr. Northwest Blvd Loop	Add 3400 LF of 20 inch HDPE including RR pipe jacking.	1806806, 1901610 1901611	4			\$ 635,800	635,800	Yes	\$ 1,302,871	Nashua	Yes	\$ 26.23	
NWS Improvements Ponemah Rd/Route 101A Loop	Add 2200 LF of 12 inch DIPCL to close two loop major dead ends.	1901611				\$ 484,000 Incuded in NWS	Incuded in NWS	Yes	5 -	Nashua	Yes	\$ 26.23	Project cancelled and replaced with piping in projects above.
NWS Improvements - Engineering Design and Inspection	Engineering and Inspection of NW System watermain improvements.		0.1 DSRR			Improvemts above	Improvemts above	No	\$ 174,347	Nashua	Yes	\$ 26.23	\$ 4,573
City of Nashua Sewer - Chase Street	Replace 470 LF of 6 inch CIP with 470 LF of 6 inch DIPCL.	1829925, 1900484	DW17-183	26,101	2/2/2018	\$ 176,000	190,000	Yes	\$ 175,370	Nashua	Yes	\$ 26.23	\$ 4,600 Project Complete
City of Nashua Sewer - Ash Street	Replace 710 LF of 6 inch CIP with 710 LF of 12 inch DIPCL.	1814367, 1915975	DW17-183	26,101	2/2/2018	\$ 242,000	162,800	Yes	\$ 156,252	Nashua	Yes	\$ 26.23	\$ 4,098 Pavement contribution to City of Nashua of \$20,832 included.
City of Nashua Sewer - Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DIPCL.	1814740, 1915976	DW17-183	26,101	2/2/2018	\$ 990,000	1,710,500		\$ 1,608,850		Yes	\$ 26.23	
City of Nashua Paving - Vilna St.	Replace 15 LF of 1.5 inch steel with 2 inch HDPE for paving program.	1915860	DW17-183	26,101	2/2/2018	\$ -	\$ 16,750	Yes	\$ 17,400		Yes	\$ 26.23	
Interconnection to BWC	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1900429 1910117	0.1 DSRR 0.1 DSRR			\$ -	3,400 3,200		\$ -	Nashua Nashua	Yes Yes	\$ 26.23 \$ 26.23	
Woodward Avenue Ritter Street	Carryover Costs to 2018 projects not recovered in prior QCPAC.  Carryover Costs to 2018 projects not recovered in prior QCPAC.	1910117	0.1 DSRR 0.1 DSRR			\$ -	6,890		s -	Nashua	Yes	\$ 26.23	7 17 1 717
Factory Street	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1909270	0.1 DSRR			S -	20,209		\$ 20,209	Nashua	Yes	\$ 26.23	
Taylor Street	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1906988	0.1 DSRR			\$ -	233		\$ 233		Yes	\$ 26.23	
Shakespeare HP System Exp	Carryover Costs to 2018 projects not recovered in prior QCPAC.	1901942	0.1 DSRR			ş -	257	No	\$ 257	Nashua	Yes	\$ 26.23	
City of Nashua Paving - Mill St.	Abandon 1.5" Steel water main and switch customers over to parrallel 8" water main.	1915006	0.1 DSRR			\$ -	\$ 17,900	No	\$ 17,321	Nashua	No	\$ 26.23	
City of Nashua Paving - Ferryalls Ct	Replace 35 ft of 1" copper water main crossing Canal St with a 4" DIPCL Water Main.	1908316	DW17-183	26,101	2/2/2018	\$ -	\$ 58,580	Yes	\$ 51,988	Nashua	Yes	\$ 26.23	Ferryalls was replaced last year to the limit of Canal St - complete this is phase 2 extending into Canal St -
City of Nashua Paving - Salvail Ct	Replace 1.5" Steel water main and install a 4" DIPCL Water Main (contaminated area).	1908317	DW17-183	26,101	2/2/2018	9	\$ 95,000	Voc	\$ 79.258	Nashua	Von	\$ 26.23	\$ 1,364 complete.  \$ 2.079 Includes final paying - complete
City of Nashua Paving - Nutt St - Final Paving and restoration	Pavement restoration and final landscaping	1702842, 1907682	DW17-183	26,101	2/2/2018	\$ .	§ 13,000	Yes	\$ 6,549	- 1110-11111	Yes	\$ 26.23	1 7,000
City of Nashua Paving - Cheshire St - Final Cleanup	Fence repair and site clean up	1908353	DW17-183	26,101	2/2/2018	\$ -	3,400		\$ 486		Yes	\$ 26.23	
City of Nashua - Simon St at Will St Upgrade	Abandon pump station pit and clean up intersection pipe work for improved flows.	1915974	DW17-183	26,101	2/2/2018	\$ -			\$ 174,754	Nashua	Yes	\$ 26.23	
City of Nashua Paving - Main St.	Main St final paving at intersection with Factory St. Carry over from 2018.	1900348, 1915859	DW17-183	26,101	2/2/2018	\$ -	\$ 24,500	Yes	\$ 1,402	Nashua	Yes	\$ 26.23	\$ 37 Final paving bill for this project.
City of Nashua Paving - Lemon St - Carry over from 2017	Paving only - Carry over from 2017.	1702875, 1915858	DW17-183	26,101	2/2/2018	\$ -	\$ 24,850	Yes	\$ 18,316		Yes	\$ 26.23	
City of Nashua Paving - Lowell St - Carry over from 2017	Paving only - Carry over from 2017.	1915857	DW17-183	26,101	2/2/2018	\$ -	\$ 37,000		\$ 37,084		Yes	\$ 26.23	
City of Nashua Paving - Green St - Carry over from 2017	Paving only - Carry over from 2017.	1915844	DW17-183	26,101	2/2/2018	\$ -	\$ 10,000		\$ 8,906		Yes	\$ 26.23	
City of Nashua Paving - Beard St - Carry over from 2017 City of Nashua Paving - Terrace St - Carry over from 2017	Paving only - Carry over from 2017.	1915845	DW17-183	26,101	2/2/2018	\$ -	,		\$ 21,689	Nashua	Yes	\$ 26.23	
City of Nashua Paving - Terrace St - Carry over from 2017  City of Nashua Paving - Warren St - Carry over from 2017	Paving only - Carry over from 2018.  Paving only - Carry over from 2017.	1915843 1702870, 1915842	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - \$ -			\$ 10,600 \$ 16,762		Yes Yes	\$ 26.23 \$ 26.23	
34, 31-140-14-14-15 34-14-14-14-14-14-14-14-14-14-14-14-14-14	Taving only - Garry over from 2017.	1502180, 1601369,	DWGTF	20,101	2/2/2010	,	17,300	103	9 10,702	i vasiida	103	20.23	Bids higher than Engineers estimate due to tight contractor market and changes in final permit requirement
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River.	1701489, 1807360,	Financing	26,247	5/3/2019	\$ 5,500,000	6,600,000	Yes	\$ 6,299,764	Merrimack	Yes	\$ 28.86	\$ 181,811 that impacted initial design that engineers estimate was based on. An estimated amount of \$362,000 of clear
		1901612, 1908505	DW19-026			-,,-	-,,		.,,				up work to be carryed into 2020.
Asset Management Outside GIS Consulting Services	Outside GIS Consulting Services	1900414	DW17-183	26,101	2/2/2018	\$ 60,000			\$ 7,961		No	\$ 27.02	
Asset Management Water Modeling Consulting	Water Modeling Consulting	1900414	DW17-183	26,101	2/2/2018	\$ 36,000	36,000		S -	Various	No	\$ 27.02	
Asset Management Trimble R2 Units WAM/Synergen Upgrade Cost & Functionality Study	Trimble R2 Units WAM/Synergen Upgrade Cost & Functionality Study	1900414 1900568, 1910219	DW17-183 0.1 DSRR	26,101	2/2/2018	\$ 14,000 \$ -			\$ - \$ 27,804	Various Various	Yes No	\$ 27.02 \$ 27.02	
Investment in developer installed services at 1xannual revenue	Per tariff	n/a	DW17-183	26,101	2/2/2018	\$ 60,000	60,000		\$ 27,804 \$ 90,434		Yes	\$ 27.02	
2019 Ford Escape	Replace Totaled 2015 Ford Escape	1907481	DW17-183	26,101	2/2/2018	\$ -	3 23,998		\$ 90,434		No	\$ 28.86	
Bower Dam reconstruction and engineering	Bower Dam reconstruction and engineering	1824545, 1900432	0.1 DSRR			\$ 25,000			\$ -	Merrimack	No	\$ 28.86	
Bowers Dam Letter of Defficiency design/analysis	Perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity.	1901734, 1907078	0.1 DSRR				35,000	No	\$ -	Merrimack	No	\$ 28.86	\$ - Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam
Hassis Dam Letter of Dofficionay design /and	Doeform Underplie and Underloop analysis desired	1907076	0.1 DSRR				40,000	No	9	Merrimack	No	\$ 28.86	S Letter of deficiency issued by the NUDES Day Brown and in industry and in the second
Harris Dam Letter of Defficiency design/analysis	Perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity.	190/0/6	U.I DSKK				40,000	INO	9 -	ivierrimack	NO	g 28.86	Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam
Supply Pond Letter of Deficncy design/analysis	Perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity.	1907077	0.1 DSRR				35,000	No	s -	Merrimack	No	\$ 28.86	\$ - Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam
	, , , , , , , , , , , , , , , , , , , ,	60, 61, 62 & 63		26,101	2/2/2018			1					
			DW17-183	20,101	4/4/4018		45.45	1	\$ 11,260	Various	Yes	\$ 27.02	La
Booster Pump replacement/rebuild Booster Pump replacement/rebuild	Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3	workorders 1914986	DW17-183	26,101	2/2/2018	\$ 40,000	15,445 24,555		\$ 11,260		Yes	\$ 26.23	

		60, 61, 62 & 63	1				1					
Well Pump replacements	Well Pump replacements	workorders	DW17-183	26,101	2/2/2018	15,000 \$	15,000	Yes	\$ 16,995 Various	Yes	\$ 27.02	\$ 459 4 replaced through 12/31/2019.
		60, 61, 62 & 63 workorders	DW17-183	26,101	2/2/2018	10,000 \$	10,000	v	. v	v	\$ 27.02	2 11 2010
Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	n/a	DW17-183	26,101	2/2/2018	5 10,000 \$ 5 150,000 \$	150,000	Yes Yes	\$ - Various \$ - Various	Yes Yes	\$ 27.02	No replacements occurred during 2019.      Scope of project was more clearly defined resulting in a reduction in cost.
Twin Ridge rebuild softener system, install radon treatment.	Twin Ridge rebuild softener system, install radon treatment.	1907731	DW17-183	26,101	2/2/2018	50,000 \$	50,000	Yes	\$ 11,112 Plaistow	Yes	\$ 25.93	\$ 288 Project scope was limited to MTM media replacement.
Misc. Structural Improvements	Misc. Structural Improvements	n/a	DW17-183	26,101	2/2/2018	20,000 \$	10,700	Yes	\$ - Various	Yes	\$ 27.02	\$ - Reduced by replacement of failed Fire Alarm CPU.
Misc. Structural Improvements	Replace Fire Alarm System CPU.	1907102, 1910221	DW17-183	26,101	2/2/2018	- S	9,300	Yes	\$ 9,251 Nashua	Yes	\$ 26.23	\$ 243 Fire Alarm CPU failed due to electrical surge.
Misc. Structural Improvements	Replace Natural Gas Heater, High Pine Station.	1917491	DW17-183	26,101	2/2/2018		, i	Yes	\$ 4,050 Nashua	Yes	\$ 26.23	\$ 106 Failed heater. Part of run rate Misc Structural Improvements.
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	n/a	DW17-183	26,101	2/2/2018 s	\$ 17,500 <b>\$</b>	9,928	Yes	\$ - Various	Yes	\$ 27.02 S	S -
Miscellaneous Equipment Purchased	Purchase 2 Gas Monitors for WS Confined Space Program.	1907611	DW17-183	26,101	2/2/2018	- S	4,568	Yes	\$ 4,568 Nashua	Yes	\$ 26.23	\$ 120 Routine Miscellaneous Equipment purchase
Miscellaneous Equipment Purchased	Purchase Entry Tripod and Winch for WS Confined Space Program.	1910296	DW17-183	26,101	2/2/2018	s - \$	3,004	Yes	\$ 3,004 Nashua	Yes	\$ 26.23	\$ 79 Routine Miscellaneous Equipment purchase
Miscellaneous Equipment Purchased	Replace Chlorine Analyzer, Twin Ridge	1915362	DW17-183	26,101	2/2/2018	- \$	-	Yes	\$ 4,449 Nashua	Yes	\$ 26.23	\$ 117 Routine Miscellaneous Equipment purchase
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	DW17-183	26,101	2/2/2018	30,000 \$	30,000	Yes	\$ - Various	Yes	\$ 27.02	ş -
Miscellaneous SCADA/Electrical	Replace VFD, Pump #1 Bowers Landing	1916547	DW17-183	26,101	2/2/2018	- \$	-	Yes	\$ 2,118 Various	Yes	\$ 27.02	\$ 57
WTP Structural/HVAC	WTP Structural/HVAC	n/a	DW17-183	26,101	2/2/2018	10,000 \$	10,000	Yes	\$ - Nashua	Yes	\$ 26.23	ş -
WTP Structural/HVAC	Replace Heat Exchanger, WTP Office	1917470	DW17-183	26,101	2/2/2018	- Ş	-	Yes	\$ 8,328 Nashua	Yes	\$ 26.23	\$ 218 WTP Structural/HVAC project
Purchase new lab equipment	Purchase new lab equipment	n/a	DW17-183	26,101	2/2/2018	20,000 \$	18,500	Yes	\$ - Nashua	Yes	\$ 26.23	\$ - Reduced by purchase of HACH DR 900 below
Purchase new lab equipment	HACH DR 900	1908450	DW17-183	26,101	2/2/2018	- \$	1,500	Yes	\$ 1,435 Nashua	Yes	\$ 26.23	\$ 38
Miscellaneous Fencing and Security projects  Miscellaneous Fencine and Security projects	Miscellaneous Fencing and Security projects	n/a 1901608	DW17-183 DW17-183	26,101 26,101	2/2/2018 \$ 2/2/2018 \$	10,000 \$	10,000	Yes Yes	\$ - Various \$ 6,744 Various	Yes Yes	\$ 27.02 S	\$ - \$ 182
Miscellaneous Fencing and Security projects  Purchase new vehicle for Water Supply Electrician.	WTP Perimeter Fence Carryover  Purchase of a new vehicle for the Water Supply Electrician.	1901608	DW17-183	26,101	2/2/2018	- 5	-	Yes	\$ 6,/44 Various \$ 28,897 Nashua	Y es No	\$ 26.23	\$ - Unbudgeted. Made necessary due to the premature retirement of 2 dept. vehicles.
Replace Ferric Chloride Feed pump.	Replace Ferric Chloride Feed pump.	1901613	DW17-183	26,101	2/2/2018	- 3	-	Yes	\$ 1,713 Nashua	Yes	\$ 26.23	
перше г сто столие г сеи рипр.	replace Ferre Charles Feet pump.		2 117-103	,	-,-,-010	- 9	-	100		- 00	20.23	
Carbon media changeout-filters 1 & 2.	Carbon media changeout-filters 1 & 2	1901614 & 1916780	DW17-183	26,101	2/2/2018	\$ 1,000,000 \$	1,050,000	Yes	\$ 990,662 Nashua	Yes	\$ 26.23	New PFAS regulations require that all filter media be changed out to ensure compliance with the new PFO3 standard which is slated to go into effect on October 1, 2019. Filter media replacement being staged over 6 month intervals. 8 of 12 filters to be replaced in 2019, remaining four filters to be replaced in Spring 2020.
Add 3rd pump at Main Dunstable Booster, replace 1 existing.	Add 3rd pump at Main Dunstable Booster, replace 1 existing.	n/a	DW17-183	26,101	2/2/2018	120,000 \$	-	Yes	\$ - Nashua	Yes	\$ 26.23	<ul> <li>Addition of 3rd pump deferred or elminated until future date subject to performance of rebuilt 2nd pump.</li> </ul>
Rebuild Main Dunstable pump #1	Rebuild Pump #1, Main Dunstable, Nashua	1901615	DW17-183	26,101	2/2/2018	- \$	-	Yes	\$ 15,995 Nashua	Yes	\$ 26.23 5	\$ 420
Replace Kessler Farm booster pump package.	Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning to pit.	n/a	DW17-183	26,101	2/2/2018	75,000 \$	75,000	Yes	S - Nashua	Yes	\$ 26.23	S - Project deferred until 2020
Stump Pond Subwatershed assessment	Stump Pond Subwatershed assessment	n/a	0.1 DSRR		3	25,000 \$	25,000	No	\$ - Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Stump Pond Stormwater BMP	Stump Pond Stormwater BMP	1908373	0.1 DSRR		9	20,000 \$	20,000	No	\$ 1.310 Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Public Education -Watershed signage	Public Education -Watershed signage	n/a	0.1 DSRR		\$	20,000 \$	20,000	No	Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Replace 2 Hach Turbidimeters and associated control module	Replace 2 Hach Turbidimeters and associated control module.	1901618	DW17-183	26,101	2/2/2018	10,000 \$	10,000	Yes	\$ 7,978 Nashua	Yes	\$ 26.23	\$ 209
Camera System Upgrade	Carryover Costs from 2018 Project.	1819073, 1900413	0.1 DSRR		\$	- \$	7,500	No	\$ 9,756 Nashua	Yes	\$ 26.23	\$ 256 Carry over costs from project completed in 2018, pay for with 0.1 DSRR.
Dredging Feasibility Study	Carryover Costs from 2018 study.	1807145, 1901939	0.1 DSRR		\$	- \$	24,600	No	\$ 39,520 Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Source Water Protection Study	Carryover Costs from 2018 study.	1901740	0.1 DSRR		\$	- \$	12,000	No	\$ 11,000 Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Aquatic Vegetation Assessment	Carryover Costs from 2018 study.	1807147, 1906080	0.1 DSRR		\$	- \$	4,200	No	\$ 9,545 Merrimack	No	\$ 28.86	\$ - Study - Pay for with 0.1 DSRR
Fiber Conduit between WTP and Dist	Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing	1901619	DW17-183	26,101	2/2/2018	40,000 \$	40,000	Yes	\$ 22,896 Nashua	Yes	\$ 26.23	8 701
Munis FER Enhancements	Comcast Ethernet line to one of the buildings.  Munis FER Enhancements	n/a	DW17-183	26.101	2/2/2018	35,000 S	35,000	Yes	S - Merrimack	No	\$ 28.86	No upgrades enhancements will be completed in 2019.
Wireless Access Points for Main Office	Wireless Access Points for Main Office	n/a	DW17-183	26,101	2/2/2018	33,000 \$ 3 14,000 \$	33,000	Yes	S - Merrimack	No	\$ 28.86	Monies moved to Veeam Backup Project.      Monies moved to Veeam Backup Project.
	Keyboard Video Mouse for Data Center so that multiple servers can be accessed by one console	,				7 11,000 4		100	y merminen	-10	20.00	y money mored to recam package model.
KVM for Data Center	without having to move the Monitor/Keyboards/ Mouse connections each time.	n/a	DW17-183	26,101	2/2/2018	2.500 \$	_	Yes	S - Merrimack	No	\$ 28.86	ş -
IOS Charging Station	Charging Station for multiple iPads to allow for upgrades across multiple devices concurrently.	n/a	DW17-183	26,101	2/2/2018	1,200 \$	-	Yes	\$ - Merrimack	No	\$ 28.86	\$ -
Digital Signage for Distribution	Digital Signage for Distribution allowing notices and schedules to be more prominently displayed.	1908376	0.1 DSRR	26,101	2/2/2018	\$ 2,000 \$	1,270	No	\$ - Merrimack	No	\$ 28.86	e
	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our		+								9 40.00	<del>y</del> -
VDI Pilot	environment.	n/a	DW17-183	26,101	2/2/2018	12.000 \$	_	Yes	S - Merrimack	No	\$ 28.86	s -
Misc Hardware	Misc Hardware	n/a	DW17-183	26,101	2/2/2018	3 12,000 \$ 3 20,000 \$	20,000	Yes	S - Merrimack	No	\$ 28.86	Š -
Misc Hardware	Mount in Vehicles	1908308	0.1 DSRR	,	.,.,	S S	-	No	\$ 1,248 Merrimack	No	\$ 28.86	\$ -
Misc Hardware	2 iPad Pros for IS Testing	1908309	0.1 DSRR			S	-	No	\$ 2,298 Merrimack	No	\$ 28.86	\$ -
Misc Software	Misc Software	n/a	DW17-183	26,101	2/2/2018	12,000 \$	12,000	Yes	\$ - Merrimack	No	\$ 28.86	ş <u>-</u>
Website upgrades	Website upgrades	n/a	DW17-183	26,101	2/2/2018	8,000 \$	8,000	Yes	\$ - Merrimack	No	\$ 28.86	ş -
Implement Customer Balances over the phone	Implement Customer Balances over the phone.	n/a	DW17-183	26,101	2/2/2018 \$	4,000 \$	25,500	Yes	\$ - Merrimack	No	\$ 28.86	\$ - Deferred
Click Resource Assistant	Allow for the moving of customer Appointment from an generic resource to a named resource.	1907952	0.1 DSRR		Ş	\$ - <sub>\$</sub>	22,828	No	\$ 22,828 Merrimack	No	\$ 28.86	\$ -
Database Server License for GIS and other Apps	Purchase Server license for Virtual Environment.	1915920	DW17-183	26,101	2/2/2018	s - \$	-	Yes	\$ 7,305 Merrimack	No	\$ 28.86	Previously licensed software was not suitable for Virtual environment.
Veeam Backup Software	Replacement of existing backup software due to exorbitant vendor fees to keep original system running.	1909216	0.1 DSRR		T :	- s	25,550	No	\$ 15,530 Merrimack	No	\$ 28.86	s -
New RCO Manager Computer	New RCO Manager Computer	1917001	0.1 DSRR		5		,	No	\$ 1,797 Merrimack	No	\$ 28.86	\$ - Replace failed desktop computer.
Kessler Farm Tank Design	Kessler Farm Tank Design	1915117	0.1 DSRR	26,101	2/2/2018	-		No	\$ 36,355 Nashua	No	\$ 26.23	\$ - Engineering for tank to be constructed in 2020.
Retainage	Payment of Retainage for projects that were used and useful in 2018.		DW17-183	26,101	2/2/2018	- 5	-	Yes	\$ 33,586 Merrimack	No	\$ 28.86	
Short term interest on the PWW Fixed Asset Line of Credit.	Capitalized interest incurred on FALOC draws to fund 2019 Capex from 1/1/2019 thru 4/2/2020.		DW17-183	26,101	2/2/2018	- S	-	Yes	\$ 230,645 Various	No		\$ -
Performance Management Platform Implementation & Technical Integration	Performance Management Platform Implementation & Technical Integration	1916551	DW17-183	26,101	2/3/2018	- S	-	Yes	\$ 13,804 Merrimack	No	\$ 28.86	ş -
Papercut MF Software for copiers	Papercut MF Software for copiers	1918363	DW17-183	26,101	2/3/2018	- \$	-	Yes	\$ 3,708 Merrimack	No	\$ 28.86	ş - <u> </u>
		Pennichuck Water Wo	orks Projected 201	19 Total Capita	Expenditure Budget -	\$ 14,968,170 \$	16,902,524		\$ 15,801,867 Projected Proper	rty Tax Expense	associated with	\$ 416,593

Total Projected PWW QCPAC Capex for 2019 -	\$ 16,832,524	\$ 14,898,170	\$ 15,374,227
Amount funded by DWGTF Merrimack River Intake -	\$ 8,819,800	\$ 8,819,800	\$ 5,359,625
Amount funded by DWGTF Northwest System Improvements -			\$ 2,859,754
Amount to be funded by 2020 Bond Issue -	\$ 8,012,724	\$ 6,078,370	\$ 7,154,848

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000
2. Projects funded by 0.1 DSRR funds are not QCPAC eligible because the cash to fund these projects is not bonded. Total 2019 Capex to be funded by 0.1 DSRR funds -

Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2019 and 12/31/2019 based on a
 QCPAC Principal and Interest expenses for DWGTF financing for the North West System improvements are based on a
 QCPAC Principal and Interest expenses for DWGTF financing for the Merrimack River Intake are based on a

12/31/2019
\$ 427,640 The 12/31/2019 0.1 DSRR amount has been increased by to reflect the Staff DR21 response indicating that \$ 21,175 of the project costs being funded with DWGTF is being funded with 0.1 DSRR monies.

30 year bond with an actual total all in interest rate of 4.261869% resulting in annual P&I expenses of 30 year bond with interest rate of 3.380% resulting in annual P&I expenses of resulting in annual P&I ex 427,022 140,376

								Estimated Proje	ct					QCPAC Eligible	
Project Name/Description		w	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Board Approved		Cost as of 11/30/2020	Final l	Project cost 12/31/2020	Community	Taxable	2020 Tax Rate (1)	Property Tax Expense	Explanation for Change/Addition/Deletion from Board Approved 2020 Capex Budget
New Services (10)	Project Description  Single Family, Owner Build, New Homes	Work Order # 20 workorders	DW17-183	26,101	2/2/2018	\$ 50,000	, ,	\$ 31,09		36,746	Various	Yes S	28.45	r · · ·	6 new services through 12/31/20.
Renewed Services (20)	Replacement of failed services.	workorders	DW17-183	26,101	2/2/2018	\$ 110,000		\$ 68,05		68,052	Various	Yes S	28.45		19 Renewed Services Installed through 12/31/2020.
lydrants (10)	Replacement of non-functional hydrants (Run rate) (8 YTD)	30 & 31 workorders	DW17-183	26,101	2/2/2018	\$ 60,000		\$ 48,00	. 4	41,401	Various	Yes S	28.45		9 Hydrants Repaired/Replaced through 12/31/2020. 12 Gates Repaired/Replaced through 12/31/2020.
Gates (10) Ladios (560)	Replacement of Failed Gate Valves  Replacement of out of Warrantee Failed Radios (280), New Meters for new customers (280).	12 & 13 workorders 54 workorders	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 40,000 \$ 58,000		\$ 40,00 \$ 51,00	_	43,189 50,832	Various Various	Yes S	28.45 \$	-,	12 Gates Repared/Replaced through 12/31/2020. 498 Radios Installed/Replaced through 12/31/2020.
Meters (Growth) 5/8"-2" - Core & CWS (280)	Meters (Growth) 5/8"-2" - Core & CWS (280)	50 workorders	DW17-183	26,101	2/2/2018	\$ 29,000	Yes	\$ 96,00		94,393	Various	Yes §	28.45 \$	2,686	631 Meters Installed/Replaced through 12/31/2020.
Meters 5/8"-6" - Replace faled meters - Core & CWS (200) Replace Mud sucker pump	Meters 5/8"-6" failed meters - Core & CWS (200)  Replace 15+ year old ditch pump.	50 workorders 2005200	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 21,000 \$ -	Yes Yes	\$ 6.35	6 \$	6,356	Various Various	Yes S	28.45 \$	i - i 181	Total included in row above.
Replacement Utility Truck	Replacement for #47 - 2006 Ford f-350, 130K miles Does not pass inspection.	2006391	DW17-183	26,101	2/2/2018	\$ 70,000		\$ 70,00		66,969	Merrimack	No \$	28.52	-	
Replacement Utility Truck	Replacment for #76 - 2008 Ford F-350, 150K miles, Does not pass inspection.	2006390	DW17-183	26,101	2/2/2018	\$ 70,000		\$ 70,00	_	68,951	Merrimack	No \$	28.52 \$	-	
teplacement Utility Truck	Replacement for #4- 2010 Ford f-350, 140K miles Does not pass inspection.  Replacement for #60 - 14 Year Vac Trailer w/excessive rot, will not pass inspection.	2006389 n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 70,000 \$ 160,000		\$ 7,00	0 \$	68,429	Merrimack	No S	28.52 \$	-	Deferred. Not avialable due to impact of COVID19 on manufacturing.
Valve Turner & Vac Truck Foreman's Truck	Replacement for #60 - 14 Year Vac Trailer w/excessive rot, will not pass inspection.  Replacement for #59 - 2011 International, 120K Miles, High Hours, Electrical, body issues.	n/a 2004436	DW17-183 DW17-183	26,101	2/2/2018	\$ 160,000 \$ 140,000		\$ - \$ 140,00	10 8	79,206	Merrimack Merrimack	No S	28.52 \$	· -	Deferred. Not available due to impact of COVID19 on manufacturing.  Deferred until 2020.
ocker Room Benches @ Distribution Facility	Permanent Benches for Male & Female locker rooms.	n/a	DW17-183	26,101	2/2/2018	\$ 7,500		\$ -		77,200	Merrimack	Yes S	28.52		Defered until 2021 due to COVID19 delays.
Locker Room Deep Wash Sinks	Deep stainless wash sinks to replace existing sinks in male & female locker rooms.	n/a	DW17-183	26,101	2/2/2018	\$ 7,500		\$ -			Merrimack	Yes \$	28.52 \$		Deferred until 2021 due to COVID19 delays.
Office Space for Const & Maint Supervisor andscape improvements	Permanent office space for Contruction & Maintenance Supervisor.  Repair Hill Sides @ 16 DWH and overseed with erosion mix.	n/a 2008276	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 12,000 \$ 12,000		\$ 12,55	in s	15,350	Merrimack Merrimack	Yes S	28.52 \$	i - i 438	Deferred until 2020 due to COVID19 delays.
Automatic Entrance Gate @ Distribution Facility	Replace manual gate @ Distribution facility with automatic gate.	2000270	DW17-103	0.1 DSRR	2/2/2010	\$ 10,000		\$ 12,55	S	3,083	Merrimack	Yes S	28.52		Work delayed on long range gate reader until 2021, due to COVID19.
Emergency Gas Detection Meters	Emergency Gas Detection Meters	2006033	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 10,41	1 \$	10,411	Merrimack	Yes 5	28.52	297	Replace exsisting failed tritector.
Leplacement Equipment/Excavator Trailer	Replacement Equipment/Excavator Trailer	2007566	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 19,45		17,917	Merrimack	No \$	28.52 \$	-	
uyout Lease of HP T2530PS Large Format Printer (OPS)  Vest Hollis Street Check Valve Pit	Buyout Lease of HP T2530PS Large Format Printer (OPS).  Install at the intersection of W. Hollis St and Panther Dr.	2008268 n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - \$ 88,000	Yes Yes	\$ 6,99	94 \$	4,995	Merrimack Nashua	No S Yes S	28.52 \$ 27.13 \$	-	Deferred
WS Improvements - Manchester Street	Install 1700 LF of 24 inch DI and new Fencing.	2000383		DWGTF	.,.,.	\$ 125,000	Yes	\$ 86,00		85,059	Nashua	Yes S	27.13	2,308	
WS Improvements - Deerwood Dr. Northwest Blvd Loop	Add 3400 LF of 20 inch HDPE including RR pipe jacking.  Add 2200 LF of 12 inch DIPCL to close two loop major deed ends	2000386 2000384		DWGTF DWGTF		\$ 40,000 \$ 125,000		\$ 18,50		19,576	Nashua	Yes S	27.13 \$		
JWS Improvements Veteran's Rd/Route 101A Loop JWS Improvements Tinker Road Paving and restoration	Add 2200 LF of 12 inch DIPCL to close two loop major dead ends.  NWS Improvements Tinker Road Paving and restoration.	2000384 2000385		DWGTF		\$ 125,000 \$ 125,000		\$ 125,00 \$ 126,00		125,566 125,458	Nashua Nashua	Yes S	27.13 \$ 27.13 \$	3,407 3,404	
imon & Will Street - Paving	Simon & Will Street - Paving	2000387	DW17-183	26,101	2/2/2018	\$ 30,000		\$ -		.,	Nashua	Yes §	27.13	-	Deferred
Garden Street - Final Paving City of Nashua Sewer - Lake Street	Garden Street - Final Paving Replace 2950 LF of 6 inch CI with 12 inch DIPCL (Paving).	2000388 2000378	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 18,000 \$ 30,000		\$ - \$	\$	10,589	Nashua Nashua	Yes S	27.13 \$ 27.13 \$	·	Deferred
,			DWGTF Financing	i				8 10210					27.13	201	
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	2000380	DW19-026	26,247	5/3/2019	\$ 140,375	Yes	\$ 192,10	19 \$	140,375	Merrimack	Yes	28.52	4,003	
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	2000380	DW17-183	26,101	2/2/2018	\$ 221,625	Yes	\$ 260,00	0 \$	253,590	Merrimack	Yes §	28.52 \$	7,232	Project cost increased by \$80,000 to develop Source Water Protection plan required by NHDES.
teplace Kessler Farm booster pump package	Replace 31 year old package booster station pumps and piping.	2000389	DW17-183	26,101	2/2/2018	\$ 75,000	Yes	\$ 188,00	0 \$	190,901	Nashua	Yes	27.13	5,179	Budget to be increased as a portion of site work for the Kessler Farm Tank was transferred to this project. Winning project bit higher than engineer's estimate.
isk and Resilience Assessment and Emergency Response Plan	Complete Risk and Resilience Assessment and Emergency Response Plan as required by the USEPA.	2002053	DW17-183	26,101	2/2/2018	\$ 120,000	Yes	\$ 120,00	0 \$	117,274	Various	No \$	28.45	-	
sset Management - GIS QA/QC ahead of NEW CMMS	GIS QA/QC Ahead of NEW CMMS	1900414, 2000362	DW17-183	26,101	2/2/2018	\$ 40,000		\$ 40,00		56,448	Merrimack	Yes \$	28.52	1,610	
rook Street (Lake St Area PH2) Iamilton Street (Lake St Area PH2)	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch DIPCL.  Replace 410 LF of 6 inch CI with 4 inch DIPCL.	1502511, 2003423 1502512, 2003422	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 380,000 \$ 87,000		\$ 276,00 \$ 137,00		257,109 126,068	Nashua Nashua	Yes S	27.13 \$	6,975 3,420	Restoration work slated for 2021 was completed in 2020.
Burritt Street (Lake St Area PH2)	Replace 4:0 LF of 4 inch CI with 8 inch DIPCL.	1502513, 2003420	DW17-183	26,101	2/2/2018	\$ 141,000		\$ 137,00		134,733	Nashua	Yes S	27.13	3,655	
Burritt Street (Lake St Area PH2)	Replace 125 LF of 4 inch CI with 4 inch DIPCL.	n/a	DW17-183	26,101	2/2/2018	\$ 38,000		\$ -			Nashua	Yes S	27.13	-	Included in row above.
Verona Street (Lake St Area PH2) Sarasota Ave (Lake St Area PH2)	Replace 675 LF of 6 inch CI with 8 inch DIPCL.  Replace 250 LF of 6 inch CI with 8 inch DIPCL.	2007542 n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 226,000 \$ 83,000		\$ 205,10 \$ 70,00		182,847	Nashua Nashua	Yes S	27.13 \$	4,961	Required the use of temporary main that was not initially part of the design.
Amherst Dodge Rd Watermain Abandonment	Abandon Approx. 700 LF of AC Main, Transfer 2 services & 1 Hyd to parallel 8" DIPCL water	2001229	DW17-183	26,101	2/2/2018	\$ 20,000		\$ 146,00		149,710	Amherst	No \$	32.93		Scope of job expanded to replace multiple broken or leaking valves discovered during the shutdown process.
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2000379		0.1 DSRR		\$ 3,388,000	No	\$ 60,00	10 \$	65,161	Nashua	No	-	, -	Design only. Construction deferred until 2021.
Replace Engineering Pickup	2020 Ford Escape SE - Replace Vehicle #101	2006652	DW17-183	26,101	2/2/2018	\$ 35,000	Yes	\$ 24,43	1 8	23,470	Merrimack	No 5	27.13 \$	<u>-</u>	
Replace Engineering SUV #34	2020 Ford Escape SE - Replace Vehicle #401	2006755	DW17-183	26,101	2/2/2018	\$ 30,000		\$ 24,47		24,432	Merrimack	No S	28.52	<del>-</del>	
Investment in developer installed services at 1xannual revenue	Per tariff	n/a	DW17-183	26,101	2/2/2018	\$ 60,000		\$ 80,00		79,591	Various	Yes §	28.45	2,265	136 Developer Installed Services through 12/31/2020.
Asset Management Trimble R2 Units	Add two new GPS units for additional staff.	2003535	DW17-183	26,101	2/2/2018	\$ 24,000	Yes	\$ 24,00	0 \$	21,963	Merrimack	No 5	28.52 \$	-	
Merrimack River Pumping Station	Add third 350 horsepower pump and motor with variable frequency drive.	2003759	DW17-183	26,101	2/2/2018	\$ 260,000	Yes	\$ 600,00	0 \$	485,114	Merrimack	Yes			Added Pump Station roof hatches and roofing to facilitate pump replacement in the future. Bid price received for new pump w higher than anticipated. Added Electrical system upgrades for code and redundency. There will be an additional \$140,000 of
					- /- /								28.52	-,	expenditures to complete this project in 2021.
Crescent Street (sewer related)	Replace 250 LF of 4 inch CI and 96 LF of 1 1/4 inch CL with 150 LF of 4" PVC.	2001230	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 39,00	_	54.705	Nashua	Yes S	27.13	1,484	Added due to Kessler Farm Tank deferral to 2021.
Crescent Street (paving contribution)  chool Street	Replace 250 LF of 4 inch CI and 96 LF of 1 1/4 inch CL with 150 LF of 4" PVC.  Replace 400 LF of 4 inch CI with 680lf of 6 inch DIPCL (creates a looped system).	2003533	DW17-183 DW17-183	26,101	2/2/2018	s -	Yes	\$ 15,00 \$ 267,00		54,705 270,734	Nashua Nashua	Yes S	27.13 \$	7 345	Added due to Kessler Farm Tank deferral to 2021.  Added due to Kessler Farm Tank deferral to 2021, restoration work that was planned for 2021 was completed in 2020.
fulton Street(Lake St Area PH2)	Replace 180 LF of 2" CL with 4" DIPCL - addition to Lake St Ph 2 project.	2007556	DW17-183	26,101	2/2/2018	ş -	Yes	\$ 92,90		80,801	Nashua	Yes S	27.13		Added due to Kessler Farm Tank deferral to 2021.  Added due to Kessler Farm Tank deferral to 2021.
Manatee St (Lake St Area PH2)	Replace 240 LF of 6 inch CI with 8" DIPCL - addition to Lake St Ph 2 project.	2007543	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 54,50	0 \$	49,820	Nashua	Yes §	27.13	1,352	Added due to Kessler Farm Tank deferral to 2021.
Ash St (Lake St Area PH2)	Replace 480 LF of 6 inch CI with 8 and 6 inche DIPCL - added to Lake StPh 2.	2007540	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 164,30		149,975	Nashua	Yes 5	27.13		Added due to Kessler Farm Tank deferral to 2021.
ields Grove Crossing (Lake St Area PH2)	Cross City park with 16" HDPE direction bore - 890 LF- added to Lake St Ph 2.	2007557 2007541	DW17-183 DW17-183	26,101 26,101	2/2/2018	\$ -	Yes	\$ 20,00		00.022	Nashua	Yes S	27.13		Added due to Kessler Farm Tank deferral to 2021.
Pine St (Lake St Area PH2) Manatee and Sarasota intersection work ngalls St - complete in 2020	Cut in tees for manatee and sarasota.  Emergency water main replacement - 175' of Galv (1921) replaced with 4" PVC.	2007541 2007544	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	s -	Yes Yes	\$ 31,50 \$ 37,00		90,922 33,471	Nashua Nashua	Yes S	27.13 \$		Intersection work associated with Sarasota and Manatee projects.  Added due to Kessler Farm Tank deferral to 2021.
Ingalis St - complete in 2020  Walnut St - water main (added to crescent/school st project)	Paving related to water main replacement - replace 56' of 12" CI and 230' of 8" CI (1925-	2006558	DW17-183	26,101	2/2/2018	-		\$ 37,00		74,774	Nashua				
	unlined) with 286' of 12" DIP.	2000356				ş -	Yes	3 84,00	.0 3	74,774		Yes \$	27.13		Added due to Kessler Farm Tank deferral to 2021, \$\$ from paving contribution in row 67 added in.
Walnut St (paving contribution)	Paving Contribution for paving in 2021.		DW17-183	26,101	2/2/2018	\$ -	Yes	3 -			Nashua	Yes \$	27.13 \$	-	Added due to Kessler Farm Tank deferral to 2021, \$\$ in row 66.  Added due to Kessler Farm Tank deferral to 2021. The majority of this project will be occurring in 2021 due to later than expe
Coburn Woods (all side streets)	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL.	2002685	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 118,00	10		Nashua	Yes	27.13	-	bid opening.
Pennichuck Brook Ponds Aerial Survey	Pennichuck Brook Ponds Aerial Survey	2006039	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 21,70		2,209	Nashua	No \$	27.13	-	Drouight response. Survey of exposed bottow of Harris and Bowers Pond.
Upgrade SCADA historian software, new hardware	Upgrade SCADA historian software, new hardware.	2000376	DW17-183	26,101	2/2/2018	\$ 65,000	Yes	\$ 65,00	0 \$	54,749	Nashua	Yes \$	27.13	1,485	
Bowers Dam LOD response engineeriing	Bowers Dam LOD response engineering	1901734, 1907078, 2000373		0.1 DSRR		\$ 10,000	No	\$ 10,00	0 \$	6,761	Nashua/Merrimack	No \$	27.83	· -	Bowers Dam LOD response engineering
Harris LOD response engineering	Harris LOD response engineering	1907076, 2000375		0.1 DSRR		\$ 20,000		\$ 20,00			Nashua/Merrimack	No \$	27.83	-	Deferred
supply Pond LOD response engineering	Supply Pond LOD response engineering	1907077, 2000374		0.1 DSRR		\$ 32,000	No	\$ 32,00	0 \$	15,788	Nashua/Merrimack	No \$	27.83	-	Deferred Council Counc
Rebuild Pump 1, Northwest, Nashua	Final costs for reinstallation and alignment.	1619402, 1701898, 1918550, 2000438	DW17-183	26,101	2/2/2018	\$ 5,000	Yes	\$ 3,45	i7 \$	53,457	Nashua	Yes	27.13	1,450	Previous Year work was instrumental in the completion of the rebuild of NW Pump #1, remaining \$50,000 for the rebuild of NW Pump #2. See row 94 below.
New Vehicle for WS electrician	Final costs for fit up of new truck purchased in 2019.	2000437	DW17-183	26,101	2/2/2018	\$ 3,000	Yes	\$ 3,00	0 \$	2,360	Nashua	No \$			
MSDC payment to MWW	MSDC payment for MSDC gallons beyond that currently purchased.	2009023	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 166,34	6 \$	166,347	Various	No \$	28.45		During 2020, PWW used 47,341 MSDC gallons beyond what had been purchased. 3,450 of the MSDC gallons were purchased
									+				S	-	cash collected via MSDC tariff. The remaining 43,891 gallons were used by existing customers.
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	60, 61, 62 & 63 workorders	DW17-183	26,101	2/2/2018	\$ 40,000	Yes	\$ 25,00	0 \$	33,239	Various	Yes	28.45	946	9 Booster Pumps Repaired/Replaced through 11/30/2020. 1 additional rebuilds projected by end of year.
Booster Pump replacement/rebuild	Replace Booster #1, Donald Street	2008275	DW17-183	26,101	2/2/2018	ş -	Yes	\$ 6,00	_	5,319	Bedford	Yes §	24.62 \$	131	
Booster Pump replacement/rebuild	WTP Intermediate pump #2 electric motor rebuild	2007216 60, 61, 62 & 63	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 12,64		12,644	Nashua	Yes \$	27.13 \$	343	
Well Pump replacements	Well Pump replacements	workorders	DW17-183	26,101	2/2/2018	\$ 15,000	Yes	\$ 5,02	.5 \$	15,160	Various	Yes \$	28.45	431	2 well pumps repaired/replaced through 12/31/20.

							o con a c	Estimated Project	F. 15			2020 77	QCPAC Eligible	
Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Board Approved 2020 Capex Budget	QCPAC Eligible?	Cost as of 11/30/2020	Final Project cost as of 12/31/2020	Community	Taxable	2020 Tax Rate (1)	Property Tax Expense	Explanation for Change/Addition/Deletion from Board Approved 2020 Capex Budget
emical Feed pump replacements	Rebuild Ferric Feed Pumps 2 & 3	2002269	DW17-183	26,101	2/2/2018	\$	Yes	\$ 3,243	S 3.541	Various	Yes	\$ 28.45	\$ 101	
rris Dam raise earthen embankment, raise dike wall	Harris Dam raise earthen embankment, raise dike wall.	n/a	DW17-183	26,101	2/2/2018	\$ 965,000	Yes	\$ -	9 5,541	Nashua/Merrimack	Yes	\$ 27.83	\$ -	Deferred until 2021, Engineering services in 2020, See Row 72.
. Structural Improvements	Misc. Structural Improvements	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	Yes	S -		Various	Yes	\$ 28.52	S -	
. Structural Improvements	Replace Fire Alarm System Control Boards - Damaged by Lightning Strike.	2006032	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 15,120	\$ 14,242	Nashua	Yes	\$ 27.13	s 386	
: Structural Improvements	Replace Maple Haven Pump Station Rood.	2008269	DW17-183	26,101	2/2/2018		Yes	\$ 4,235	\$ 5,170	Derry	Yes	\$ 29.06	s 150	
ellaneous Equipment Purchased	Miscellaneous Equipment Purchased	n/a	DW17-183	26,101	2/2/2018	\$ 17,500	Yes	\$	,	Nashua	Yes	\$ 27.13	\$ 150	
ellaneous Equipment Purchased	Replace Sewage Ejection Pump, Snow Station	2003515	DW17-183	26,101	2/2/2018	\$ 17,500	Yes	\$ 3,300	\$ 3,287	Nashua	Yes	\$ 27.13 \$ 27.13	s 89	
rellaneous Equipment Purchased	WTP Replace Filter-to-Waste Valve	1918552	DW17-183	26,101	2/2/2018	s -	Yes	\$ 2,353		Nashua	Yes	\$ 27.13		This was in 2019 budget, but did not go useful until 2020.
ellaneous Equipment Purchased	Replace Sludge Pump #2, WTP.	2004525	DW17-183	26,101	2/2/2018	s -	Yes	\$ 3,410		Various	Yes	\$ 28.52	\$ 97	
tellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	DW17-183	26,101	2/2/2018	\$ 30,000	1	s -	,	Various	Yes	\$ 28.52	S -	
ellaneous SCADA/Electrical	Replace VFD, Pump #3 - High Pines Booster	2003512	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 9,500	\$ 9,523	Nashua	Yes	\$ 27.13	\$ 258	
ellaneous SCADA/Electrical	Install cellular SCADA device, HI and LO, Derry.	2004180	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 2,500	\$ 2,354	Derry	Yes	\$ 27.02	\$ 64	
ellaneous SCADA/Electrical	SCADA control system, Powder Hill, Donald St.	2004989	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 9,500		Bedford	Yes	\$ 27.02	\$ -	Deferred
llaneous SCADA/Electrical	Replace Intermediate Pump 3, VFD at WTP.	2008126	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 5,500		Nashua	Yes	\$ 27.13	S -	Deferred
ild NWS booster pump #2	Rebuild NWS booster pump #2.	2003436	DW17-183	26,101	2/2/2018	\$ 40,000	Yes	\$ 50,000	\$ 43,464	Nashua	Yes	\$ 27.13	\$ 1,179	
Structural/HVAC	WTP Structural/HVAC	n/a	DW17-183	26,101	2/2/2018	\$ 10,000		\$ -		Nashua	Yes	\$ 27.13		
ase new lab equipment	Purchase new lab equipment.	n/a	DW17-183	26,101	2/2/2018	\$ 20,000		\$ 5,000		Nashua	Yes	\$ 27.13	\$ -	
laneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	DW17-183	26,101	2/2/2018	\$ 10,000		\$ -	_	Various	Yes	\$ 27.13	S -	
e Vehicle 200	Replace Vehicle 200	2007616	DW17-183	26,101	2/2/2018	\$ 40,000		\$ 35,000		Nashua	No	\$ 27.13	S -	
e Vehicle 201 e Vehicle 63	Replace Vehicle 201  Replace Vehicle 63	2004137	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 55,000 \$ 40,000	Yes	\$ 55,000	\$ 53,062	Nashua Nashua	No No	\$ 27.13 \$ 27.13	3 - e	Deferred
/Replace Soffit and Fascia, Boat House Bldg.	Replace Vehicle 6.3  Repair/Replace Soffit and Fascia, Boat House Bldg.	n/a n/a	DW17-183	26,101	2/2/2018	\$ 40,000 \$ 30,000	Yes Yes	9 -		Nashua Nashua	No Yes	\$ 27.13 \$ 27.13		No contractors available. Deferred until 2021.
n media changeout-filters 5 & 6	Carbon media changeout-filters 5 & 6.	n/a 2003490	DW17-183	26,101	2/2/2018	\$ 500,000 \$ 500,000	Yes	\$ - \$ 450,000	\$ 495,331	Nashua Nashua	Yes	\$ 27.13 \$ 27.13	\$ 13,438	
l new Day Fuel Tank, Controller and related equip., FWPS Generator	Install new Day Fuel Tank, Controller and related equip., FWPS Generator.	n/a	DW17-183	26,101	2/2/2018	\$ 500,000 \$ 75,000		\$ 450,000	475,551	Nashua Nashua	Yes	\$ 27.13 \$ 27.13		Deferred until 2021. Project scope being evluated under new code.
OA PLC Replacements	SCADA PLC Replacements	n/a	DW17-183	26,101	2/2/2018	\$ 75,000 \$ 75,000	Yes	s -		Nashua	Yes	\$ 27.13 \$ 27.13	s -	Deferred until 2021. Project scope being evidated under new code.  Deferred until 2021.
ce 2 Hach Turbidimeters and associated control module	Replace 2 Hach Turbidimeters and associated control module.	2007545	DW17-183	26,101	2/2/2018	\$ 10,000		\$ 18,000	\$ 16,929	Nashua	Yes	\$ 27.13	s 459	Changed from 2 to 4 units.
ld Merrimack River pump #2	Rebuild Merrimack River pump #2.	2008305	DW17-183	26,101	2/2/2018	S -	Yes	\$ 93,100		Merrimack	Yes	\$ 28.86		
Pond Dam Modifications per NHDES LOD	Engineering, Permitting, Design Services	2008270		0.1 DSRR	•	ş -	No	\$ 69,000		Merrimack/Nashua	No	\$ 27.55	\$ -	Engineering Design Work only
Dam Raise Earthen Embankment, Dike wall	Engineering, Permitting, Design Services	2008271		0.1 DSRR		ş -	No	\$ 90,000		Merrimack/Nashua	No	\$ 27.55	s -	Engineering Design Work only
FER Enhancements	Munis FER Enhancements	n/a	DW17-183	26,101	2/2/2018	\$ 35,000	Yes	\$ 35,000		Merrimack	No	\$ 28.52	S -	
Hardware	Misc Hardware	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	Yes	\$ 1,500		Merrimack	No	\$ 28.52	\$ -	
Hardware	Laptop Purchase for Regulatory Department - JK	2001987	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 1,660	\$ 1,397	Merrimack	No	\$ 28.52	\$ -	Purchase to accommodate work from home created by COVID19.
Hardware	Laptop Purchase for Regulatory Department - CAH	2002761	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 1,400	\$ 1,397	Merrimack	No	\$ 28.52	S -	Purchase to accommodate work from home created by COVID19.
Hardware	Laptop Purchase for onboarding employees (5)	2002930	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 9,995		Merrimack	No	\$ 28.52	\$ -	Purchase to accommodate work from home created by COVID19.
Hardware	Laptop Purchase for New Employee C. Harding	2005120	DW17-183	26,101	2/2/2018	ş -	Yes	\$ 2,491	\$ 2,491	Merrimack	No	\$ 28.52	ş -	Purchase to accommodate work from home created by COVID19.
Hardware	Spare Laptop Purchase	2005238	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 1,005		Merrimack	No	\$ 28.52		Purchase to accommodate work from home created by COVID19.
Hardware	New Laptop for Accounting new hire - Payroll Admin	2006388	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 1,160	\$ 1,160	Merrimack	No	\$ 28.52	<u> </u>	Purchase to accommodate work from home created by COVID19.
Software	Misc Software	n/a	DW17-183	26,101	2/2/2018	\$ 12,000		\$ -		Merrimack	No	\$ 28.52	<u> </u>	
Software Software	Macola Development Environment for testing upgrade.  Tyler Notify	2002276 2003317	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ -	Yes Yes	\$ 5,280 \$ 3,840	\$ 6,400 \$ 3,024	Merrimack Merrimack	No No	\$ 28.52 \$ 28.52	5 -	
Software	MSL Server License for Munis Upgrade	2005976	DW17-183	26,101	2/2/2018	ş - s	Yes	\$ 6,350	3 3,024	Merrimack	No	\$ 28.52 \$ 28.52	s -	Deferred
ite upgrades	Website upgrades	n/a	DW17-183	26,101	2/2/2018	\$ 8,000		s -		Merrimack	No	\$ 28.52	s -	Detered .
ne upgrade.	The server at WTP is over 7 years old and should be replaced. I am recommending to replace		2000				100	ů		THE THINKS		9 20.02		
on Replacement at WTP	the server with a VM host for ease of use and reliability.	2003704	DW17-183	26,101	2/2/2018	\$ 15,000	Yes	\$ 15,000	\$ 9,366	Merrimack	No	\$ 28.52	\$ -	
onal UPS for Distribution Data Center	We are starting to leverage this datacenter more with more equipment. The current UPS is over subscribed and we need to protect everything in there.	2003493	DW17-183	26,101	2/2/2018	\$ 1,600	Yes	\$ 1,600	\$ 2,060	Merrimack	No	\$ 28.52	S -	
i Wireless AP's for WTP	The current AP's at WTP are tied into the wireless at HQ. We will be changing to the Maraki solution for HQ so these will need to be replaced.	2003426	DW17-183	26,101	2/2/2018	\$ 3,000	Yes	\$ 3,000	\$ 3,252	Merrimack	No	\$ 28.52	\$ -	
e Replacement for PS6110 Array	Nimble addon shelf – 33tb usable	2003425	DW17-183	26,101	2/2/2018	\$ 57,000	Yes	\$ 30,000	\$ 16,145	Merrimack	No	\$ 28.52	s -	
Backup of O365	Backup documents stored in the cloud within Office 365.	n/a	DW17-183	26,101	2/2/2018	\$ 2,000		\$ 2,000		Merrimack	No	\$ 28.52	s -	
Remote Control Software	5 licenses	n/a	DW17-183	26,101	2/2/2018	\$ 1,300	Yes	\$ 1,300		Merrimack	No	\$ 28.52	S -	
			DW17-183	26,101	2/2/2018			[. ]						
replacment project	Replace Synergen/WAM with newer more cost effective/improved functionality system.	2000368		· ·		\$ 600,000		\$ 450,000		Nashua	Yes	\$ 27.13		Project implementation has been slowed due to COVID19. Project \$\$ not used in 2020 will carry over into 2021.
uilding	New Building	2001988		0.1 DSRR		\$ 78,300	No	\$ 140,000		Nashua	Yes	\$ 27.13	\$ 16,558	
uilding - Server Room Networking	Routers/Switches/Racks/Patch Panels	2100047		0.1 DSRR		\$ 19,000	No	\$ 12,800	\$ 14,888	Nashua	Yes	\$ 27.13	\$ 404	
uilding - Phone System	Replacement of existing Phone sytem. New system will not work with existing hardware.	2100043		0.1 DSRR		\$ 70,000	No	\$ 60,000	\$ 77,830	Nashua	Yes	\$ 27.13	\$ 2,112	
- IOS mobile Management	Software configuration support for JAMF product.	2004171	DW17-183	26,101	2/2/2018	\$ 6,000	Yes	\$ 6,000	\$ 5,400	Merrimack	No	\$ 28.52	S -	
nent Management	Software to allow for document tracking and flow management (Accounting).	n/a	DW17-183	26,101	2/2/2018	\$ 8,000	Yes	s -		Merrimack	No	\$ 28.52	\$ -	
oftware move to MS sql	Move Click Database from Oracle to MS sql in order to retire Oracle after the WAM replacement project is complete.	2003421	DW17-183	26,101	2/2/2018	\$ 45,000	Yes	\$ 19,500	\$ 140,012	Merrimack	No	\$ 28.52	S -	
Street, Final Restoration	2020 Carryover Costs	2000693	DW17-183	26,101	2/2/2018	ş -	Yes	\$ 1,500	\$ 1,500	Nashua	Yes	\$ 27.13	\$ 41	Not included in approved 2020 Budget.
Street, Final Restoration	2020 Carryover Costs	2000694	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 2,500		Nashua	Yes	\$ 27.13	\$ <u>-</u>	Not included in approved 2020 Budget.
arl Street, Final Restoration	2020 Carryover Costs	2000695	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 12,750	\$ 12,750	Nashua	Yes	\$ 27.13	\$ 346	Not included in approved 2020 Budget.
ge	Paid out in 2020 on retainage held on 2019 projects.	N/A	DW17-183	26,101	2/2/2018	ş -	Yes	\$ 162,383	\$ 164,061	Nashua	Yes	\$ 27.13	\$ 4,451	
ge	Held on various projects listed above. Will be paid out in 2021.	N/A	DW17-183	26,101	2/2/2018	ş -	Yes	\$ (54,805)		Nashua	Yes	\$ 27.13	<b>\$</b> (957)	
interest	Interest accrued on PWW FALOC from 5/1/2020 to 4/1/2021.		DW17-183	26,101	2/2/2018	ş -	Yes	\$ 70,000		Various	No	\$ 28.45		Projected interest accrued on FALOC \$\$ for funding of 2020 Capex projects.
eet, Final Restoration	2020 Carryover Costs	2000696	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 21,750		Nashua	Yes	\$ 27.13		Not included in approved 2020 Budget.
Street, Final Restoration	2020 Carryover Costs	2000697	DW17-183	26,101	2/2/2018	\$ -	Yes	\$ 1,500		Nashua	Yes	\$ 27.13		Not included in approved 2020 Budget.
rum Hand Truck	New Drum Hand Truck	2003534	DW17-183	26,101	2/2/2018	\$ -	Yes		\$ 1,383	Nashua	Yes	\$ 27.13		
e Sludge Discharge Pump #1	Replace Sludge Discharge Pump #1	2100054	DW17-183	26,101	2/2/2018	\$ -	Yes	<del>                                     </del>	\$ 3,522	Nashua	Yes	\$ 27.13 \$ 27.13	\$ 96	
	M-Scopes & Metal Detectors	2100055	DW17-183	26,101	2/2/2018	<b>,</b> -	Yes		\$ 9,910	Nashua	Yes	\$ 27.13	\$ 269	
ppes & Metal Detectors  Space Planning	Office Space Planning	1806837, 1917427		0.1 DSRR	Į.	e	No		\$ 30,045	Nashua	No	\$ 27.13		

0.1 DSRR Funded project Total - \$
Total Projected PWW QCPAC Capex for 2020 - \$
Total Projected PWW QCPAC Capex for 2020 funded with Bonds - \$
Amount funded by DWGTF Northwest System Improvements - \$
Amount funded by DWGTF Merrimack River Intake - \$
Project Annual P&I on 2020 QCPAC eligible Projects - \$ 229,300 9,766,400 9,211,025 415,000 140,375 564,236 334,800 \$
6,542,055 \$
5,994,446 \$
355,500 \$
192,109 \$
376,789 \$ 849,428 6,101,832 5,605,797 355,660 140,375 351,395

PWW QCPAC Filing Exhibit DLW-1 Page 3

Project Name/Description	Project Description	Work Order#	Financing Docket No.	NHPUC Order No.	Board App. Date of NHPUC Order 2020 Capex I	ved QCPAC dget Eligible?	Estimated Proje Cost as of 11/30/2020	Final Project cost as of 12/31/2020	Community Taxal	2020 Tax le Rate (1)	Explanation for Change/Addition/Deletion from Board Approved 2020 Capex Budget
	Estimated Bond Terms (Bonds to be sold in April 2021) -	30	Years @	4.056692%	\$ 53	347	\$ 349,0	50 \$ 326,419			
	Merrimack River Intake DWGTF Terms -	30	Years @	3.38%	S	518	\$ 10.2	39 \$ 7,518			

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

											QCPAC	
Project Name/Description	Project Description	Work Order#	Financing Docket No.	Date of NHPUC NHPUC Order No. Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Project Cost as of 6/30/2020	Community	Taxable	Tax Rate (1)	Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2021 Filing
Foreman Truck	Upfit of Foreman's Truck body at JC Madigans.	NTD		0.1 DSRR	\$ 61,000	No	\$ 61,000	Merrimack	No	\$ 28.52		1 01
2021 New Services (10)	Single Family, Owner Build, New Homes	Routine	DW20-157	Awaiting Approval	\$ 50,000	Yes	\$ 80,000	Various	Yes	\$ 28.45		7 New Services installed through 06/30/21, projecting 3 more
2021 Renewed Services (20) 2021 Hydrants (15)	Replacement of Failed Services  Replacement of non-functional hydrants	Routine Routine	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 110,000 \$ 90,000	Yes Yes	\$ 60,000 \$ 60,000	Various Various	Yes Yes	\$ 28.45 \$ 28.45		7 8 Renewed Services installed through 06/30/21, projecting 12 more 7 1 Hydrant installed/repaired through 06/30/21, projecting 9 more
2021 Gates (10)	Replacement of Failed Gate Valves	Routine	DW20-157	Awaiting Approval	\$ 40,000	Yes	\$ 120,000	Various	Yes	\$ 28.45		4 18 Gates installed/epaired through 06/30/21, projecting 10 more
2021 Radios (250) 2021 Radios (4250)	Replacement of failed radios  Yr 1 of 7 Replacement of all PWW Radios installed in 2007 (4000). New Radios for new customers (250)	Routine 2101626	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 425,000	Yes Yes	\$ 11,000 \$ 400,000	Various Various	Yes Yes	\$ 28.45 \$ 28.45		3 47 Radios installed through 06/30/21 projecting 70 more 525 Radios installed through 06/30/21 projecting 3500 more
2021 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (250). Replacement of failed meters(250).	Routine	DW20-157	Awaiting Approval	\$ 50,000	Yes	\$ 50,000	Various	Yes	\$ 28.45	-	3 154 Meters installed through 06/30/21, projecting 200 more
Replacement Utility Truck	Replacement for Truck #83 - 2011 F350, 110K miles, High maint costs & lots of body rust/rot.  Replacement for Truck #9 - 2014 F350, 110K Miles, High maint costs & significant rust.	2103610 2103609	DW20-157	Awaiting Approval	\$ 70,000	Yes	\$ 70,000	Merrimack	No	\$ 28.52		
Replacement Utility Truck Replacement Full Size Pickup	Replacement for Truck #9 - 2014 F350, TTUK Miles, High maint costs & significant rust.  Replacement for Truck #95 - 2008 Ford Ranger 110K miles did not pass inspection.	2103609	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 70,000 \$ 45,000	Yes Yes	\$ 70,000 \$ 45,000	Merrimack Merrimack	No No	\$ 28.52 \$ 28.52		
Replacement Full Size Pickup	Replacement for Truck # 20 - 2008 Ford Ranger 135K miles did not pass inspection.	NTD	DW20-157	Awaiting Approval	\$ 45,000	Yes	\$ -	Merrimack	No	\$ 28.52	-	Deferred until 2022
Replacement SUV - Meter Reading  Landscape Improvements	Replacement for vehicle #21 - 2013 Chevy Equinox 135k miles, high maint costs & suspension issues.  Irrigation system, loam & seed area at front of Distribution Building.	2103615 NTD	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 35,000 \$ 15,000	Yes Yes	\$ 35,000 \$ 15,000	Merrimack Merrimack	No Yes	\$ 28.52 \$ 28.52		3
Replacement Valve/vac trailer	Replacement for # 96 - 2010 EHWA Valvemate - Valve Turner not functional and cannot get parts.	2105021	DW20-157	Awaiting Approval	\$ 65,000	Yes	\$ 72,000	Merrimack	No	\$ 28.52		
Replacement Equipment Trailer	Replacement for # 53 - 14' BigTex Trailer - Excessive rust & rot and safety issues.	NTD NTD	DW20-157	Awaiting Approval	\$ 7,500	Yes	\$ 7,500		No	\$ 28.52	1	
Protectus Meter Upgrade Valve Turner & Vac Truck	Protectus Meter Upgrade  Replacement for #60 - 15 Year Vac/Valve Trailer with excessive rot, will not pass inspection.	N1D 2103613	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 22,000 \$ 200,000	Yes Yes	\$ 22,000 \$ 200,000	Nashua Merrimack	Yes No	\$ 27.13 \$ 28.52		
Office Space for Const & Maint Supervisor	Permanent office space for Contruction & Maintenance Supervisor	NTD	DW20-157	Awaiting Approval	\$ 15,000	Yes	\$ 15,000	Merrimack	Yes	\$ 28.52	\$ 42	3
Locker Room Deep Wash Sinks Locker Room Benches	Deep stainless wash sinks to replace existing sinks in male & female locker rooms.  Permanent Benches for Male & Female locker rooms.	NTD NTD	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 10,000 \$ 7,500	Yes Yes	\$ 10,000 \$ 7,500	Merrimack Merrimack	Yes Yes	\$ 28.52 \$ 28.52		
Distribution Facility Bird Mitigation	Installation of 3/4" Bird Mitigation Netting to the Outside Vehicle/equipment covered storeage area	2105481	DW20-15/	Awaiting Approvai	\$ -	Yes	\$ /,500 \$ 27,000	Merrimack Merrimack	Yes	\$ 28.52 \$ 28.52		Level of Birds nesting and bird excrement required addition of this netting for health and safety
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch DIPCL.	2102529	DW20-157	Awaiting Approval	\$ 103,000	Yes	\$ 100,000	Nashua	Yes	\$ 27.13	\$ 2,71	3
	Replace 410 LF of 6 inch CI with 4 inch DIPCL.  Replace 425 LF of 4 inch CI with 8 inch DIPCL.	2102528 2102532	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 33,000 \$ 24,000	Yes Yes	\$ 75,000 \$ 25,000	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13		
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL.	combined with above	DW20-157 DW20-157	Awaiting Approval	\$ 24,000 \$ 12,000	Yes	\$ 15,000	Nashua	Yes	\$ 27.13		7 This budget was combined with other Burritt Street budget.
	Replace 675 LF of 6 inch CI with 8 inch DIPCL.	2102534	DW20-157	Awaiting Approval	\$ 56,000	Yes	\$ 60,000	Nashua	Yes	\$ 27.13		
Sarasota Ave Merrimack River Pumping Station	Replace 250 LF of 6 inch CI with 8 inch DIPCL.  Add third 350 horsepower pump with electrical and Structural Improvements.	2102531 2102256	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 24,000 \$ 140,000	Yes Yes	\$ 18,000 \$ 140,000	Nashua Merrimack	Yes Yes	\$ 27.13 \$ 28.52	-	'
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2101759	DW20-157	Awaiting Approval	\$ 4,000,000	Yes	\$ 4,000,000	Nashua	Yes	\$ 27.13	\$ 108,520	
Coburn Woods (all side streets) Merrimack River Intake	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL.  Merrimack River Intake Modified Source Water Protection Plan	2002685 & 2101761 2101763	DW20-157	Awaiting Approval 0.1 DSRR	\$ 1,855,000 \$ 30,000	Yes	\$ 1,855,000 \$ 110,000	Nashua Merrimack	Yes	\$ 27.13 \$ 28.52		Budget increased based on the results of risk analysis and the resulting actions required by the NHDES.
Balcom Street	Replace 1240 LF 6 inch CI with 1240 LF 8 inch DIPCL.	NTD	DW20-157	Awaiting Approval	\$ 30,000	No Yes	\$ 110,000	Nashua	No Yes	\$ 28.52		5 Deferred to 2022 for Projects associated with sewer and other utility replacement
Euclid Avenue	Replace 425 LF 6 inch CI with 425LF 8 inch DIPCL.	NTD	DW20-157	Awaiting Approval	\$ 100,000	Yes	\$ 100,000	Nashua	Yes	\$ 27.13		B Deferred to 2022 for Projects associated with sewer and other utility replacement
Ash Street Chataqua Avenue	Final Paving Design work for 2022 project	2102530 2101749	DW20-157	Awaiting Approval 0.1 DSRR	\$ - \$ -	Yes No	\$ 30,000 \$ 10,000	Nashua Nashua	Yes	\$ 27.13 \$ 27.13		Not included in original board approved budget     Not included in original board approved budget. Response to Nashua sewer replacement
Manatee Street	Final Paving, Includes Pine St Interesection	2102535	DW20-157	Awaiting Approval	\$ -	Yes	\$ 16,000	Nashua	Yes	\$ 27.13		Not included in original board approved budget. Response to I vasilida sewer replacement.  Not included in original board approved budget.
Niquette Drive	Emergency water main replacement across E. Dunstable Rd for continued main replacement in 2022	2103936 2105496	DW20-157	Awaiting Approval	\$ -	Yes	\$ 52,000	Nashua	Yes	\$ 27.13		Not included in original board approved budget
Miami Street 377 Main Street Repairs	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL  Damaged sewer lateral that only surfaced 2 years after completion of the project - Main St Area Ph 2	2105496	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	S -	Yes Yes	\$ 177,100 \$ 25,000	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13	\$ 4,80	Not included in original board approved budget. Response to Nashua sewer replacement  Not included in original board approved budget
Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL	2105500	DW20-157	Awaiting Approval	\$ -	Yes	\$ 189,640	Nashua	Yes	\$ 27.13	\$ 5,14	Not included in original board approved budget. Response to Nashua sewer replacement
Faxon Avenue Faxon Street	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC  Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL	2105579 2105580	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ -	Yes Yes	\$ 85,800 \$ 219,400	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13		Not included in original board approved budget. Response to Nashua sewer replacement  Not included in original board approved budget. Response to Nashua sewer replacement
Sweet Hill Internnection	Connecting Pipeline and Meter Pit	NTD		NHDES SRF ot DWGTF	\$ 250,000	Yes	\$ -	Plaistow	Yes	\$ 28.45	S -	Deferred to 2022 for NHSRF Funding
Twin Ridge Interconnection PWW RRA- ERP	Connecting Pipeline and Meter Pit Engineering Evaluations to Implement Recommendations	NTD NTD		NHDES SRF ot DWGTF 0.1 DSRR	\$ 100,000 \$ 200,000	Yes No	\$ - \$ 200,000	Plaistow Various	Yes No	\$ 28.45 \$ 28.45		Deferred to 2022 for NHSRF Funding
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	NTD	DW20-157	Awaiting Approval	\$ 32,000	Yes	\$ 200,000	Various	Yes	\$ 28.45		
Merrimack River Watershed Council	Grant Match with othe Stakeholders \$40k for five years.	NTD	T218/20 457	0.1 DSRR Awaiting Approval	\$ 40,000	No	\$ 40,000	Various	No	\$ 28.45		3 27 Developer installed services through 06/30/21 projecting 80 more.
Investment in Developer Services Engineering Vehicle	1x Annual Revenue SUV Replaces a 2014 vehicle with over 150,000 miles.	Routine NTD	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 90,000 \$ 30,000	Yes Yes	\$ 140,000 \$ 30,000	Various Nashua	Yes No	\$ 28.45 \$ 27.13		3 2/ Developer installed services through 06/30/21 projecting 80 more.
Engineering Vehicle	SUV Relpaces (#34) 2010 with over 196,000 miles.	NTD	DW20-157	26,459 3/2/2021	\$ 30,000	Yes	\$ 30,000	Nashua	No	\$ 27.13	S -	
Route 101A Water Main Relocation  Northwest Pressure System Analysis	Route 101A Water Main Relocation  Hydraulic analysis of the Northwest Pressure Systems to provide for increase demands from Milford, NH	2008857 & 2102006 2105480	DW20-157	26,459 3/2/2021 0.1 DSRR	\$ -	Yes Yes	\$ 505,000 \$ 25,000	Nashua Nashua	Yes No	\$ 27.13 \$ 27.13		Not included in original board approved budget. Relocation required by NHDOT  Not included in original board approved budget
	Hydraulic modelling and Engineering analysis of the Pennichuck Distribution system's abiltiy to provide water to	2105499	0.1 DSRR	U.I DORK	9 -	V		Nashua	N-	\$ 27.13		Not included in original board approved budget
Distribution System Analysis - HUDSON	Hudson, NH		0.1 D3KK	0.4 DCDD	\$ -	res			No			0 11 0
New Building COO Vehicle	New Building 2021 Carryover Costs  SUV Replaces a 2014 vehicle with over 150,000 miles.	2001988 & 2101751 NTD	DW20-157	0.1 DSRR 26,459 3/2/2021	\$ 30,000	No Yes	\$ 35,000 \$ -	Nashua Nashua	Yes No	\$ 27.13 \$ 27.13		Not included in original board approved budget  Not needed. COO to provide own vehicle.
Bon Terrain Contractual Payment	Phase 1 payment per SNHWC contract with Tana Properties.	NTD	DW20-157	26,459 3/2/2021	\$ 129,200	Yes	\$ 129,200	Amherst	No	\$ 32.93	\$ -	
Booster Pump replacement/rebuild Booster Pump replacement/rebuild	Booster Pump replacement/rebuild Bowers Landing Replace VFD, Fire Pump #1	Routine 2102277	DW20-157 DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ 40,000	Yes Yes	\$ 30,000 \$ 4,719	Various Various	Yes Yes	\$ 28.45 \$ 28.45		4 6 Booster Pump installed/repaired through 06/30/21 projecting 6 more.
Booster Pump replacement/rebuild	Bowers Landing Replace VFD, Fire Pump #2	2102277	DW20-157	26,459 3/2/2021	\$ -	Yes	\$ 4,641	Various	Yes	\$ 28.45		
Well Pump replacements	Well Pump replacements Chemical Feed pump replacements	Routine	DW20-157	26,459 3/2/2021	\$ 15,000 \$ 10,000	Yes Yes	\$ 24,000 \$ 4,000	Various	Yes	\$ 28.45		3 3 Well Pump installed/repaired through 06/30/21, projecting 3 more
Chemical Feed pump replacements Supply Pond Spillway Improvements	Supply Pond Spillway Improvements	Routine 2101927	DW20-157 DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ 750,000	Yes	\$ 4,000 \$ -	Various Merrimack/Nashua	Yes Yes	\$ 28.45 \$ 27.83		4 0 Chemical Pumps installed/repaired through 06/30/21 projecting 2 more  Work not required due to Hazard level reclassification of Bowers Dam
Harris Dam raise earthen embankment, raise dike wall, regulatory requirement.	Harris Dam raise earthen embankment, raise dike wall, regulatory requirement.	2101956	DW20-157	26,459 3/2/2021	\$ 965,000	Yes	\$ -	Merrimack/Nashua	Yes			Deferred to 2022. Project scope will change due to no change to Hazard level classification of Bowers Dam
			DW00 457	2,470						\$ 27.83	\$ -	
Misc. Structural Improvements	Misc. Structural Improvements	NTD	DW20-157	26,459 3/2/2021	\$ 20,000	Yes	\$ 15.515	Various	Yes	\$ 28.45	\$ 44	
Misc. Structural Improvements	Replace Sewage Ejection Pump 2, WTP	2102276	DW20-157	26,459 3/2/2021	\$ -	Yes	\$ 4,485	Various	Yes	\$ 28.45	\$ 12	Pump failed
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	NTD	DW20-157	26,459 3/2/2021	\$ 20,000	Yes	\$ 15,000	Various	Yes	\$ 28.45	<del> </del>	
Miscellaneous Equipment Purchased Miscellaneous SCADA/Electrical	Install Softener, Farley Road Estates, Nashua Miscellaneous SCADA/Electrical	2104003 NTD	DW20-157 DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ -	Yes Yes	\$ 5,000 \$ 21,500	Various Various	Yes Yes	\$ 28.45 \$ 28.45		2 Water level hardness has increased and requires treatment 2 Some budget money was pulled into 2102309 VFD pump #3
			DW20-157	26,459 3/2/2021	,							Needed to allow Station to communicate with water tank in Hudson. Needed to allow for automatic tank fills
Miscellaneous SCADA/Electrical Rebuild 1 High lift/Intermediate pump	Replace PLC and install cellular modem, Taylor Falls Station, Nashua Rebuild 1 High lift/Intermediate pump	2104170 NTD	DW20-157	26,459 3/2/2021	\$ 30,000 \$ 25,000	Yes Yes	\$ 5,500 \$ 25,000	Various Nashua	Yes Yes	\$ 28.45 \$ 27.13		5 required by shuttering of Dame well due to PFAS.
Replace VFD, Intermediate Pump #3 WTP	Replace VFD, Intermediate Pump #3 WTP	2102309	DW20-157	26,459 3/2/2021	\$ -	Yes	\$ 28,000	Nashua	Yes	\$ 27.13	\$ 76	VFD failed
WTP Structural/HVAC Purchase new lab equipment	WTP Structural/HVAC Purchase new lab equipment	NTD NTD	DW20-157	26,459 3/2/2021	\$ 10,000 \$ 20,000	Yes	\$ 10,000 \$ 20,000	Various	Yes	\$ 28.45		
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	NTD NTD	DW20-157 DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ 20,000 \$ 10,000	Yes Yes	\$ 20,000 \$ 1,850	Nashua Various	Yes Yes	\$ 27.13 \$ 28.45		3
Miscellaneous Fencing and Security projects Add Third pump - Donald Street Booster Station	Install Perimeter Fence around remote wells, Badger Hill, Milford	2103214	DW20-157	26,459 3/2/2021	\$ -	Yes	\$ 8,150	Various	Yes	\$ 28.45	\$ 23:	Added due to vandalism
Add Third pump - Donald Street Booster Station  Vehicle replacement	Add Third pump - Donald Street Booster Station  Vehicle replacement-replace vehicle 210. >160,000 miles, 3K repairs in 2020.	NTD NTD	DW20-157 DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ 40,000 \$ 55,000	Yes Yes	\$ - \$ 55,000	Bedford Nashua	Yes No	\$ 24.62 \$ 27.13		deferred until 2022
Vehicle replacement	Vehicle replacement - Replace vehicle 351. >163,000 miles, 6K repairs in 2020.	NTD	DW20-157	26,459 3/2/2021 26,459 3/2/2021	\$ 40,000	Yes	\$ 40,000	Nashua	No	\$ 27.13		
Replace 6 filter turbidimeters (manufacturer no longer supports current units).	Replace 6 filter turbidimeters (manufacturer no longer supports current units).	NTD	DW20-157	26,459 3/2/2021	\$ 30,000	Yes	\$ 30,000	Nashua	Yes	\$ 27.13	\$ 81	
Rebuild of Pump 2 @ Merrimack River Intake.	Rebuild of Pump 2 @ Merrimack River Intake.	NTD	DW20-157	26,459 3/2/2021	\$ 75,000	Yes	\$ 75,000	Merrimack	Yes	\$ 28.52	\$ 2,13	/

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PWW QCPAC Filing Exhibit DLW-1

Pennichuck Water Works, Inc.
DW 21-032
Projected 2021 QCPAC Capital Expenditures
2/11/2021, Updated 6/30/2021, Revised 8/23/21 - Attachment DOE DR 2-3

Project Name/Description	Project Description	Work Order#	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Appro Budgeted		CPAC Eligible?	Estimated Proj Cost as of 6/30/2020	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense Explanation for Change/Addition/Deletion since Feb 2021 Filing
Repair/Replace Soffit and Fascia, Boat House Bldg.	Repair/Replace Soffit and Fascia, Boat House Bldg.	2103205	DW20-157	26,459	3/2/2021	\$	30,000	Yes	\$ 15,0	00 Nashua	Yes	\$ 27.13	s \$ 407
Install new Day Fuel Tank, Controller and related equip. FWPS Generator	Regulatory requirement, existing equipment is malfunctioning and unreliable, Soft metals present in piping system which is not allowed.	NTD	DW20-157	26,459	3/2/2021	\$	75,000	Yes	\$	Nashua	No	\$ 27.13	
Replace Pakscan Master Station, WTP	Replace Pakscan Master Station, WTP	2103886	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 44,0	00 Nashua	Yes	\$ 27.13	. ,
New SCADA Control System, Powder Hill, Bedford	New SCADA Control System, Powder Hill, Bedford	2103888	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 9,5		Yes	\$ 24.62	
CMMS replacment project (Estimate)	Replace Synergen/WAM with newer more cost effective/improved functionality system.	2101757	DW20-157	26,459	3/2/2021	\$	100,000	Yes	\$ 100,0	00 Nashua	Yes	\$ 27.13	\$ 2,713
Infoview Licenses	Infoview Licenses	2104021	DW20-157	26,459	3/2/2021	\$	65,000	Yes	\$ 53,4	50 Nashua	No	\$ 27.13	s s -
Redundant Internet	The new phone system, these phone lines use the internet to make and receive telephone calls. We currently only have a single internet feed for the office and the WTP/Distribution facilities. This project provides a secondary internet feed into the Distribution facility which internet will provide us a redundant path to the internet in case one fails. This secondary internet feeds the internet load from the 3 major locations between the 2 internet connections instead of one.	2102395	DW20-157	26,459	3/2/2021	ş	69,000	Yes	\$ 69,0	00 Nashua	No	\$ 27.13	S -
Treatment Plant and Distribution security retrofit	Update both the Treatment plant and Distribution to the same security system that the new HQ is using so that there is one badge procedure and system to maintain. It will also gives us better analytics and notifications of access to each of the buildings.  Add tool box, work bench and parts storage to the IT room to keep things organized to provide a place	2103934	DW20-157	26,459	3/2/2021	ş	37,000	Yes	\$ 120,0	00 Nashua	Yes	\$ 27.13	Change of Scope for 2 remote facilities. Existing wiring at Distribution not adequate for new system. Add gate, request for Exit, change int keypad functionality.
IT Storage Room / Work Room	to work on physical computers and perform repairs.	NTD	DW20-157	26,459	3/2/2021	\$	4,000	Yes	\$ 4,0	00 Nashua	Yes	\$ 27.13	\$ \$ 109
Cybernetics Disk Array	Replace 7 year of device used for system back ups.	2104055	DW20-157	26,459	3/2/2021	\$	20,000	Yes	\$ 12,0	00 Nashua	Yes	\$ 27.13	\$ \$ 326
Virtual Desktops	The majority of the office computers will be 5 years old in 2021. The plan is create a Virtual Desktop that will support up to 50 concurrent users. By shifting the computing and disk requirements to a client server will increase computer speed that will allow the existing desktops to remain in service for several more years. Additionally the client server provides more flexibility to the end user to allow them to work at other locations and still get all their settings and programs to perform their job.	2104056	DW20-157	26,459	3/2/2021	ş	106,000	Yes	\$ 60,0	00 Nashua	No	\$ 27.13	s s -
Computer Updates	There are 30 Computers that are due for replacement in 2023. These computers have very slow hard dr	NTD	DW20-157	26,459	3/2/2021	\$	6,000	Yes	\$ 6,0	00 Nashua	No	\$ 27.13	s s -
Snow Station Switch Replacement	Replace the outdated switch that connects the fiber optic cable from outsdie to the inside of the WTP.	NTD	DW20-157	26,459	3/2/2021	\$	1,000	Yes	\$ 1,0	00 Nashua	Yes	\$ 27.13	s \$ 27
Munis FER Enancements	Munis FER Enhancements	NTD	DW20-157	26,459	3/2/2021	\$	35,000	Yes	\$ 35,0	00 Nashua	No	\$ 27.13	s s -
Click to Munis Data interfaces	Implement connection between ClickSoft and Munis to reduce the need of user to duplicate data entery into Munis from information captured in ClickMobile.	NTD	DW20-157	26,459	3/2/2021	\$	20,000	Yes	\$ 20,0		No	\$ 27.13	· ·
CMMS PLL Implementation	Implemtation of Cityworks PLL. Cityworks PLL simplifies applications for customers and streamlines wo		DW20-157	26,459	3/2/2021	\$	170,000	Yes	\$ 125,5	_	Yes	\$ 27.13	
Cityworks PLL License	License for above (Estimate)	NTD	DW20-157	26,459	3/2/2021	\$	40,000	Yes	\$ 13,8	_	No	\$ 27.13	,
Misc Hardware	Misc Hardware	NTD	DW20-157	26,459	3/2/2021	\$	20,000	Yes	\$ 8,0		No	\$ 28.45	
Misc Hardware	Small MFP's at Distribution	2101826	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 2,1		No	\$ 28.45	
Misc Hardware	Replacement Laptops - CS	2102671	DW20-157	26,459	3/2/2021	\$	-	Yes		00 Various	No	\$ 28.45	
Misc Hardware	Replacement Laptops - CS	2103177	DW20-157	26,459	3/2/2021	\$	-	Yes		49 Various	No	\$ 28.45	
Misc Hardware	4 iPads & iPad cases	2105019	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 2,8		No	\$ 28.45	
Remote User Laptops	Remote User Laptops	2104113	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 36,0		No	\$ 28.45	
Misc Software	Misc Software	NTD	DW20-157	26,459	3/2/2021	\$	12,000	No	\$ 12,0		No	\$ 28.45	· ·
WTP Wifi expansion	WTP Wifi expansion	NTD	DW20-157	26,459	3/2/2021	\$	15,000	Yes	\$	Nashua	No	\$ 27.13	Determined that the need was not there for the use of this technology.
Projected short term interest on FALOC	Interest incurred to finance 2021 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$	-	Yes	\$ 128,3		No		
		Pennich	nuck Water Works Proj	jected 2021 Total Capital	Expenditure Budget -	- \$ 12	2,045,200		\$ 11,538,2	99 Projected Pr	operty Tax Expen	se associated wit	h \$ 268,528

	Total P	,	funded PWW QCF	ded PWW QCPAC Capex for 2021 - \$\) ded PWW QCPAC Capex for 2021 - \$\) Total for 0.1 DSRR Projects - \$\)		11,404,200 350,000 291,000	\$ \$ \$	11,032,299 - 506,000
Estimated Bond Terms (Bonds to be sold in April 2022) -	30	Years @	4.0%	resulting in P&I of	s	659,506	\$	637,999
DWGTF Terms -	30	Years @	3.38%	resulting in P&I of	\$	18,745	\$	-

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

PWW QCPAC Filing Exhibit DLW-1

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Projected 2022 QCPAC Capital Expenditures 2/11/2021 Revised 5/26/21 per Staff Tech Session DR, 7/20/21 Staff DR1 6/30/2021 Update

Project Name/Description  2022 New Services (10)  2022 Renewed Services (20)	Project Description Work Order #	Financing Docket							
2022 Renewed Services (20)		No.	NHPUC Order Date of NHPUC No. Order	Approved Budgeted Amount	QCPAC Eligible	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense Explanation for Change/Addition/Deletion since Feb 2021 Filing
( -/	Single Family, Owner Build, New Homes	DW20-157	Awaiting Approval	\$ 50,000	Yes	Various	Yes	\$ 28.45	\$ 1,423
	Replacement of Failed Services	DW20-157	Awaiting Approval	\$ 110,000	Yes	Various	Yes	\$ 28.45	\$ 3,130
2022 Hydrants (15)	Replacement of non-functional hydrants	DW20-157	Awaiting Approval	\$ 90,000	Yes	Various	Yes	\$ 28.45	\$ 2,561
2022 Gates (10)	Replacement of Failed Gate Valves	DW20-157	Awaiting Approval	\$ 40,000	Yes	Various	Yes	\$ 28.45	, , , ,
2022 Radios (500)	Replacement of failed Radios (250), New Radios for new customers (250).	DW20-157	Awaiting Approval	\$ 50,000	Yes	Various	Yes	\$ 28.45	
2022 Radios (4000) 2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	Yr 2 of 7 Replacment of all PWW Radios installed in 2007 (4000) by contractor.  New meters for new customers, including PFOA (250). Replacement of failed meters(250).	DW20-157	Awaiting Approval	\$ 520,000 \$ 50,000	Yes	Various	Yes	\$ 28.45	
Replacement Boom Truck	Replacement for #19 - 2011 Ford F450 - High Milage, Maintenance & Safety issues.	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 150,000	Yes Yes	Various Merrimack	Yes No	\$ 28.45 \$ 28.52	
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles.	DW20-157	Awaiting Approval	\$ 70,000	Yes	Merrimack	No	\$ 28.52	
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles.	DW20-157	Awaiting Approval	\$ 70,000	Yes	Merrimack	No	\$ 28.52	
Replacment Supervisor Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup.	DW20-157	Awaiting Approval	\$ 45,000	Yes	Merrimack	No	\$ 28.52	
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles.	DW20-157	Awaiting Approval	\$ 40,000	Yes	Merrimack	No	\$ 28.52	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	Awaiting Approval	\$ 22,000	Yes	Nashua	Yes	\$ 27.13	
Miscellaneous Construction Equipment			0.1 DSRR	\$ 40,000	Yes	Merrimack	Yes	\$ 28.52	
Balcom Street	Replace 1240 LF 6 inch Cl with 1240 LF 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 73,600	Yes	Nashua	Yes	\$ 27.13	· /
Euclid Avenue Fairview Street	Replace 425 LF 6 inch CI with 425LF 8 inch DIPCL.  Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL.	DW20-157 DW20-157	Awaiting Approval	\$ 25,200 \$ 47,000	Yes	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13	
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL.	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 47,000	Yes Yes	Nashua	Yes	\$ 27.13 \$ 27.13	'
School Street ( High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL.	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 66,000	Yes	Nashua	Yes	\$ 27.13 \$ 27.13	
Sargent Street	Replace 1900 LF 6 inch Cl with 1900 LF 16 inch DIPCL.	DW20-157	Awaiting Approval	\$ 480,000	Yes	Nashua	Yes	\$ 27.13	
Courtland Street	Replace 1170 LF 4 inch Cl with 1170 LF 16 inch DIPCL.	DW20-157	Awaiting Approval	\$ 300,000	Yes	Nashua	Yes	\$ 27.13	" /
Alld Street	Replace 1860 LF of 6 & 8 inch Cl with 12 inch DIPCL.	DW20-157	Awaiting Approval	\$ 740,000	Yes	Nashua	Yes	\$ 27.13	
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL.	DW20-157	Awaiting Approval	\$ 420,000	Yes	Nashua	Yes	\$ 27.13	\$ 11,395
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 160,000	Yes	Nashua	Yes	\$ 27.13	
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 280,000	Yes	Nashua	Yes	\$ 27.13	" /
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL.	DW20-157	Awaiting Approval	\$ 61,000	Yes	Nashua	Yes	\$ 27.13	'
Spaulding Avenue St Lazare Street	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL.  Replace 415 LF of 2 inch CI with 4 inch DIPCL.	DW20-157	Awaiting Approval	\$ 80,000	Yes	Nashua	Yes	\$ 27.13	
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL.	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 80,000 \$ 40,000	Yes Yes	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13	
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL.	DW20-157	Awaiting Approval	\$ 73,000	Yes	Nashua	Yes	\$ 27.13	
Copp Street	Replace 350 LF of 6 inch Cl with 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 103,000	Yes	Nashua	Yes	\$ 27.13	
Fairview Street	Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 189,000	Yes	Nashua	Yes	\$ 27.13	
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL.	DW20-157	Awaiting Approval	\$ 85,000	Yes	Nashua	Yes	\$ 27.13	\$ 2,306
Additional Water Main Replacement	To be determined	DW20-157	Awaiting Approval	\$ 1,100,000	Yes	Nashua	Yes	\$ 27.13	
2022 Nashua City Sewer Projects	To be determined	DW20-157	Awaiting Approval	\$ 900,000	Yes	Nashua	Yes	\$ 27.13	
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	DW20-157	Awaiting Approval	\$ 500,000	Yes	Various	Yes	\$ 28.45	\$ 14,226
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years for land conservation/protection in the Merrimack River Watershed.		0.1 DSRR	\$ 40,000	No	Various	No	\$ 28.45	\$ -
Investment in Developer Services	1x Annual Rvenue	DW20-157	Awaiting Approval	\$ 90,000	Yes	Various	Yes	\$ 28.45	
Replace Engineering Pickup	Replace vehicle with high mileage.	DW20-157	Awaiting Approval	\$ 40,000	Yes	Nashua	No	\$ 27.13	"
Replace Engineering Pickup Milford Booster Station	Replace vehicle with high mileage.  Replace/Relocate/Upgrade the Milford Booster Station (>4MGD)	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 40,000 \$ 800,000	Yes No	Nashua Amherst	No Yes	\$ 27.13 \$ 32.93	
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL.	DW20-157	Awaiting Approval	\$ 263,000	Yes	Nashua	Yes	\$ 27.13	" '
School Street ( High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 108,000	Yes	Nashua	Yes	\$ 27.13	
Linwood Street	Replace 960 LF of 6 inch CI with 8 inch DIPCL.	DW20-157	Awaiting Approval	\$ 283,800	Yes	Nashua	Yes	\$ 27.13	1 27.2.1
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	Awaiting Approval	\$ 40,000	Yes	Various	Yes	\$ 28.45	
Well Pump replacements	Well Pump replacements	DW20-157	Awaiting Approval	\$ 15,000	Yes	Various	Yes	\$ 28.45	\$ 427
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	Awaiting Approval	\$ 10,000	Yes	Various	Yes	\$ 28.45	
Install/replace treatment systems in small CWS.	Install/replace treatment systems in small CWS.	DW20-157	Awaiting Approval	\$ 15,000	Yes	Various	Yes	\$ 28.45	
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	Awaiting Approval	\$ 15,000	Yes	Various	Yes	\$ 28.45	
Miscellaneous Equipment Purchased Miscellaneous SCADA/Electrical	Miscellaneous Equipment Purchased  Miscellaneous SCADA/Electrical	DW20-157 DW20-157	Awaiting Approval Awaiting Approval	\$ 20,000 \$ 30,000	Yes Yes	Various Various	Yes Yes	\$ 28.45 \$ 28.45	
Well Rehabilitation	Well Rehabilitation	DW20-157	Awaiting Approval	\$ 50,000	Yes	Various	Yes	\$ 28.45	
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	Awaiting Approval	\$ 10,000	Yes	Nashua	Yes	\$ 27.13	
Bowers Pond Spillway Improvements	Bowers Pond Spillway Improvements to bypass revised NHDES flows	DW20-157	Awaiting Approval	\$ 1,800,000	Yes	Merrimack/Nashua	Yes	\$ 27.83	
Purchase new lab equipment	Purchase new lab equipment	DW20-157	Awaiting Approval	\$ 20,000	Yes	Nashua	Yes	\$ 27.13	\$ 543
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	Awaiting Approval	\$ 10,000	Yes	Nashua	Yes	\$ 27.13	
Re-paint FWPS ceiling	Re-paint FWPS ceiling	DW20-157	Awaiting Approval	\$ 20,000	Yes	Nashua	Yes	\$ 27.13	
WTP Replace Vehicle	Replace High Mileage Vehicle.	DW20-157	Awaiting Approval	\$ 65,000	Yes	Nashua	No	\$ 27.13	
WTP Replace Vehicle Misc Hardware	Replace High Mileage Vehicle.	DW20-157	Awaiting Approval 0.1 DSRR	\$ 40,000	Yes	Nashua	No No	\$ 27.13	
Misc Software	Misc Hardware Misc Software		0.1 DSRR 0.1 DSRR	\$ 20,000 \$ 12,000	No No	Nashua Nashua	No No	\$ 27.13 \$ 27.13	
Network Hardawre infrastructure improvements	Update aging network infrustructure.	DW20-157	Awaiting Approval	\$ 12,000	No Yes	Nashua Nashua	No No	\$ 27.13 \$ 27.13	
Major Software Replacement Project	- F	25 20-157	0.1 DSRR	\$ 60,000	No	Nashua	No	\$ 27.13	
Munis Enhancements	Munis Enhancements	DW20-157	Awaiting Approval	\$ 35,000	Yes	Nashua	No	\$ 27.13	
	Pennichuck Wate	er Works Projected 2	022 Total Capital Expenditure Budget -	\$ 11,208,600		Projected Prope	rty Tax Expense	associated with	\$ 290,383

10,236,600 less 800,000 for Milford Booster. Milford to pay the 1.1x P&I

172,000

Total Projected Bond funded PWW QCPAC Capex for 2021 - \$
Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2021 - \$
Total for 0.1 DSRR Projects - \$

Years @ 4.0% resulting in P&I of \$ 591,984

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

Estimated Bond Terms (Bonds to be sold in April 2022) -

Revised 6/16/2020 per Staff Tech DR-1, 7/20/21 Staff DR1

											QCPAC	
			Financing Docket	NHPUC Order	Date of NHPUC	Approved	QCPAC				Eligible Property Tax	Explanation for Change/Addition/Deletion since Feb 2021
Project Name/Description	Project Description	Work Order #	No.	No.	Order	Budgeted Amount	Eligible?	Community	Taxable	Tax Rate (1)	Expense	Filing
2023 New Services (10)	Single Family, Owner Build, New Homes		DW20-157	Awaiting	Approval	\$ 50,000	Yes	Various	Yes	\$ 28.45	\$ 1,423	
2023 Renewed Services (20)	Replacement of Failed Services		DW20-157	Awaiting	Approval	\$ 110,000	Yes	Various	Yes	\$ 28.45	, ,	
2023 Hydrants (15)	Replacement of non-functional hydrants		DW20-157	Awaiting	1.1	\$ 90,000	Yes	Various	Yes	\$ 28.45	" '	
2023 Gates (10)	Replacement of Failed Gate Valves		DW20-157	Awaiting	* *	\$ 40,000	Yes	Various	Yes	\$ 28.45	, ,	
2023 Radios (500)	Replacement of failed Radios (250), New Radios for new customers (250).		DW20-157	Awaiting	* *	\$ 50,000	Yes	Various	Yes	\$ 28.45		
2023 Radios (4000) 2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	Yr 2 of 7 Replacment of all PWW Radios installed in 2007 (4000) by contractor. New meters for new customers, including PFOA (250). Replacement of failed meters (250).		DW20-157	Awaiting	* *	\$ 520,000	Yes	Various	Yes	\$ 28.45		
Replacement Utility Truck	New Helers for flew customers, including PFOA (250). Replacement of failed meters(250).  New Utility Truck to replace existing high mileage/maintenance vehicles.		DW20-157 DW20-157	Awaiting Awaiting	1.1	\$ 50,000 \$ 70,000	Yes Yes	Various Merrimack	Yes No	\$ 28.45 \$ 28.52		
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles.		DW20-157	Awaiting	* *	\$ 70,000	Yes	Merrimack	No	\$ 28.52		
Replacement Supervisor Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup.		DW20-157	Awaiting	1.1	\$ 45,000	Yes	Merrimack	No	\$ 28.52	,	
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles.		DW20-157	Awaiting	* *	\$ 40,000	Yes	Merrimack	No	\$ 28.52		
Protectus Meter Upgrade	Protectus Meter Upgrade		DW20-157	Awaiting	* *	\$ 22,000	Yes	Nashua	No	\$ 27.13		
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment			0.1 DSRR	11	\$ 40,000	Yes	Merrimack	Yes	\$ 28.52		
PWW RRA- ERP	Implement Recommendations Evaluated in 2021.		DW20-157	Awaiting	Approval	\$ 500,000	Yes	Various	Yes	\$ 28.45	\$ 14,226	
Sargent Street	Replace 1900 LF 6 inch CI with 1900 LF 16 inch DIPCL.		DW20-157	Awaiting	Approval	\$ 84,000	Yes	Nashua	Yes	\$ 27.13	\$ 2,279	
Courtland Street	Replace 1170 LF 4 inch CI with 1170 LF 16 inch DIPCL.		DW20-157	Awaiting	Approval	\$ 52,000	Yes	Nashua	Yes	\$ 27.13	\$ 1,411	
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL.		DW20-157	Awaiting	Approval	\$ 130,000	Yes	Nashua	Yes	\$ 27.13	\$ 3,527	
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL.		DW20-157	Awaiting	* *	\$ 73,000	Yes	Nashua	Yes	\$ 27.13		
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL.		DW20-157	Awaiting	1.1	\$ 28,000	Yes	Nashua	Yes	\$ 27.13		
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL.		DW20-157	Awaiting	1.1	\$ 48,000	Yes	Nashua	Yes	\$ 27.13	, ,	
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL.		DW20-157	Awaiting	* *	\$ 11,000	Yes	Nashua	Yes	\$ 27.13		
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch Cl with 4 inch DIPCL.		DW20-157	Awaiting	1.1	\$ 14,000	Yes	Nashua	Yes	\$ 27.13		
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL.		DW20-157	Awaiting		\$ 14,000	Yes	Nashua	Yes	\$ 27.13		
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL.		DW20-157	Awaiting		\$ 6,000	Yes	Nashua	Yes	\$ 27.13		
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL.		DW20-157	Awaiting	1.1	\$ 13,000	Yes	Nashua	Yes	\$ 27.13		
Copp Street	Replace 350 LF of 6 inch Cl with 8 inch DIPCL.		DW20-157	Awaiting	1.1	\$ 18,000	Yes	Nashua	Yes	\$ 27.13		
Gray Avenue	Replace 360 LF of 6 inch Cl with 6 inch DIPCL.		DW20-157	Awaiting	* *	\$ 15,000	Yes	Nashua	Yes	\$ 27.13		
2022 Nashua City Sewer Projects Fairview Street	To be detremined (Paving)  Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL.		DW20-157 DW20-157	Awaiting Awaiting	11	\$ 200,000 \$ 47,000	Yes Yes	Nashua Nashua	Yes Yes	\$ 27.13 \$ 27.13		
Water Main Replacement Additional Paving Carry Over	TBD from 2022		DW20-157	Awaiting	1.1	\$ 400,000	Yes	Nashua	Yes	\$ 27.13	-	
Booster Station Replacement/Upgrade	To be determined		DW20-157	Awaiting	* *	\$ 800,000	Yes	Nashua	Yes	\$ 27.13	-	
Water Main Replacement	To be determined		DW20-157	Awaiting	1.1	\$ 3,700,000	Yes	Nashua	Yes	\$ 27.13		
2023 Nashua City Sewer Projects	To be determined		DW20-157	Awaiting	1.1	\$ 900,000	Yes	Nashua	Yes	\$ 27.13		
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.			0.1 DSRR	11	\$ 40,000	No	Various	No	\$ 28.45	-	
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		DW20-157	Awaiting	Approval	\$ 32,000	Yes	Merrimack	No	\$ 28.52		
Investment in Developer Services	1x Annual Rvenue		DW20-157	Awaiting	Approval	\$ 90,000	Yes	Various	Yes	\$ 28.45	\$ 2,561	
Replace Engineering SUV	Replace vehicle with high mileage.		DW20-157	Awaiting	Approval	\$ 30,000	Yes	Various	Yes	\$ 28.45	\$ 854	
Replace Engineering Pickup	Replace vehicle with high mileage.		DW20-157	Awaiting	Approval	\$ 40,000	No	Various	Yes	\$ 28.45	\$ 1,138	
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		DW20-157	Awaiting	Approval	\$ 40,000	Yes	Various	Yes	\$ 28.45	\$ 1,138	
Well Pump replacements	Well Pump replacements		DW20-157	Awaiting	Approval	\$ 15,000	Yes	Various	Yes	\$ 28.45		
Chemical Feed pump replacements	Chemical Feed pump replacements		DW20-157	Awaiting	* *	\$ 15,000	Yes	Various	Yes	\$ 28.45		
Carbon media changeout-filters 1 & 2 (Spring of 2023)	Carbon media changeout-filters 1 & 2		DW20-157	Awaiting	1.1	\$ 500,000	Yes	Nashua	Yes	\$ 27.13	-	
Install/replace treatment systems in small CWS.	Install/replace treatment systems in small CWS.		DW20-157	Awaiting	1.1	\$ 15,000	Yes	Various	Yes	\$ 28.45	,	
Misc. Structural Improvements	Misc. Structural Improvements Miscellaneous Equipment Purchased		DW20-157	Awaiting	* *	\$ 20,000	Yes	Various	Yes	\$ 28.45		
Miscellaneous Equipment Purchased Miscellaneous SCADA/Electrical	Miscellaneous Equipment Purchased  Miscellaneous SCADA/Electrical		DW20-157 DW20-157	Awaiting	* *	\$ 20,000	Yes	Various	Yes	\$ 28.45		
Well Rehabilitation	Well Rehabilitation		DW20-157	Awaiting Awaiting	* *	\$ 30,000 \$ 50,000	Yes Yes	Various Various	Yes Yes	\$ 28.45 \$ 28.45		
WTP Structural/HVAC	WTP Structural/HVAC		DW20-157	V	Approval	\$ 30,000		Various Nasnua	Yes	\$ 28.45		
Purchase new lab equipment	Purchase new lab equipment.		DW20-157	Awaiting	* *	\$ 20,000	Yes	Nashua	No	\$ 27.13		
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW20-157	Awaiting	* *	\$ 10,000	Yes	Various	Yes	\$ 28.45		
Replace Vehicle	Replace High Mileage Vehicle.		DW20-157	Awaiting	* *	\$ 65,000	Yes	Nashua	No	\$ 27.13		
Carbon media chageout - 3 & 4 (Fall of 2023)	Carbon media chageout - 3 & 4		DW20-157	Awaiting	* *	\$ 500,000	Yes	Nasnua	Yes	\$ 27.13	,	
Replace Vehicle	Replace High Mileage Vehicle.		DW20-157	Awaiting	* *	\$ 40,000	Yes	Nashua	No	\$ 27.13		
Misc Hardware	Misc Hardware			0.1 DSRR	**	\$ 20,000	No	Nashua	No	\$ 27.13		
Misc Software	Misc Software			0.1 DSRR		\$ 12,000	No	Nashua	No	\$ 27.13		
Network Hardware infrastructure improvements	Update aging network infrustructure.		DW20-157	Awaiting	Approval	\$ 80,000	Yes	Nashua	No	\$ 27.13	_	
Major Software Replacement Project				0.1 DSRR		\$ 60,000	No	Nashua	No	\$ 27.13	\$ -	
Munis Enhancements	Munis Enhancements			0.1 DSRR		\$ 35,000	No	Amherst	No	\$ 32.93	\$ -	
Misc Computer replacements				0.1 DSRR		\$ 15,000	No	Nashua	No	\$ 27.13	\$ -	
		Pennichuck War	ter Works Projected 2	2020 Total Capital Ex	penditure Budget -	\$ 10,054,000		Projected Prope	erty Tax Expense	associated with	\$ 257,112	

Total Projected Bond funded PWW QCPAC Capex for 2021 - \$ 9,832,000

Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2021 - \$

Total for 0.1 DSRR Projects - \$ 222,000

Estimated Bond Terms (Bonds to be sold in April 2022) -Years @ 4.0% resulting in P&I of \$ 568,586

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

Pennichuck Water Works
2021 PWW QCPAC filing
DW 21-023
Attachment DOE DR 2-4
Comparison of Electrical vs. Carbon Expenses
7/21/2021
8/23/2021

Comparsion based on treating

11.975 MGD. This is the average daily pumpage through the WTP over the past 5 years

350 HP for one Merrimack River Pump 0.746 Kw per HP 261.1 KW - electrical draw for one Merrimack River Pump 8000 gpm - Average flow rate for 1 MRI pump 11.53 MGD - Average flow rate for 1 MRI pump 0.1206 Unit electrical Cost per KW-Hr - Based on 2020 WTP electrical expenses 755.73 to run one 350 HP pump 24 hours 65.56 Electrical cost per MG 286,552 Additional electrical cost per year to pump from the Merrimack River 1,650,000 Cost of complete Carbon Change out 1.5 Expected Carbon life in years with Pennichuck Brook at average PFOA levels of **18 PPT** 6.75 Expected Carbon life in years with Merrimack River at average PFOA levels of 4 PPT MRI carbon life controlled by Taste and Odor or by loss of PFOA adsorption. 1,100,000 Annual expense of Carbon bed change out if Pennichuck Brook is used as the raw water supply 244,444 Annual expense of Carbon bed change out if the Merrimack River is used as the raw water supply 530,996 Annual cost of using MRI (electric + Carbon) 3.84 Comparison of PB Carbon Change out to MRI electrical cost 2.1 Comparison of PB Carbon Change out to MRI electrical and Carbon Change out cost

From: Countie, Chris <chris.countie@PENNICHUCK.com>

Sent: Wednesday, August 25, 2021 3:36 PM

To: Ware, Don

Subject: FW: [EXTERNAL] RE: Bowers Dam, confirmation of Hazard Classification



Chris Countie
Director, Water Supply and Community Systems
Pennichuck Water
25 Walnut St.
Nashua, New Hampshire 03061-0428

Ph: (603) 913-2372

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From: Findon-Henry, Jonathan < Jonathan. D. Findon-Henry@des.nh.gov>

Sent: Wednesday, August 25, 2021 3:34 PM

To: Countie, Chris <chris.countie@PENNICHUCK.com>

**Subject:** [EXTERNAL] RE: Bowers Dam, confirmation of Hazard Classification

Chris, correct. NHDES classifies Bowers Pond Dam as a High Hazard Potential Dam in accordance with Env-Wr 101.21 (copied below). The justification is that the 1991 breach analysis (most recent approved analysis) by H.L Turner estimates that a breach of Bowers Pond Dam during the 100-year flood event would result in high hazard impacts in accordance with Env-Wr 101.21 to some of the condominiums located downstream, to the east of NH-3.

I have attached our rules and definitions with this email. If you are looking for information related to the classifications and/or appeals process, you can look at Env-Wr 303.02 and 303.03, and Env-Wr 402.05 (although this is more applicable to construction/reconstruction projects).

Hope this is helpful, but if not, I am happy to answer other questions or discuss.

PWW 2021 QCPAC 21-023\_2022-03**Decket N**o. DW21-023 DOE DR 2-8a Page 2 of 3

Env-Wr 101.21 "High hazard structure" means a dam that has a high hazard potential because it is in a location and of a size that failure or misoperation of the dam would result in probable loss of human life as a result of:

- (a) Water levels and velocities causing the structural failure of a foundation of a habitable residential structure or a commercial or industrial structure which is occupied under normal conditions;
- (b) Water levels rising above the first floor elevation of a habitable residential structure or a commercial or industrial structure which is occupied under normal conditions when the rise due to dam failure is greater than one foot;
- (c) Structural damage to an interstate highway which could render the roadway impassable or otherwise interrupt public safety services;
- (d) The release of a quantity and concentration of materials which qualify as "hazardous waste" as defined in RSA 147-A:2, VII; or

Thanks,

Jonny

Jonny Findon-Henry, PE
Dam Safety Engineer
Dam Bureau
Water Division
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, NH 03302

Telephone: (603) 271-7507 – desk (603) 848-8982 – cell Jonathan.D.Findon-Henry@des.nh.gov

https://www.des.nh.gov/water/dam-maintenance-and-management

From: Countie, Chris < <a href="mailto:chris.countie@PENNICHUCK.com">chris.countie@PENNICHUCK.com</a>

Sent: Wednesday, August 25, 2021 10:14 AM

To: Findon-Henry, Jonathan < <u>Jonathan.Findon-Henry@des.nh.gov</u>>
Subject: Bowers Dam, confirmation of Hazard Classification

**EXTERNAL:** Do not open attachments or click on links unless you recognize and trust the sender.

Good morning Jonny,

We've been asked to provide proof that Bowers Dam is classified as High Hazard, according to NHDES, Dam Bureau regulations. By response to this e-mail, could you please confirm this classification?

Best regards,

Chris



Chris Countie
Director, Water Supply and Community Systems
Pennichuck Water
25 Walnut St.
Nashua, New Hampshire 03061-0428

Ph: (603) 913-2372

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OWERS Reduced to a Significant Hazard	Valil									
9-May-21					171	FM 1 Au	gust 30, 2021 Letter			
			-		111	-111 1.710	guot out month out			
PENNICHUCK			n	ENER DELP						
ITEM		Su	pply Pond	Harris Pond	На	rris Dike	Bowers Pond Dam			
Earthwork & General Construction										
Erosion and Sedimentation Control										
Silt Fence (install, Maintain & Remove)	LS.	\$	30,000 \$	20,000		50,000	A. Existing Intake:			
Silt Sock (Install, Maintain & Remove)	LS.	\$	20,000 \$	16,000	\$	20,000	Structural Steel Cofferdam	LS.	5	68,00
Topsoli Removal & Stockpile	LS.	\$	10,000 \$	15,000		8,000	Demoilsh Existing Intake	LS.	\$	40,00
Compact Existing Earth w Sheeps Foot Roller	LS.	\$	20,000 \$	20,000	5	-	Fill Penstock w Concrete	LS.	\$	10,0
install and Compact New Backfill	LS.	5	35,000 \$	\$0,000		20,000	Regrade Upstream Slope	L.S.	\$	15,0
Loaming and Seeding (30' Wide for Harris)	LS.	S	32,000 \$	60,000	\$	15,000				
Testing	LS.	\$	5,000 \$	5,000	5	10,000	B. New Gates (2) & New Stanchion Bays (2):			
resung							Upstream Stoplogs/Bulkhead	LS.	\$	30,0
Remove Granite Posts	LS	4	15,000 S		5		Remove Aluminum Covers	LS.	\$	4,0
	LS.	S	15,000 \$		Š		Reconfigure Alum, Covers		\$	10,0
Sawcut Existing Pavement	LS.	\$	42.000 S		Š	-	Remove Exist. Stoplogs	LS.	\$	5,00
Remove and Discard Pavement			10,000 \$				Remove Exist. Stanchions	LS.	s	4,0
Remove Exist. Handrall from Access Walk	LS.	\$					Two (2) New Gates w/ Operator:	-		-
Remove and Replace Door to Garage at Dam	LS.	\$	8,000 \$			-	SupplyTwo (2) New Gates w/Operator	LS.	5	290.0
Remove Door Round Gate Ho. And Infili w Brick	LS.	5	5,000 \$				Install 2 New Gates	LS.	Š	40,0
Raise Concrete Walk on Both Sides of Dam	LS.	5	35,000 \$					LS.	\$	40,0
Install Granite Bollards	LS.	S	20,000 \$				Install Two (2) New Stoplog Bays	LS	2	40,0
Class 1 NHDOT Rip Rap - Placed	LS.	5	55,000 \$	,	5					
Regrade Under Bit. Pavement	LS.	5	15,000 \$		\$		C. Earthwork		100	
Replace Bit. Pavement	LS.	s	50,000 \$	143	\$	(*)	Erosion/Sediment Control	L.S.	\$	15,0
replace one ravellen							Right Side Rip-Rap	L.S.	\$	20,0
Remove Exist. Fencing and Gate	LS.	s		20,000	S		Left Side Rip-Rap	LS.	5	20,0
Replace Fencing and Gate	LS	s	. s	30,000	s		D/S Spillway Rip-Rap	LS.	\$	20,0
Shallow Conrete Retaining Wall at Abutments	LS.	s	. s	15,000	\$		Vegetative Cover Left D/S Embankment	LS.	\$	10,0
Raise Penstock Vent Pipe	LS.	Š	. s	15,000			Vegetative Cover Near Former Intake	LS.	5	5,0
	LS	5	. s	20,000			Vegetative Cover/Burrows Crest Right	LS.	\$	10,0
Reconfigure Access to Arch Dam	LZ	>	. ,	20,000	*		Topsoil Removal & Stockpile	LS.	5	15,0
					\$	10,000	Compact Existing Earth w Sheeps Foot Roller	L.S.	\$	10,0
Proof Rolling					5	180,000	Level/Grade Earth Embankment	LS.	5	20,0
Contruct Concrete Parapet Wall	LS	\$	- \$		5	35,000	CETEL) GI DOC COI DI CIIIDANI III			
Backfill Lower Section of Wall w/ Flowable Fill	LS	\$	- \$		5	15,000	D. Other			
Detail Footing Around the Existing Pipes	LS	\$	- \$				New Fence/Gate 270 LF.	LS.	\$	22,0
D/S Geotextile Fabric	LS	\$	. \$		\$	10,000		LS.	s	5,0
Filter Drain/Special RipRap	LS	5	- \$		5	80,000	Tosting	LS.	s	30,0
					4		Estimated NHDES Permit Contingency	L.S.	s	25,0
Estimated NHDES Permit Contingency	LS.	\$	30,000 \$	20,000	5	30,000				
Sub-Total	LS.	\$	452,000 S	306,000	\$	453,000		LS.	\$	784,0
Consest Conditions (1994)	0.1	s	45,200 S	30,600	S	45,300			\$	78,
General Conditions (10%)	0.1		45,200 S	30,600		45,300			\$	78,4
Overhead & Profit (10%)	0.1		45,200 S	30,600		45,300			\$	78,4
Construction Contingency (10%)	0.1	5	135,600 \$			135,900			\$	235,
Sub-Total		\$	135,600 \$	91,800	2	233,900				-
Add Budget for Structural Stability Analyses										
Supply - Left Side		S	10.000							
Supply - Left Side Supply - Spillway		5	15,000							
		5	10,000							
Supply - Right Side		3	10,000	15,000						
Harris - Left Side				25,000						
Harris - Spilliway			S							
Harris - Right Side			S	15,000		16,000				
Harris Dike		\$	- 5		\$					
Sub-Total		5	35,000 \$	55,000	\$	10,000				
TOTAL Opinion of Cast per Dam		\$	622,600	452,800	\$	598,900			\$	1,019,
TOTAL PROJECT OPINION of COST		\$	2,693,500							
Note: Engineering Costs - Use Current Budget										

# BOWERS DAM REMAINS HIGH HAZARD OPINION OF COST

Note: Engineering Costs - Use Current Budget

14-May-21

# ITEM 2. August 30, 2021 Letter





<u>ITEM</u>		Bowers		Harris Dike	
		(90	Percent)		(Raise 6")
A. Existing Intake:					
Structural Steel Cofferdam	L.S.	\$	68,000	ė.	-
Demolish Existing Intake	L.S.	\$	40,000		•
Fill Penstock w Concrete	L.S.	\$	10,000		-
Regrade Upstream Slope	L.S.	\$	15,000	>	
B. New Gates (2) & New Stanchion Bays (2):					
Upstream Stoplogs/Bulkhead	L.S.	\$	30,000		-
Remove Aluminum Covers	L.S.	\$	4,000		-
Reconfigure Alum. Covers		\$	10,000		-
Remove Exist. Stoplogs	L.S.	\$	5,000 4,000		-
Remove Exist. Stanchions	L.S.	>	4,000	Þ	-
Two (2) New Gates w/ Operator: SupplyTwo (2) New Gates w/Operator	L.S.	\$	290,000	\$	
Install 2 New Gates	L.S.	\$	40,000		-
Install Two (2) New Stoplog Bays	L.S.	\$	40,000		
C. Earthwork	L.S.	\$	15,000	4	10,000
Erosion/Sediment Control	L.S.	\$	20,000		10,000
Right Side Rip-Rap	L.S.	\$	20,000		-
Left Side Rip-Rap D/S Spillway Rip-Rap	L.S.	\$	20,000		1
Vegetative Cover Left D/S Embankment	L.S.	\$	10,000		-
Vegetative Cover Left by a Embandment Vegetative Cover Near Former Intake	L.S.	\$	6,000		-
Vegetative Cover/Burrows Crest Right	L.S.	\$	10,000		-
Topsoil Removal & Stockpile	L.S.	\$	15,000		-
Compact Existing Earth w Sheeps Foot Roller	L.S.	\$	10,000		-
Level/Grade Earth Embankment	L.S.	\$	20,000		20,000
D. Auxilliary Spillway (L/S of Dam)					
Cofferdam (Steel Sheetpiles U/S & D/S)	L.S.	\$	95,000	\$	
Excavation	L.S.	\$	22,000	\$	-
Geotextile Grid	L.S.	\$	10,000	\$	-
Backfill/Compaction	L.S.	\$	20,000	\$	-
Articulated Concrete Block (\$20./SF)	L.S.	\$	390,000	\$	i-
Loaming and Seeding	L.S.	\$	-	\$	15,000
				\$	45,000 Dike Sub-Total
E. Other	1.6	4	22 000	ċ	
New Fence/Gate 270 L.F.	L.S. L.S.	\$	22,000 5,000		
Testing		\$	30,000		1
Estimated NHDES Permit Contingency	L.S.	2	30,000	Ş	
Sub-Total Bowers	L.S.	\$	1,311,000		
Sub-Total Harris Dike	L.S.	\$	45,000		
Sub-Total for Both	L.S.	\$	1,356,000		
General Conditions (10%)	0.1	\$	135,600		
Overhead & Profit (10%)	0.1	\$	135,600		
Construction Contingency	0.1	\$	135,600		
Sub-Total		\$	406,800		
Project TOTAL Opinion of Conctruction Cost (w/Minimal Work Req'd. on Dike)		\$	1,762,800		

309