

**ATTACHMENT A**

**Exhibit DLW 1-5 PWW QCPAC Petition  
Response to DOE Discovery Requests Set 3  
July 5, 2023**

Pennichuck Water Works, Inc.  
 DW 23-015  
 Computation of QCPAC Surcharge  
 2/13/2023  
 Revised per DOE DR Sets 1, 2, and 3  
 5/18/2023 and 6/16/2023 and 6/29/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 1

	Requested 032 Revenues	DW 22- 032	QCPAC For 2022 Capital Additions pro forma	QCPAC Surcharge for 2022 Capital Addition	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions	QCPAC For 2024 Capital Additions pro forma	QCPAC Surcharge for 2024 Capital Additions	QCPAC For 2025 Capital Additions pro forma	QCPAC Surcharge for 2025 Capital Additions					
City Bond Fixed Revenue Requirement (CBFRR)	\$	7,729,032	\$ -	\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032					
DW 22-032 Operating Expense Revenue Requirement, with MOEF, per Settlement Agreement	\$	25,249,661	(1)	\$ 114,271	(4)	\$ 25,363,931	\$ 244,264	(4)	\$ 25,608,196	\$ 452,061	(4)	\$ 26,060,257	\$ 209,136	(4)	\$ 26,269,393
DW 22-032 Annual Principal and Interest Payments per Settlement Agreement	\$	7,436,923	(2)	\$ 377,666	(7)	\$ 7,814,589	\$ 856,213	(8)	\$ 8,670,802	\$ 1,411,675	(8)	\$ 10,082,477	\$ 774,747	-8	\$ 10,857,224
Principal and Interest Coverage Requirement		1.10	(3)			1.10			1.10			1.10			1.10
DW 22-032 Principal and Interest Revenue Requirement	\$	8,180,615				\$ 8,596,048			\$ 9,537,883			\$ 11,090,725			\$ 11,942,947
DW 22-032 RSF Debit	\$	(422,871)	(11)			\$ (422,871)			\$ (422,871)			\$ (422,871)			\$ (422,871)
DW 22-032 Revenue Requirement per Settlement Agreement inclusive of RSF Debit	\$	40,736,437	(10)			\$ 41,266,141			\$ 42,452,239			\$ 44,457,143			\$ 45,518,501
DW 22-032 Revenue Requirement less Other Revenues	\$	40,143,045				\$ 40,672,749			\$ 41,858,847			\$ 43,863,751			\$ 44,925,108
DW 22-032 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$	39,057,359	(6)			\$ 39,587,063			\$ 40,773,161			\$ 42,778,065			\$ 43,839,422
Percent QCPAC Surcharge (5)						1.36%			3.04%			5.13%			2.72%
Cumulative QCPAC Surcharge (9)						1.36%			4.39%			9.53%			12.24%
Cumulative QCPAC monthly increase in average single family residential bill.						\$ 0.83			\$ 2.69			\$ 5.84			\$ 7.50
Average monthly single family residential bill with QCPAC.	\$	61.28				\$ 62.11			\$ 63.97			\$ 67.11			\$ 68.78

Notes:

- (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses agreed to in the Settlement agreement for DW22-032
- (2) Annual Principal and interest payments for PWW debt associated with all plant in service as agreed to in the settlement agreement for DW22-032.
- (3) Principal and interest coverage of 1.10 is as approved in DW 16-806.
- (4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year
- (5) QCPAC percent revenue surcharges based on increase in revenues which are reflected in the Settlement agreement in DW22-032
- (6) Reduction in revenues associated with fixed contracts as follows:
- (7) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of 3.38%
- (8) QCPAC Principal and Interest expenses based on actual April 26, 2023 Bond issuance based on a 30 year bond with interest rate of 5.005716% (Total All In Interest Cost of all Series Bonds)
- (9) QCPAC Principal and Interest expenses for 2023, 2024 and 2025 QCP's are based on 5.50% for 2023 through 2025 Capital Expenditures unless funding is via an SRF/DWGTIF financing.
- (10) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues agreed to in the settlement in DW 22-032 that are impacted by the QCPAC.
- (11) Operating expense revenues agreed to in the Settlement Agreement per DW 22-032 less total Other Revenues of \$ 593,392
- (12) RSF debit agreed to in Settlement Agreement in DW 22-032

Impact on Single Family Residential Home:

	DW 22-032
Monthly meter charge agreed to in Settlement in DW 22-032 -	\$ 26.90
Average Single Family Consumption as filed in DW 22-032 (CCF) -	7.76
Volumetric Charge agreed to in Settlement in DW 22-032 -	\$ 4.43
Ave. Single Family monthly bill with rates projected upon completion of DW 22-032 -	\$ 61.28

Hudson Annual Fixed Chg	\$ 457,083	Milford Annual Fixed Chg	\$ 81,000	A-B Annual Fixed Chg	\$ 356,622	PEU Annual Fixed Chg	\$ 190,981
-------------------------	------------	--------------------------	-----------	----------------------	------------	----------------------	------------

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Year End Project Cost as of 09/30/2022	Estimated Project Cost as of 11/30/2022	Final Project cost as of 12/31/2022	Community	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Office Space for Const & Maint Supervisor	Permanent Office space for Construction & Maint Supervisor	n/a	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	\$ -	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Wash Sinks	Deep stainless wash sinks to replace existing sinks in male & female locker rooms	n/a	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	\$ 10,000	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Benches	Permanent Benches in Men's & Women's Locker Rooms	n/a	DW20-157	26,459	3/2/2021	\$ 7,500	Yes	\$ 7,500	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
2022 New Services (15)	Single Family, Owner Build, New Homes	Routine	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 75,000	\$ 102,500	\$ 102,500	Various	Yes	\$ 23.78	\$ 2,437	10 New Services installed in 2022
2022 Renewed Services (20)	Replacement of Failed Services	Routine	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	\$ 110,000	\$ 142,271	\$ 155,198	Various	Yes	\$ 23.78	\$ 3,691	32 Renewed Services completed in 2022.
2022 Hydrants (10)	Replacement of non functional hydrants	Routine	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	\$ 15,000	\$ 14,796	\$ 14,793	Various	Yes	\$ 23.78	\$ 352	2 Hydrants installed in 2022.
2022 Gates (20)	Replacement of Failed Gate Valves	Routine	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	\$ 72,000	\$ 82,863	\$ 76,944	Various	Yes	\$ 23.78	\$ 1,830	13 Gate Valves Replaced in 2022.
2022 Radios (250)	New Radios for new customers (250)	Routine	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	\$ 177,000	\$ 16,636	\$ 16,195	Various	Yes	\$ 23.78	\$ 385	163 Radios installed in 2022.
2022 Radios (2800)	Year 2 of 10 year Replacement of all PWW Radios installed in 2007 (2800)	2200381	DW20-157	26,459	3/2/2021	\$ 280,000	Yes	\$ 240,000	\$ 253,475	\$ 236,311	Various	Yes	\$ 23.78	\$ 5,619	2,142 Radios Replaced thru 11/30/2022. 300 additional radio replacements expected by year end.
2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)	Routine	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 60,000	\$ 82,786	\$ 82,204	Various	Yes	\$ 23.78	\$ 1,955	392 Meters Replaced in 2022.
Replacement Dump Truck	Replacement for Truck # 7, 2011 Peterbilt T-335, 100K+ miles, 2500 hrs, high maint & Repair	n/a	DW20-157	26,459	3/2/2021	\$ 125,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Deferred due to availability.
Replacement Utility Truck	New Utility Truck to replace #84, 2014 F-350, 120k miles, High maint & Repair costs	2204657		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,995	\$ 53,995	\$ 76,895	Merrimack	No	\$ 22.87	\$ -	
Replacement Utility Truck	New Utility Truck to replace #9, 2014 F-350, 120k miles, High Maint & Repair costs	2204656		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,600	\$ 53,600	\$ 76,500	Merrimack	No	\$ 22.87	\$ -	
Replacement Supervisor Pickup	New Full sized Pickup to replace #21, 2013 Chevy Equinox, 150k miles, Hi Maint & Repair costs	2204655	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 54,340	\$ 54,340	\$ 54,340	Merrimack	No	\$ 22.87	\$ -	
Prolectus Meter Upgrade	Prolectus Meter Upgrade	n/a	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Deferred due to availability.
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	n/a	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Budget money moved to a different unbudgeted project/projects.
New 22 Ton Tilt Trailer	22 Ton Tilt Trailer to transport Excavator for Distribution Crew Work	2205058	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ 39,421	\$ 39,421	\$ 39,421	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2206577		0.1 DSRF funds	26,459	\$ 12,000	Yes	\$ 18,450	\$ 4,572	\$ 4,572	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2206577	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 13,878	\$ 13,878	\$ 13,878	Merrimack	No	\$ 22.87	\$ -	Residual of Air Compressor cost (row 27) not covered by 0.1 DSRF funds.
New 3" Neptune Construction Meters	Purchase 2 new 3" Neptune Construction Meters to meet Demand	2203895		0.1 DSRF funds	26,459	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 23
New Cut Saws for Distribution	2 New Stihl Cust saws for Distribution	2203898		0.1 DSRF funds	26,459	\$ -	Yes	\$ 3,528	\$ 3,528	\$ 3,528	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 24
New Mechanics Field Service Vehicle	New Mechanics Field Service Vehicle	2204653	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 58,900	\$ 58,900	\$ 78,800	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Replacement Utility Trailer	Replacement Utility Trailer for Foreman	2204991	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,800	\$ 6,800	\$ 6,800	Merrimack	No	\$ 22.87	\$ -	
New Neptune Construction Meters	2 New Neptune Construction Meters for Contractor requests	2205668	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Irrigation Sys. Inst. at Dist. Facility	Installation of Irrigation System at Distribution Facility	2205669	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,120	\$ 3,120	\$ 3,120	Merrimack	No	\$ 22.87	\$ -	
Loam & Hydroseed at Dist. Facility	Installation of Loam and Hydroseeding at Distribution Facility	2205672	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 8,333	\$ 8,333	\$ 8,333	Merrimack	No	\$ 22.87	\$ -	
New Volvo ECR88D Excavator	New Volvo ECR88D Excavator	2208205	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 123,261	\$ 123,261	\$ 125,303	Merrimack	No	\$ 22.87	\$ -	
Purchase New 4-Ton hotbox w/30 Gal Tack Tank	Purchase New 4-Ton hotbox w/30 Gal Tack Tank	2208362	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 49,900	\$ 49,900	\$ 49,900	Merrimack	No	\$ 22.87	\$ -	
DynaPac Pavement Roller	DynaPac Pavement Roller	2208363	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 21,500	\$ 21,500	\$ 21,500	Merrimack	No	\$ 22.87	\$ -	
Trailer for Pavement Roller	Trailer for Pavement Roller	2208364	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,980	\$ 6,980	\$ 6,980	Merrimack	No	\$ 22.87	\$ -	
Purchase 4 New Pavement Saws	Purchase 4 New Pavement Saws	2209555	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,000	\$ 6,000	\$ 6,000	Merrimack	No	\$ 22.87	\$ -	
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2200501	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 272,000	\$ 200,103	\$ 200,776	Nashua	Yes	\$ 23.55	\$ 4,728	
Coburn Woods (all side streets) Phase 1	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	2200500	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 189,000	\$ 179,254	\$ 183,474	Nashua	Yes	\$ 23.55	\$ 4,321	
Miami Street	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL	2201253	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	\$ 187,550	\$ 186,176	\$ 185,648	Nashua	Yes	\$ 23.55	\$ 4,372	
Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL	2201252	DW20-157	26,459	3/2/2021	\$ 190,000	Yes	\$ 130,000	\$ 142,868	\$ 142,894	Nashua	Yes	\$ 23.55	\$ 3,365	Paving on this was deferred until 2023. Paving cost will be reduced and shared with the City.
Faxon Avenue	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC	2201254	DW20-157	26,459	3/2/2021	\$ 86,000	Yes	\$ 86,000	\$ 86,000	\$ 83,841	Nashua	Yes	\$ 23.55	\$ 1,974	
Faxon Street	Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL	2201255	DW20-157	26,459	3/2/2021	\$ 220,000	Yes	\$ 195,000	\$ 195,000	\$ 191,910	Nashua	Yes	\$ 23.55	\$ 4,519	Bid was lower than the engineer's estimate.
Chataqua Ave	Broad St. to End Replace/Add 780 feet of 1.25"/4"6" installed in 1915-1963 with 4"/6"	2200426	DW20-157	26,459	3/2/2021	\$ 209,000	Yes	\$ 267,000	\$ 267,068	\$ 267,095	Nashua	Yes	\$ 23.55	\$ 6,290	Paving restoration requirements were more than anticipated.
Niquette Dr.	E. Dunstable to service 12 Niquette Replace/Add 525 feet of 2" installed in 1960 with 4"	2200427	DW20-157	26,459	3/2/2021	\$ 131,000	Yes	\$ 127,200	\$ 128,323	\$ 128,363	Nashua	Yes	\$ 23.55	\$ 3,023	
Pine Hill Ave	Wright Rd. to End Replace/Add 300 feet of 1.25" installed in 1953 with 4"	2200422	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 92,400	\$ 92,367	\$ 92,394	Nashua	Yes	\$ 23.55	\$ 2,176	Old pipe records were not accurate requiring more pipe to be replaced.
Mt. Pleasant St.	Merrimack St. to Manchester St. Replace/Add 400 feet of 1.5" installed in 1955 with 8"	2200423	DW20-157	26,459	3/2/2021	\$ 117,000	Yes	\$ 204,200	\$ 195,922	\$ 195,948	Nashua	Yes	\$ 23.55	\$ 4,615	More paving and night work than anticipated.
French St.	Merrimack St. to 10 French Replace/Add 340 feet of 2"/6" installed in 1887 & 1926 with 4"/6"	2200424	DW20-157	26,459	3/2/2021	\$ 87,000	Yes	\$ 178,040	\$ 173,709	\$ 173,736	Nashua	Yes	\$ 23.55	\$ 4,091	More paving and night work than anticipated.
Dudley St.	June St. to E. Hobart St. Replace/Add 830 feet of 1.25"/8" CI/AC installed in 1957-1971 with 8"	2200428	DW20-157	26,459	3/2/2021	\$ 256,000	Yes	\$ 300,000	\$ 269,714	\$ 269,900	Nashua	Yes	\$ 23.55	\$ 6,356	
Ledgewood Hills Dr. /Heather	To Intersection Replace/Add 10 feet of Unconnected installed in with 8"	2200429	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	\$ 5,500	\$ 11,059	\$ 11,059	Nashua	Yes	\$ 23.55	\$ 260	
Rita St.	Allids St. to 6 Rita Replace/Add 210 feet of 1.5" CI/CL installed in 1956 with 4"	2200430		0.1 DSRF funds	26,459	\$ 53,000	No	\$ 2,899	\$ 2,880	\$ 2,880	Nashua	No	\$ 23.55	\$ -	Design only
Salem St.	Whitney St. to Summer St. Replace/Add 855 feet of 4"/6" installed in 1888-1927 with 6"	2200425		0.1 DSRF funds	26,459	\$ 253,000	No	\$ 300	\$ 728	\$ 848	Nashua	No	\$ 23.55	\$ -	Design only
Walnut St.	W. Pearl St. to W. Hollis St. Replace/Add 830 feet of 6"/8" installed in 1888-1931 with 12"	2200431		0.1 DSRF funds	26,459	\$ 312,000	No	\$ 300	\$ 778	\$ 1,346	Nashua	No	\$ 23.55	\$ -	Design only
Garden Street	Emergency replacement of 150 11 of 6" CI/CP with 8" DIP	2208030	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 50,000	\$ 49,456	\$ 49,536	Nashua	Yes	\$ 23.55	\$ 1,167	City Sewer Project - Budget from row 54
Route 101A Water Main Relocation	Route 101A Water Main Relocation	n/a	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	n/a	DW20-157	26,459	3/2/2021	\$ 500,000	Yes	\$ -	\$ -	\$ -	Various	Yes	\$ 23.78	\$ -	Budget money moved to a different unbudgeted project/projects.
Milford Booster Station	Replace/Relocate Milford Booster Station (Design & Permitting)	2201853		0.1 DSRF funds	26,459	\$ 60,000	No	\$ 6,827	\$ 6,827	\$ 6,827	Milford	No	\$ 26.27	\$ -	Station to be designed, owned and operated by the Milford Water Department.
City Sewer Projects (2022)	Replace CI, AC, and other older main disrupted by sewer construction	n/a	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	No city sewer projects projected for remainder of year.
Coburn Tank Area HP Zone Watermain	Create new HP area with 1600 LF of Water Main and Check Valves	n/a		0.1 DSRF funds	26,459	\$ 800,000	Yes	\$ 5,000	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Coburn Tank Area HP Booster Station	New Domestic flow and pressure booster station	n/a		0.1 DSRF funds	26,459	\$ 550,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Investment in Developer Services	1x Annual Revenue	Routine	DW20-157	26,459	3/2/2021	\$ 140,000	Yes	\$ 75,000	\$ 69,449	\$ 77,276	Various	Yes	\$ 23.78	\$ 1,838	96 Developer Services through 11/30/2022, 10 more projected by year end.
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	2204654	DW20-157	26,459	3/2/2021	\$ 32,000	Yes	\$ 20,000	\$ 20,000	\$ 9,156	Merrimack	No	\$ 22.87	\$ -	
Sweet Hill Interconnection	Connecting Pipeline and Meter Pit	2208920	SRF			\$ 220,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Twin Ridge Interconnection	Connecting Pipeline and Meter Pit	2208919	SRF			\$ 100,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2201770.
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2206415.
Snow Station Building Addition	Addition of a third High Lift Pump (Design & Permitting)	n/a		0.1 DSRF	26,459	\$ 100,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Project deferred
Engineering Studies: WTP	Chemical Feed and Storage, PFAS treatment	2205826		0.1 DSRF	26,459	\$ 50,000	Yes	\$ 90,000	\$ 125,000	\$ 113,182	Nashua	No	\$ 23.55	\$ -	Design only
Atherton Commons</															



Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/16/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense
Replacement Dump Truck	New Dump Truck to Replace #7, 2009 Peterbilt 335, 100K Miles, 6000 hrs Continuous High Maintenance, suspension issues, electrical issues	Bond	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Various	No	\$ 23.78	\$ -
2023 New Services (10)	Single Family, Owner Build, New Homes	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Renewed Services (20)	Replacement of Failed Services	Bond	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2023 Hydrants (10)	Replacement of non functional hydrants	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2023 Gates (20)	Replacement of Failed Gate Valves	Bond	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2023 Radios (200)	New Radios for new customers (200)	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
2023 Radios (2800)	Year 3 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	Bond	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters (200)	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Meter - PFOA (25)	New Meters for PFOA customers (25)	Bond	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84 2014 Ford F350 100K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9 2014 Ford F350 110K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing Veh #22 2013 Chevy Equinox w/150K miles that has been retired due to not passing inspection	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickupe to replace Disconnect Vehicle #346 - 2017 Chevy Express 2500 Van w/67K miles - that will become Hydrant Painting Van	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Merrimack	Yes	\$ 22.87	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Foreman's Truck Truck	New Foreman's Truck to replace #357- 2018 Kenworth T170, 6K Hrs, 70K Miles - Continuous maintenance, electrical issues, compressor needs to be replaced, No onboard air system, underpowered engine.	Bond	DW20-157	26,459	3/2/2021	\$ 275,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ford Meter Test Bench Upgrade	Upgrade of Ford Meter Test Bench to replace failed computer components and associated hardware fittings	Bond	DW20-157	26,459	3/2/2021	\$ 90,000	Yes	Nashua	No	\$ 23.55	\$ -
N360 Meter Reading Upgrade	Upgrade of Hardware & Software needed as part of the N360 meter reading upgrade - 13 R900 Belt Clip Tranceivers, 3 MRX920 Mobile Data Collectors, N360 Software subscription for 38K customers.	Bond	DW20-157	26,459	3/2/2021	\$ 155,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,650
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 129,700	Yes	Nashua	Yes	\$ 23.55	\$ 3,054
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 42,250	Yes	Nashua	Yes	\$ 23.55	\$ 995
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 453,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,668
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 101,750	Yes	Nashua	Yes	\$ 23.55	\$ 2,396
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 184,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,333
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 171,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,027
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ -	No	Milford	No	\$ 23.55	\$ -
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 807,250	Yes	Nashua	Yes	\$ 23.55	\$ 19,011
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 311,500	Yes	Nashua	Yes	\$ 23.55	\$ 7,336
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 597,500	Yes	Nashua	Yes	\$ 23.55	\$ 14,071
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 247,000	Yes	Nashua	Yes	\$ 23.55	\$ 5,817
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 627,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,766
Kendrick Street	Carry over shared paving cost with City of Nashua - Spring 2023	Bond	DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	Yes	\$ 23.55	\$ 283
Kessler Farm Tank - landscape items	10+/- trees died and need replaced in spring 2023 - funds held in retainage until complete	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Nashua	Yes	\$ 23.55	\$ 236
NH Rte. 101A - Amherst, NH	Total Project Cost exclusive of NHDOT contribution	Bond	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Twin Ridge Interconnection	150 of 8" DI with Meter Vault plus Station Demolition and Well Abandonment	SRF	DW 22-033	26,673	8/29/2022	\$ 270,000	Yes	Plaistow	Yes	\$ 24.40	\$ 6,588
Sweet Hill Interconnection	1600 LF of new 4 inch PVC watermain and Treatment Equipment	SRF	DW 22-033	26,673	8/29/2022	\$ 420,000	Yes	Plaistow	Yes	\$ 24.40	\$ 10,248
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	0.1		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	0.1		0.1 DSRR Funds		\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program (Design)	0.1		0.1 DSRR Funds		\$ 8,000	Yes	Nashua	No	\$ 23.55	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 10,000	Yes	Nashua	No	\$ 23.55	\$ -
Jones Ct	Replacing 180 LF of 1.5 inch Galv with 4inch PVC	Bond	DW20-157	26,459	3/2/2021	\$ 66,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,554
Troy St.	Abandon Replacing 290 LF of 1.5" & 2"	Bond	DW20-157	26,459	3/2/2021	\$ 27,000	Yes	Nashua	Yes	\$ 23.55	\$ 636
Broadview Ave	Replacing 435 feet of 1.5 & 8 inch with 4 inch PVC & 8 inch DI	Bond	DW20-157	26,459	3/2/2021	\$ 168,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,956
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 88,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,072
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 731,000	Yes	Nashua	Yes	\$ 23.55	\$ 17,215
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 95,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,237
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 194,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,569

Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/16/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense
Elim St.	Replacing 330 LF of 1892 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 135,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,179
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 866,000	Yes	Nashua	Yes	\$ 23.55	\$ 20,394
Water Treatment Facility Chemical Feed and Storage	Final Design, Permitting and Bidding	0.1	0.1 DSRR Funds			\$ 600,000	Yes	Nashua	No	\$ 23.55	\$ -
English Woods Alternative Source Interconnection	Interconnection of the English Woods Station to the Donald Street Area with building expansion to remove chloramines	Bond	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Beford	Yes	\$ 23.03	\$ 8,061
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	Bond	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Various	Yes	\$ 23.78	\$ 9,512
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 2 of 5.	0.1	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Investment in Developer Services	1x Annual Revenue	Bond	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Radio Comms, various stations	Replace Radio Comms, various stations	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Replace Roof, backwash return pump station	Replace Roof, backwash return pump station	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Misc. Structural Improvements	Misc. Structural Improvements	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	No	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	No	Various	Yes	\$ 23.78	\$ 1,427
Rebuild 1 High lift/Intermediate pump	Rebuild 1 High lift/Intermediate pump	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,178
WTP Structural/HVAC	WTP Structural/HVAC	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,413
Purchase new lab equipment	Purchase new lab equipment	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	vehicle replacement #39, 2012 w/ 120,000 + miles	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	vehicle replacement #40 2014 w/>100K miles, rust	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Nashua	No	\$ 23.55	\$ -
Re-paint FWPS ceiling	Re-paint FWPS ceiling	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	Yes	\$ 23.55	\$ 942
Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	Yes	\$ 23.55	\$ 707
Replace Filter Media 5A thru 6B	Replace Filter Media 5A thru 6B	Bond	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,130
Cameras for WTP	Cameras for WTP	0.1	0.1 DSRR Funds			\$ 106,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,496
ESRI Utility Network	ESRI Utility Network	Bond	DW20-157	26,459	3/2/2021	\$ 253,000	Yes	Various	No	\$ 23.78	\$ -
Distribution Intercom and Camera update addition	camera DVR system that is not under maintenance and should be updated due to age.	Bond	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	Merrimack	Yes	\$ 22.87	\$ 1,715
SEIM	On premise appliance that will sift through server logs looking for anomalies and notify IT of issues.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Nova	few years . Otherwise, this system and its sister will need to be replaced in 2024 because they will be 7 years old.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
IT User Hardware	Replacement Desktop Hardware for Jason, and Laptop fo Steve	Bond	DW20-157	26,459	3/2/2021	\$ 6,000	Yes	Various	No	\$ 23.78	\$ -
Clicksoft Replacement Project	Due to the retirement of ClickSoft by the vendor, a replacement must be purchased and implemented.	Bond	DW20-157	26,459	3/2/2021	\$ 343,000	Yes	Various	No	\$ 23.78	\$ -
iPad replacements	Replacement of iPad hardware as it becomes obsolete for field use.	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Various	No	\$ 23.78	\$ -
DoForms Replacement/Clarios	Replace Existing DoForms with Clarios Data collection for WTP field staff	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Software	Miscellaneous Software	Bond	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	Bond	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2023 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 303,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2023 Total Capital Expenditure Budget -</b>						<b>\$ 13,414,775</b>		<b>Projected Property Tax Expense associated with</b>		<b>\$ 244,264</b>	

**Total for 0.1 DSRR 2023 Projects - \$ 877,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2023 - \$ 11,997,775** minus the cost of the Milford Booster Station of \$ -  
**Total Projected NHDES SRF/DWGTf funded PWW QCPAC Capex for 2023 - \$ 540,000** Milford to pay for and finance the Milford booster station

Estimated Bond Terms (Bonds to be sold in April 2024) - 30 Years @ 5.50% resulting in P&I of \$ 825,512  
 NHDES SRF terms - 20 Years @ 1.256% resulting in P&I of \$ 30,701

Utility tax rate of \$6.60/\$1000

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2024 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2024 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2024 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2024 Radios (4000)	Year 4 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Replacement Hydrant Crane Truck	New Hydrant/Crane Truck to replace #19 - 2011 Ford F-450 High Mileage & Hours, Extensive Vehicle & Crane Maint	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Dump Truck	New Dump Truck to replace #10, 2008 Peterbilt 335, 100K+ miles, 9000hrs, body rot & high Maint & repair costs	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
New Vacuum Excavator Truck	New Vacuum Excavator Truck for LCR pothole excavation & safe excavation around other utilities, minimize excavation costs, pavement repairs and reliance on outside contractors. Very safe excavation in tight places w/multiple utilities.	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Merrimack	No	\$ 22.87	\$ -
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 59,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,389
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 19,600	Yes	Nashua	Yes	\$ 23.55	\$ 462
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,168
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 106,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,508
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 57,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,354
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 71,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,684
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 65,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,543
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 375,250	Yes	Nashua	Yes	\$ 23.55	\$ 8,837
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 120,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,838
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 281,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,618
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 116,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,732
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI - Final Pavement and Restoration	DW20-156	26,459	3/2/2021	\$ 292,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,877
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 144,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,391
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 73,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,731
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 107,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,520
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 410,500	Yes	Nashua	Yes	\$ 23.55	\$ 9,667
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 325,250	Yes	Nashua	Yes	\$ 23.55	\$ 7,660
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,531
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 109,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,567
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 35,325
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	DW20-157	26,459	3/2/2021	\$ 800,000	Yes	Nashua	Yes	\$ 23.55	\$ 18,840
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program	DW20-157	26,459	3/2/2021	\$ 396,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,326
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 8,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 200,175
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,605	Yes	Nashua	No	\$ 23.55	\$ -
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,290	Yes	Nashua	No	\$ 23.55	\$ -
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI - Design only	0.1 DSRR Funds			\$ 4,125	Yes	Nashua	No	\$ 23.55	\$ -
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,280	Yes	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,175	Yes	Nashua	No	\$ 23.55	\$ -
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,740	Yes	Nashua	No	\$ 23.55	\$ -
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,640	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Design only	0.1 DSRR Funds			\$ 4,950	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Installing 115 LF of new 8" DI to complete loop - Design only	0.1 DSRR Funds			\$ 1,365	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 765	Yes	Nashua	No	\$ 23.55	\$ -
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 2,010	Yes	Nashua	No	\$ 23.55	\$ -

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 2,055	Yes	Nashua	No	\$ 23.55	\$ -
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 1,965	Yes	Nashua	No	\$ 23.55	\$ -
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 4,050	Yes	Nashua	No	\$ 23.55	\$ -
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 3,525	Yes	Nashua	No	\$ 23.55	\$ -
Haines St.	Abandoning 75 LF of 1934 1.5" main - Design only		0.1 DSRR Funds		\$ 450	Yes	Nashua	No	\$ 23.55	\$ -
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 5,670	Yes	Nashua	No	\$ 23.55	\$ -
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,985	Yes	Nashua	No	\$ 23.55	\$ -
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,305	Yes	Nashua	No	\$ 23.55	\$ -
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,590	Yes	Nashua	No	\$ 23.55	\$ -
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,910	Yes	Nashua	No	\$ 23.55	\$ -
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI - Design only		0.1 DSRR Funds		\$ 19,590	Yes	Nashua	No	\$ 23.55	\$ -
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI - Design only		0.1 DSRR Funds		\$ 6,840	Yes	Nashua	No	\$ 23.55	\$ -
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 1,710	Yes	Nashua	No	\$ 23.55	\$ -
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,570	Yes	Nashua	No	\$ 23.55	\$ -
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,075	Yes	Nashua	No	\$ 23.55	\$ -
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI - Design only		0.1 DSRR Funds		\$ 9,885	Yes	Nashua	No	\$ 23.55	\$ -
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	DW20-157	26,459	3/2/2021	\$ 200,000	Yes	Various	Yes	\$ 23.78	\$ 4,756
Investment in Developer Services	1x Annual Revenue	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering Pickup	Replace #105 2013 Chevy with >160k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace #31 2012 Chevy with >110k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 3 of 5.		0.1 DSRR Funds		\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Rotork Pakscan valve control system	Replace Rotork Pakscan valve control system	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Bowers Dam Spillway reconstruction/increase capacity	Bowers Dam Spillway reconstruction/increase capacity	DW20-157	26,459	3/2/2021	\$ 2,300,000	Yes	Merrimack	Yes	\$ 22.87	\$ 52,601
This replacement will flatten out our replacements over the next few years .	Runrate Business needs	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Typical IT Annual budget roughly runs about \$400K	typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2024 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 157,600	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -</b>					<b>\$ 21,604,535</b>					<b>Projected Property Tax Expense associated with \$ 452,061</b>

**Total for 0.1 DSRR 2024 Projects - \$ 387,610**  
**Total Projected Bond funded PWW QCPAC Capex for 2024 - \$ 12,016,925**  
**Special Project Bond for Chemical Feed Building - \$ 8,500,000**  
**FEMA Grant - \$ 700,000**

Estimated Bond Terms (Bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 826,829  
 Estimated Bond Terms (Special Project bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 584,846  
**Total Projected P&I - \$ 1,411,675**

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

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2025 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2025 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2025 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2025 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2025 Radios (2800)	Year 5 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickup to Replace Veh #22 that has been retired due to not passing inspection.	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickeup to replace Disconnect Vehicle that will become Hydrant Painting Van.	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 54,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,283
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 33,600	Yes	Nashua	Yes	\$ 23.55	\$ 791
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,260
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 198,500	Yes	Nashua	Yes	\$ 23.55	\$ 4,675
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 150,500	Yes	Nashua	Yes	\$ 23.55	\$ 3,544
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,250	Yes	Nashua	Yes	\$ 23.55	\$ 1,254
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 207,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,875
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021 - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Nashua	Yes	\$ 23.55	\$ 8,243
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 30,500	Yes	Nashua	Yes	\$ 23.55	\$ 718
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Nashua	Yes	\$ 23.55	\$ 589
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI	DW20-158	26,460	3/3/2021	\$ 94,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,214
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC	DW20-159	26,461	3/4/2021	\$ 49,000	No	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 47,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,107
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 35,500	Yes	Nashua	Yes	\$ 23.55	\$ 836
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC	DW20-156	26,459	3/2/2021	\$ 57,500	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 112,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,638
Long Ave	Installing 115 LF of new 8" DI to complete loop	DW20-157	26,459	3/2/2021	\$ 29,000	Yes	Nashua	Yes	\$ 23.55	\$ 683
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 15,500	Yes	Nashua	Yes	\$ 23.55	\$ 365
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 63,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,495
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 60,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,425
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 40,500	Yes	Nashua	Yes	\$ 23.55	\$ 954
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 41,000	Yes	Nashua	Yes	\$ 23.55	\$ 966
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 39,500	Yes	Nashua	Yes	\$ 23.55	\$ 930
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 78,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,837
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 68,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,613
Haines St.	Abandoning 75 LF of 1934 1.5" main	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	Nashua	Yes	\$ 23.55	\$ 118
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 122,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,873
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 64,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,519
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 92,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,167
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 98,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,308
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 62,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,460
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 166,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,909
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 37,500	Yes	Nashua	Yes	\$ 23.55	\$ 883
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 77,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,825
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 66,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,566
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 222,500	Yes	Nashua	Yes	\$ 23.55	\$ 5,240
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 3,900,000	Yes	Nashua	Yes	\$ 23.55	\$ 91,845
2026 Watermain Replacement (Design Only)	Various Streets, Diameters, and Materials	0.1 DSRR Funds			\$ 180,000	Yes	Nashua	No	\$ 23.55	\$ -
City Sewer Related Projects	Water Main Replacements Associated with Sewer Reconstruction	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	0.1 DSRR Funds			\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Investment in Developer Services	1x Annual Revenue	0.1 DSRR Funds			\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering SUV	Replace Highest Mileage SUV	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace Highest Mileage/Poorer Condition Pickup	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Rebuild High lift pump, WTP	Rebuild High lift pump, WTP	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,355
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
WTP Carbon Filter Replacement	Replaced Carbon in WTP Filters 1a through 4b	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Stellar	This replacement will flatten out our replacements over the next few years .	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Monitary placeholder	Typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2025 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 124,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2025 Total Capital Expenditure Budget -</b>					<b>\$ 11,799,975</b>					<b>Projected Property Tax Expense associated with \$ 209,136</b>

**Total for 0.1 DSRR 2024 Projects - \$ 540,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2025 - \$ 7,359,975**  
**Special Project Bond for Chemical Feed Building - \$ 3,900,000**

Estimated Bond Terms (Bonds to be sold in April 2026) -	30	Years @	5.50%	resulting in P&I of	\$ 506,406
Estimated Bond Terms (Special Project bonds to be sold in April 2026) -	30	Years @	5.5%	resulting in P&I of	\$ 268,341
Total Projected P&I -					<b>\$ 774,747</b>

1. Tax rate is the sum of the Dec 2022 local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

**ATTACHMENT B**

**Final Audit Report – DW 23-015**

**June 22, 2023**

# STATE OF NEW HAMPSHIRE

Department of Energy  
Intra-Department Communication

**DATE:** June 22, 2023

**FROM:** Division of Enforcement, Audit Staff

**SUBJECT:** Pennichuck Water Works, Inc.  
DW 23-015 Qualified Capital Project Adjustment Charge - QCPAC  
**FINAL Audit Report**

**TO:** Jayson Laflamme, Director Water Group, Regulatory Support Division  
Anthony Leone, Utility Analyst, Regulatory Support Division  
Suzanne Amidon, Attorney, Department of Energy

## **Introduction**

The Audit Staff was asked by the Regulatory Support Division to conduct an audit of the 2022 actual Pennichuck Water Works, Inc. (PWW) Qualified Capital Project (QCP) additions, which were included within the filing docketed as DW 23-015.

## **History**

The DW 19-084 rate case set the QCPAC recovery rate at zero percent per Commission Order 26,425 on November 24, 2020.

On December 9, 2021 Commission Order 26,555 approved the DW 20-020, 2020 Qualified Capital Project Annual Adjustment charge at 3.90%. The Commission Order applied to plant in service additions that were unitized as of December 31, 2019.

On March 29, 2022 Commission Order 26,598 approved the DW 21-023 2021 Qualified Capital Project Annual Adjustment charge at 1.56%. The Commission Order applied to plant in service that were unitized on December 31, 2020.

On October 11, 2022 Commission Order 26,697 approved the DW 22-006 2022 Qualified Capital Project Adjustment charge at 1.80%. The Commission Order applied to plant in service additions that were unitized on December 31, 2021. The Order also approved a QCPAC recoupment surcharge of \$2.05 per month, subject to final calculation, for service rendered as of April 26, 2022 until the anticipated date of the Order, November 1, 2022.

Order 26,734, issued on November 23, 2022 in DW 22-006 authorized the recoupment tariff implementation for three months, and the 2022 QCPAC charges for service rendered from April 26, 2022 until October 11, 2022.

### **Regulatory Approval**

As required by Order 26,070, and included within the DW 23-015 QCPAC filing on Bates page 004, to be eligible for recovery through the QCPAC, a project must meet the following standards:

- (1) the capital project must be completed, in service and used and useful within the previous fiscal (calendar) year for which the QCPAC filing is made;
- (2) financed by debt that has been approved by the Commission;
- (3) correspond to a capital budget that has previously been submitted by the Company and approved by the Commission.

By Order 26,605, the quarterly filing requirements were modified to include a filing in November for known or estimated expenses as of September 30, and a filing by January 15 of the subsequent year for the period ending November 30 of the prior year.

### **Budget to Actual for Calendar Year 2022**

On February 15, 2023, PWW filed the QCPAC schedule of projects reported to have been placed in service in 2022. The schedule, and the associated projects, subject to the Public Utilities Commission's review and subsequent Order, will be considered for recovery through the 2023 QCPAC.

Audit compared the projects listed in the 2022 Budget (in docket DW 22-006) to the actual reported additions during 2022 included in this instant filing. Of the 152 total projects included as 2022 additions, 67 had not been included in the original budget schedule in DW 22-006. However, updates to the 2022 budgeted projects were provided to the PUC on 11/8/2022 for the period ending 9/30/2022 and on 1/11/2023 for the period ending 11/30/2022. Audit understands that the updated budgeted project listings were submitted by PWW to the PUC in compliance with Order 26,605, but it is not clear if either updated budget was *approved* by the PUC as required by Order 26,070. In this current docket, PWW proposes to adjust the reporting requirements to an initial filing and one update on August 30 for the period ending July 30.

18 projects included in the 2022 Additions tab of the filing had no money expended. Eight of those projects indicated that the project was deferred until 2023 or later. Two projects identified specific workorders to which the budgeted amounts were moved. Six of the 18 projects indicated that "Budget money moved to a different unbudgeted project/projects". One project with zero money expended indicated "No city sewer projects projected for remainder of year." The "Purchase New TOC Analyzer", workorder 2208043 had no budgeted amount nor any expended. The explanation was "Not complete until 2023".

### **Summary of 2022 Reported Qualified Capital Projects' (QCP) Funding**

Per the testimony of Don Ware, Bates page 017 of the filing, the Company invested \$6,788,187 in property, equipment, engineering designs and studies, and capitalized interest incurred on the short term debt used to fund the QCP placed in service during 2022. Funding for the 2022 projects was noted to be:

Anticipated April 2023 bond proceeds	\$5,847,807
0.1 DSRR funds (balance as of 12/31/2022)	<u>\$ 940,380</u>
<b>Total funding per testimony</b>	<b><u>\$6,788,187</u></b>

Audit verified the 0.1 DSRR figure of \$940,380 to the December reconciliation of general ledger account 131395 to the TD Bank Statement as of 12/31/2022.

The filing schedule DLW-1 was summarized by Audit, using the types of finding:

Debt Service funding per DW 20-157, Order 26,459	\$5,801,507
Partial Debt, Partial 0.1 DSRR Cash	\$ 51,999
0.1 DSRR Cash only-not for inclusion in QCPAC calc.	<u>\$ 934,680</u>
<b>Rounded total of reported 2022 completed projects</b>	<b><u>\$6,788,186</u></b>

The 0.1 Debt Service Revenue Requirement (DSRR) projects are financed using cash and are not eligible for inclusion in the QCPAC revenue calculation. Municipal property taxes on assets as appropriate, even if funded through the 0.1 DSRR, are included in the QCPAC calculation.

The DSRR 0.1 general ledger balance of account 131395 at year-end 2021 was \$1,018,147.89, net of December month-end reversal and recording of month-end transfers  $$(191,151.86) + $47,290.45 = $(143,861.41)$  which had not been included in the 2021 filing. Audit verified the crediting of the \$47,290.45 reversing entry to the general ledger on 1/1/2022. However, the debit was “re-recorded” on 1/31/2022. Audit requested clarification of the three types of entries noted within the general ledger, and was informed as follows:

- ***“Current Month DSRR 0.1 month end transfer -These are the calculated monthly entries that are recorded in the GL each month based on the percentage of revenue per the last Rate Case and QCPAC.***
- ***Reverse prior month DSRR 0.1 - The reversal is done the following month, since we already recorded this transaction in the current month.***
- ***Re-record prior month DSRR 0.1 - If the prior month’s transfer has not been completed in the following month, it must be re-recorded, so that the year to ate balance is correct. If it has been completed, you will see the month and an amount on the date the transfer was completed.”***

There were two workorders included in the filing, with final project costs as of 12/31/2022 of zero. The interconnection of the pipeline and meter pits at Sweet Hill and Twin Ridge, work orders 2208920 and 2208919 respectively, are identified with a combined budget amount of \$320,000 but for which a petition for SRF financing had not been filed as of February 2023.

Two projects were financed with both debt and cash, which sum to \$51,999. Of that total, \$46,299 was funded through the FALoC (debt to be bonded) and \$5,700 funded with cash.

Work order 2206577 Inline Air Compressor for Valve/Vac Truck-debt	\$13,878
Work order 2206577 Inline Air Compressor for Valve/Vac Truck-cash	<u>\$ 4,572</u>
Total for work order 2206577	\$18,450
Work order 2208041 Utility Network Migration - debt	\$32,421
Work order 2208041 Utility Network Migration - cash	<u>\$ 1,128</u>
Total for work order 2208041	\$33,549

Audit requested clarification of how the cash/debt projects are identified, and specifically how these two projects were determined for split of both cash and debt. PWV responded:

*“The amount of 0.1 DSRR funds available to pay toward 2022 capital projects... was initially determined to be \$935,808 [and] was being finalized at the time the funding sources of 2022 capital expenditures was being balanced between available 0.1 DSRR funds and projects to be bonded were being determined. Since the available 0.1 DSRR funds did not match exactly the selected project costs and the Company wanted to fully utilize the 0.1 DSRR funds to reduce the amount of bonds, a project was selected to split, which was the Utility Network Migration project to allow the \$1,128 in 0.1 DSRR funds that had not been used to help partially fund this project. Before the filing was completed the amount of 0.1 DSRR funds was adjusted upwards to \$940,380 resulting in an additional \$4,572 of 0.1 funds to be used to reduce the overall bond amount. That additional amount was used to partially fund the Inline Air Compressor. Apparently it was missed when that decision was made that a project had already had split funding...The Company is agnostic to how the 0.1 DSRR funds are used but wants to make sure that all the 0.1 DSRR funds are used to reduce the amount of the projects that must be funded with bonds.”*

The inline Air Compressor WO #2206577 was verified to the open project work order detail as of 12/31/2022, and to a request for a check (request dated 8/22/2022) payable to J.C. Madigan in the amount of \$18,450.00. Support for the request was an email from J.C. Madigan indicating the details for an under-hood 150cfm compressor, VR150, for a 2021 Ram 5500 diesel pickup, part number V91003 with a cost of \$14,950 and \$3,500 labor to install it. Audit verified the \$18,450.00 to account 105222, CWIP Contractor Clearing, in August 2022. Audit verified two line items on the CPR to in-service dates of 12/01/2022 for \$13,878 + \$4,572 = \$18,450, both with a 15 year straight line life. The amounts are noted in account 343000-2000-001, Shop Equipment.

The Utility Network Migration WO #2208041 was verified to the open project work order detail as of 12/31/2022 and to detailed support as follows:

Engineering and IS Overhead	November 2022	\$ 275.84	105444
Timmons Group for services through November 2022		\$ 8,900.00	105444
Engineering and IS Overhead	December 2022	\$ 423.56	105444
Timmons Group for services through December 2022		<u>\$23,950.00</u>	105444
		\$33,549.40	105444

The progress billing invoice from the Timmons Group reflects eight components which sum to a fee total of \$199,000. As of 12/31/2022, \$32,850 had been earned by them (paid to

them by PWW), or 17%. Audit reviewed the contract between PWW and the Timmons Group, signed on 11/7/2022. Each task category on the December 2022 invoice (included in the Scope of Services Exhibit A) reflects a percent complete, ranging from 100% (project initiation), 70% (discovery and tech design), 30% (GIS data readiness) and 25% (data modeling design) to Infrastructure, Data Migration, Systems Integration, and Test/Train/Go-live which have zero percent completed. While Audit understands that projects funded with 01.DSRR (cash) are not eligible for inclusion in the QCPAC calculation, because the project is not yet complete, none of the debt-funded portion should be part of the QCPAC calculation. Audit noted the total \$33,549.40 in account 105444, CWIP Contractor Clearing-Other. RSA 378:30(a) specifically restricts inclusion of assets that are in the CWIP account to be part of rates charged to customers.

**Audit Issue #1**

Release of retainage (final payments) held on 2021 projects, and paid in 2022, \$479,371, is discussed in the Additions section below.

Long-term interest is included as an asset addition, and was noted within the debt funded portion of the total 2022 assets for \$204,000. See detailed verification in the Additions section below.

### **Overhead Rates**

The Company's overhead rates are input into Cityworks, the plant accounting system, by the Senior Accountant or Staff Accountant. The system automatically calculates the overhead charged to each work order. Overhead is posted to the general ledger when the work orders are posted to the general ledger at the end of each month.

For 2022, the Union overhead rate was 71.49% January through March. After the Company's annual analysis of prior year employees' benefits, the rate applied for April through December was 73.06%.

"Routine" work orders also have a general overhead of 2% applied.

The Company indicated for 2021 Non-Union labor may be applied to some but not all special capital projects. The overhead rate for 2022 was 55.05% January through March, and updated to 54.20% April through December.

Engineering and Information Systems related labor hours have overhead applied using the non-union overhead rate. This rate is applied to any projects that that have Engineering or Information Systems (IT) labor hours.

The general overhead rate is calculated on the total job cost, including the union labor rate as described above, and by an analysis of the employee benefits which is reviewed/revised annually as part of the budget process. Audit verified the OH charged to the work order detail reports of each project reviewed. A specific audit of the calculation inputs into each overhead was not conducted during this QCPAC audit, but was done as part of the DW 22-032 rate case audit of test year 2021.

**Bidding**

Audit requested the bid proposals for all projects put to bid and placed in service during 2022. The Company provided a Record of Bids and Proposals for projects from 2019 through 2023. Of those, ten related to projects placed in service in 2022. Because PWW is ultimately owned by the city of Nashua, the Company explained that *“The Company makes every reasonable effort to secure competitive bids from multiple qualified contractors. The Company publicly advertises opportunities to bid projects and will also attempt to directly reach out to qualified contractors about bid opportunities. Our bids are received sealed by the contractor and publicly opened and read aloud at a specified date and time. Contract award is based on the qualified contractor that submits the lowest cost bid. The Company strives to secure a minimum of three bids for each project. However, there are times when fewer than that are received based on contractor availability or uniqueness of the work. There are projects that will only have one bidder due to the work being proprietary or being highly specialized. Computer software and certain water treatment equipment will sometimes fall into this category for example.”*

**Fixed Asset Line of Credit (FALoC)**

As noted in the DW 22-006 Audit report, the Company no longer calculates Allowance for Funds used during Construction (AFUDC) on projects booked to Construction Work in Progress (CWIP). Rather, they have replaced the calculation of AFUDC with the interest incurred on the Fixed Asset Line of Credit (FALOC).

The Company projects it will have incurred approximately \$204,000 interest on the short term debt incurred between April, 2022 and April, 2023 (when the FALoC borrowings will be paid with the proceeds from its annual Bond issuance) relating to the funding of its 2022 Qualified Capital Projects. The final amount of interest capitalized will not be known until after the Company closes on the Bond Financing. The Company books the FALoC interest charges to account #427200.

Audit requested the actual 2022 FALOC interest details and bond documentation, such as the summary term sheet demonstrating the interest rates, as well as the DWGTF proceeds, for comparison of the estimated 2021 amount \$105,244 included in the QCPAC rate approved in DW 22-006. Only the amortization schedule reflecting interest principal and interest payments for the Series A and Series B bonds was provided.

2022 Series A	\$125,803
2022 Series B	<u>\$ 1,405</u>
Total Actual Interest	\$127,208

The amortization schedule reflected “SRF Debt service for 2022” as \$1,264,261.

**Continuing Property Records**

The Company submitted the Continuing Property Records (CPR), detailing the capitalized date, disposition date, cost of removal, gross book value, depreciation expense, accumulated depreciation, and net book value.

Total Asset Costs per CPR	\$259,745,082.03	
Total Assets per F8 Annual Report	<u>\$250,882,641.37</u>	
Original Asset Value CPR higher than F8	\$ 8,862,440.66	cost of removal and dispositions:
Cost of Removal column CPR	\$(5,214,214.64)	
Retirements/Dispositions CPR	<u>\$(3,648,226.02)</u>	
	\$(8,862,440.66)	

Also noted on the CPR information was the following:

GL 108001 Acc Dep Cost of Rmvl	\$ 7,806,630.96
CPR cost of removal a/o 12/31/2022	<u>\$ 5,214,214.64</u>
Assets (costs) applied directly to GL	\$ 2,592,416.32

Included within the CPR is cost of removal tab detailing a total of \$5,214,214.64. Audit requested clarification of the difference between the year-end general ledger balance and the CPR cost of removal total, and was informed that the general ledger does reflect the original book value of any asset retired during the year. The cost of removal tab related to “...mostly assets that are/were directly charged to GL 108001. If not charged directly to 108001, they are the cost of removal charges that are for retired assets in the 301-348 fixed assets range. We do not write off this cost of removal charge at the time of disposal.” Audit verified with the Company that the assets literally still in service, only those cost of removal specifics were included in the CPR information. The general ledger properly reflects *all* costs of removal, for assets both in service and retired.

Audit requested the manner in which cost of removal is posted to the general ledger, and was informed that the Company, in compliance with the chart of accounts, posts cost of removal entries:

Debit Accumulated Depreciation Cost of Removal account 108001  
Credit the Plant in Service account 3XXXXX

Utilities that have rates set using “rate base” rather than the QCPAC mechanism, deduct the cost of removal from the book cost, as does PWW. For the Pennichuck East and Pennichuck Water utilities, because the QCPAC is a mechanism designed to ensure sufficient cash-flow coverage for debt service and related increase in property taxes, the cost of removal is a literal cost paid by the Company, which is allowed for inclusion in the filing.

### **Review of 2022 Capital Projects and Selected Projects to Review**

The Company provided Exhibit DLW-1, Bates pages 029 through 031, which showed the detailed list of capital projects that were reported to be used and useful as of December 31, 2022. The PWW Estimated Capital Expense Budget (CAPEX) as of November 30, 2022 totaled \$6,131,010. The Final Projected Cost as of 12/31/2022 shown on the exhibit was \$6,788,187.

Audit selected 60% of the debt funded project dollars for detailed review. Of the total \$5,801,507, the following \$3,454,409 were tested:

WO #N/A Retainage paid out in 2022	\$ 479,371
WO #N/A Projected short term interest on FALoC	\$ 204,000
WO #2202953 Carbon Filter Media	\$1,432,922
WO #2205056 Vehicle replacement	\$ 58,866
WO #routine investment in developer services 1x annual revenue	\$ 77,276
WO #2200423 Mt Pleasant St	\$ 195,948
WO #2200424 French St	\$ 173,736
WO # 2200428 Dudley St	\$ 269,900
WO #2200501 Kessler Farm Tank	\$ 200,776
WO #2208205 Excavator	\$ 125,303
WO #2200381 Radio replacement	\$ <u>236,311</u>
Total Work Orders selected for detailed testing: funded projects.	\$3,454,409 or 60% of debt

Retainage paid out in 2022 \$479,371

Audit requested and was provided with the details supporting the retainage payout of \$479,371. A reconciliation of account 241350 was provided and demonstrated that the payout relates to four specific projects:

Project	Vendor	Accruals 2022	Payout 2022	Retainage 12/31/2022
Kessler Farm Tank Replacement #2101759	DN Tanks	\$ (382,444.96)	\$ 344,024.43	\$ (38,420.53)
2021 Sewer Related Water Main Replacement #2201252-2201255	DeFelice Corporation	\$ (53,601.10)	\$ 53,601.10	\$ -
2022 Small Diameter Mains-South #2200427-431 & 2206578	Joseph O. Cardillo & Sons, Inc.	\$ (20,542.63)	\$ 10,241.45	\$ (10,301.18)
Couburn Woods #2101761	RWC Enterprises	\$ (71,504.30)	\$ 71,504.30	\$ -
2022 Small Diameter Mains-North #2200422-426 & 2208030		\$ (73,447.33)	\$ -	\$ (73,447.33)
<b>2022 Activity Total</b>		<b>\$ (601,540.32)</b>	<b>\$ 479,371.28</b>	<b>\$ (122,169.04)</b>

Progress payment invoices were reviewed for all retainage payouts. The net activity above was noted in general ledger account 241350 Accrued Liabilities-Retainage. The total general ledger activity and balance, however, does not agree with the reconciliation on which the \$479,371.28 was identified.

	Beg Balance	Debits	Credits	End Balance
Total 2022 per Recon	\$ (432,409.23)	\$ 479,371.28	\$ (169,131.09)	\$ (122,169.04)
Total 2022 per GL 241350	\$ (493,643.65)	\$ 540,605.70	\$ (191,927.27)	\$ (144,965.22)
Recon vs. GL	\$ 61,234.42	\$ (61,234.42)	\$ 22,796.18	\$ 22,796.18

Audit verified the beginning balance variance, \$61,234.42, which had been booked in 2021, as a debit to account 241350 in March 2022, offset to account 231000, Accounts Payable.

The payable was then cleared with a check (#17841) credit to account 131385, MOERR. The check was issued to S.U.R. Construction West, Inc.

The credit on the general ledger of \$(22,796.18) was posted to account 241350 in December 2022 and was referenced as retainage related to the “Amherst PFOA CSSI App. #1”. Because there was no payout of the retainage, it was not included as part of the reconciliation provided to Audit. No exception.

WO #N/A Projected short term interest on FALoC \$204,000

Audit requested the calculation supporting the estimated \$204,000 short-term interest associated with the 2022 QCP. Pennichuck provided Audit with the daily FALoC balance, any advances from the \$12,000,000 line, any payments on the advances, the 0.25% unused fee, calculated daily, and the related interest calculation using the LIBOR plus 1.75%. Each daily calculation was then divided by 360 days. The daily calculations began on 12/31/2021 and continued through 12/31/2022. The calculation demonstrates that beginning on 4/27/2022 through 5/16/2022, there was zero outstanding on the line of credit (the out of debt period). As a result, the unused percentage fee on the \$12,000,000 was \$83.33 per day, or \$4,149.66 for the period.

Audit spot checked the LIBOR rate used by the Company to the following online site: <https://www.global-rates.com/en/interest-rates/libor/american-dollar/2022.aspx>, which is the US Dollar LIBOR interest rates in 2022 per global-rates.com. That site reflected:

Month / LIBOR rate 2022

	first	last	high	low	average
January	0.072 %	0.077 %	0.079 %	0.070 %	0.076 %
February	0.077 %	0.077 %	0.078 %	0.074 %	0.077 %
March	0.077 %	0.332 %	0.332 %	0.077 %	0.198 %
April	0.327 %	0.330 %	0.331 %	0.321 %	0.327 %
May	0.330 %	0.822 %	0.827 %	0.330 %	0.773 %
June	0.819 %	1.579 %	1.579 %	0.816 %	1.216 %
July	1.567 %	2.322 %	2.322 %	1.558 %	1.639 %
August	2.312 %	2.316 %	2.324 %	2.307 %	2.315 %
September	2.320 %	3.065 %	3.072 %	2.311 %	2.578 %
October	3.066 %	3.063 %	3.068 %	3.056 %	3.063 %
November	3.059 %	3.823 %	3.823 %	3.059 %	3.740 %
December	3.824 %	4.318 %	4.321 %	3.812 %	4.067 %

Rates Used by PWW				Average LIBOR
	sum	basis add	LIBOR	
12/31/2021 through 5/31/2022	1.83638	1.75	0.08638	0.2902 average of 5 months' averages
6/1/2022 through 6/30/2022	2.8152	1.75	1.0652	1.216
7/1/2022 through 7/31/2022	3.41614	1.75	1.66614	1.639
8/1/22 through 8/31/2022	4.12314	1.75	2.37314	2.315
9/1/2022 through 9/30/2022	4.27386	1.75	2.52386	2.578
101/2022 through 12/31/2022	4.86529	1.75	3.11529	3.623 average of 3 months' averages

The same website did not have the rate detail for 2023 as it did for 2022, so Audit reviewed the overnight daily rates which showed:

Rates Used by PWW				Average LIBOR
	sum	basis add	LIBOR	
12/31/2022	5.81243	1.75	4.06243	4.31886 overnight daily rate, first of the month
1/1/2023 through 1/31/2023	6.11871	1.75	4.36871	4.31866
2/1/2023 through 4/27/2023	6.36871	1.75	4.61871	4.29686

For the majority of the months January 2022 through December 2022, the rate calculation used by PWW was slightly less than the researched rates noted by Audit. The rates for January through April 2023, however, were slightly higher. Audit requested clarification of the source of the interest rate, and was provided with a sample statement from TD Bank. The Company noted that they use the interest rate included on the statement.

WO #2202953 Carbon Filter Media \$1,432,922

Audit requested and was provided with the work order cost detail and supporting documentation related to the Carbon Filter Media addition. The work order showed:

Calgon Carbon Corporation	09/30/22	\$ 358,230.60	GL #105222	09/30/2022
Calgon Carbon Corporation	10/31/22	\$ 358,230.60	GL #105222	10/25/2022
Calgon Carbon Corporation	12/31/22	<u>\$ 716,461.20</u>	GL #105222	12/31/2022
		\$1,432,922.40		

The general ledger account 320310 Water Treatment: Filter Media showed a 12/1/2022 debit to record the \$1,432,922.40, offset with a credit to 105222.

Copies of invoices were provided to Audit, but it was unclear if the first two were duplicate orders or duplicate invoices. Each has DUPLICATE COPY noted at the top of the invoice details. Based on a review of the general ledger 105222, CWIP, the invoices do not appear to be duplicate entries.

Audit verified that the carbon filter exchange total was also verified in the DW 21-134 PWW-MVD Emergency Special Contract audit work. Among calculation issues noted in the Audit report dated March 22, 2023, was the following (page 13) *“PWW replaced 8 of the 12 filters in 2022 at a cost of \$1,432,922.40. The remaining 4 filters will be replaced this spring at a cost of \$716,461.20 resulting in the total cost to replace all 12 filters of \$2,149,383.60.”*

Also in that report was: *“Audit reviewed the provided invoices [same as those invoices provided in this audit] from Calgon Carbon, which included the order dates of the carbon filter media, as well as the total cost of \$1,432,922.40 needed to replace 8 of the 12 filters for the emergency contract period. Notated on the invoices, the Company identified filters 1A, 1B, 2A, 2B, 3A, 3B, 4A, and 4B as 8 of the 12 filters replaced in 2022”*

Audit requested clarification of the timing of entries, as the \$716,461.20 was dated 12/31/2022 but the complete \$1,432,992.40 was cleared out of 105222 and booked to 320310 on 12/1/2022:

<b>9/30/2022</b>		<b>Debit</b>	<b>Credit</b>
105222 CWIP: Contractor Clearing	\$	358,230.60	
231222 A/P - CWIP			\$ (358,230.60)
<b>10/25/2022</b>		<b>Debit</b>	<b>Credit</b>
105222 CWIP: Contractor Clearing	\$	358,230.60	
231222 A/P - CWIP			\$ (358,230.60)
<b>10/26/2022</b>		<b>Debit</b>	<b>Credit</b>
231222 A/P - CWIP	\$	716,461.20	
131385 MOERR			\$ (716,461.20)
<b>12/1/2022</b>		<b>Debit</b>	<b>Credit</b>
320310 Water Treatment: Filter Media	\$	1,432,922.40	
105222 CWIP: Contractor Clearing			\$ (1,432,922.40)
<b>12/31/2022</b>		<b>Debit</b>	<b>Credit</b>
105222 CWIP: Contractor Clearing	\$	716,461.20	
231222 A/P - CWIP			\$ (716,461.20)

The Company informed Audit that the 12/1 date is the reference date on which the fixed asset system is interfaced with the general ledger system. The transaction took place in January, 2023 but the system interface is coded to be reflected on the first day of the previous month.

WO #2205056 Vehicle replacement \$58,866

Audit reviewed the open work order as of 12/31/2022 that shows:

MacMulkin Chevrolet	06/30/2022	\$43,269.00	Chevy Silverado-2022
Marshall Signs, LLC	07/31/2022	\$ 395.00	Lettering
Superior Interiors	07/31/2022	\$ 645.00	Accessories
Superior Interiors	08/31/2022	\$ 1,050.00	Two toolboxes
Kidders Repair Service	12/31/2022	<u>\$13,506.60</u>	not related to this vehicle
		\$58,865.60	

A Vehicle locator detail report from MacMulkin Chevrolet demonstrates the vehicle purchase price of \$43,269 for a 2022 Chevrolet 1500 Silverado, 4-wheel drive, double cab, vehicle identification number 1GCRDBEK6NZ517467.

An invoice from Marshall Signs, Inc. shows the \$395.00 to letter and stripe the new Chevy Silverado crew cab pickup truck.

The \$645.00 was verified to an invoice from Superior Interiors, Inc. for a NERF bar, and 4-piece WeatherTech and Rainguard accessories for the 2022 Chevy Silverado 1500 double cab.

The \$1,050.00 was verified to an invoice from Superior Interiors, Inc. for two toolboxes for the 2022 Chevy Silverado 1500.

The final invoice from Kidder's Repair Service relates to a 2022 Chevrolet Silverado 2500 ¾ ton pickup, vehicle identification 1GC3YNE77NF109309 and shows additions to the truck such as plow frame, wiring harness and controller, 3-port isolation module, Fleet Flex truckside wiring harness kit, plowside plug-in light wiring harness kit, Fish-Stik Fleet Flex plow control unit, bed rack and toolbox set, crossmembers, strobe lights, among many other accessories. The detail demonstrates that this \$13,506.60 is not associated with the vehicle purchased. Audit located the \$13,506.60 within the CPR detail, and noted that it relates to asset #125, which reportedly is asset code 200-00009539, a 2022 Chevy Silverado, valued at \$45,359. That figure is the sum of the purchase price and the first three items related to a different Silverado. Audit requested clarification of the trucks, and the Company researched the trucks and discovered that the invoice actually related to truck #214, work order #2108277, which was capitalized in 2021. Therefore, the \$13,506.60 should not be included in the 2022 capitalized asset listing. **Audit Issue #2**

WO #n/a Routine Investment in Developer Services 1x Annual Revenue \$77,276

Audit requested all of the documentation associated with this investment. The line item in the filing has no associated work order number. The information provided was:

- Monthly debits reflecting “accrue developer installed services” to account 333250, Developer Installed Serv: Paid, with credit offsets posted to account 241300, Misc. Current Accrued Liability. The month end entries automatically reverse on the first of the following month.

For those assets associated with CIAC and refunds, Audit verified that the net of the asset value minus the refund was debited to account 333230. Developer Install Serv: CIAC with the credit offset to account 271200, Contributions in Aid of Const.

	<u>1/1/2022</u>	<u>2022 Debits</u>	<u>2022 Credits</u>	<u>12/31/2022</u>
#333230	\$ 7,261,375.47	\$ 231,809.26	\$ (1,936.32)	\$ 7,491,248.41
#271200	\$ (40,156,713.82)	\$ 9,900.00	\$ (772,547.20)	\$ (40,919,361.02)
#333250	\$ 1,958,670.45	\$ 147,041.22	\$ (68,995.03)	\$ 2,036,716.64
#241300	\$ (194,390.25)	\$ 3,669,584.54	\$ (3,734,379.46)	\$ (259,185.17)

Account 333230 represents the cost for materials, inventory, labor, etc. to set meters. Account 333250 represents Pennichuck portion of meter or service installation, based on contract terms with the developer (start and stop dates) and the anticipated revenue per customer for one year. Pennichuck must send a representative onsite to ensure that the meter is set properly.

Based on documentation provided, and discussions with the Company, Audit understands that the Company enters contracts with developers, which typically last for 5 years. The contractor anticipates building residential structures, and the entries are triggered once the meter is set. As an example:

The average yearly consumption based on 2020 data, calculated for 2021 inclusion was \$702.01. The average yearly consumption based on 2021 data was updated 2/21/2022 and was \$638.03

Based on the meter being set, inspected, and in service, the actual cost, including all materials, labor, inspections, etc., are noted on the monthly Inspection of Services report. That total is referenced as the CIAC Asset Cost. For example, in January 2022, using the average rate sheet of \$702.01, multiplied by 7 meters = \$4,914.07, the following was noted:

	CIAC Asset Cost	Refund Due	CIAC to Record
7 specific meter locations	\$ 9,700.39	\$4,914.07	\$ 4,801.72
14 other non-eligible meters	<u>\$20,359.38</u>	<u>\$ -0-</u>	<u>\$20,359.38</u>
January 2022 Total	\$30,059.77	\$4,914.07	\$25,161.10

The \$4,914.07 January 31, 2022 entry was noted to be:

Developer Installed Serv: Paid #333250	\$4,914.07	
Misc Current Accrued Liability #241300		\$(4,914.07)

The above entry automatically reversed on the first of the following month, was re-accrued in the same manner February 28, 2022, reversed March 1, 2022, then posted in three specific meter sets as debits to 333250 on March 22, 2022.

Developer Installed Serv: CIAC #333230	\$25,161.10	
Contributions in Aid of Const #271200		\$(25,161.10)

WO #2200423 Mt Pleasant St \$195,948

The closed work order status report for the Mount Pleasant Avenue Main Replacement project reflects the following:

Charge Type	Date	Amount
Eng and IS Overhead	01/31/2022	\$ 427.82
Eng and IS Overhead	02/28/2022	\$ 333.16
Imtek Reprographics	03/31/2022	\$ 100.85
Eng and IS Overhead	03/31/2022	\$ 648.34
Eng and IS Overhead	04/30/2022	\$ 1,019.81
Eng and IS Overhead	05/31/2022	\$ 2,948.25
S.U.R Construction West, Inc.	05/31/2022	\$ 375.00
Eng and IS Overhead	06/30/2022	\$ 880.66
S.U.R Construction West, Inc.	06/30/2022	\$ 41,880.00
S.U.R Construction West, Inc.	06/30/2022	\$ 3,540.00
Eng and IS Overhead	07/31/2022	\$ 234.57
Eng and IS Overhead	08/31/2022	\$ 3,676.84
Eng and IS Overhead	09/30/2022	\$ 173.17
S.U.R Construction West, Inc.	09/30/2022	\$ 139,496.70
Eng and IS Overhead	10/31/2022	\$ 186.49
Eng and IS Overhead	12/31/2022	\$ 26.64
		<u>\$ 195,948.30</u>

Each Engineering and Information Systems Overhead entry was noted within the overall monthly allocation. Refer to the Overhead section of this report for a general description of overheads.

The March 2022 Imtek invoice total of \$384.93 was split among this work order, work orders 2200422, 2200427, and 2200430. The reprographics details were for hard copies of the plans and contract documents for the entire 2022 small diameter water main replacements-south project.

Audit reviewed all of the invoicing details from S.U.R. Construction West, Inc. The addressee on each was PEU (Pennichuck East Utility). The address appears to be a holdover in the S.U.R. invoicing system (according to PWW) since the work performed does relate to PWW. The description of the work included in each requisition for payment related to small diameter water main replacements, linear feet, bends, couplings, reducers, tees, adapters, caps and plugs, cross, gate valves, butterfly valves, air release assemblies, service reconnections, curb stops, service union, hydrant reconnections, temporary and final trench patch, among other finish work.

Within one of the PWW Engineering Capital Projects detail listing was reference to labor hours for a failed shutdown. Audit requested clarification of the failed shutdown and was informed that it “*refers to the labor cost or other expenditures that a contractor may incur when there is an unsuccessful attempt to shutdown an area of the water system that they need to work in to install new water infrastructure. The shutdowns typically involve a contractor that is connecting the new water infrastructure to existing water mains. It could be that there was an emergency that came up that caused the shutdown to be delayed (i.e. an existing system valve breaks, an existing valve does not close properly, etc.).*”

The October 2022 requisition for payment shows a current amount due of \$175,079.98. Handwritten details regarding the allocation shows \$193,533.31. Audit requested clarification of the total and the spread among the work orders, and was provided with the following:

Work order	Payable	Retainage	Detail supporting request
2200424	\$ 48,650.96	\$ 5,405.66	\$ 54,056.62
2200423	\$ 5,312.70	\$ 590.30	\$ 5,903.00
2200423	\$120,234.33	\$13,359.37	\$133,593.70
2200426	\$ 882.00	\$ 98.00	\$ 980.00
	<u>\$175,079.99</u>	<u>\$19,453.33</u>	<u>\$194,533.32</u>

WO #2200424 French St \$173,736

The same documentation was provided for this work order as was provided for work order #2200423 above.

Charge Type	Date	Amount
Eng and IS Overhead	01/31/2022	\$ 401.81
Eng and IS Overhead	02/28/2022	\$ 552.34
Intek Reprographics	03/31/2022	\$ 100.86
Eng and IS Overhead	03/31/2022	\$ 584.01
Eng and IS Overhead	04/30/2022	\$ 871.68
Eng and IS Overhead	05/31/2022	\$ 5,471.44
S.U.R Construction West, Inc.	05/31/2022	\$ 375.00
Eng and IS Overhead	06/30/2022	\$ 1,963.41
S.U.R Construction West, Inc.	06/30/2022	\$ 102,176.85
S.U.R Construction West, Inc.	06/30/2022	\$ 5,596.00
Eng and IS Overhead	07/31/2022	\$ 1,212.79
Eng and IS Overhead	08/31/2022	\$ 53.28
Eng and IS Overhead	09/30/2022	\$ 133.21
S.U.R Construction West, Inc.	09/30/2022	\$ 54,056.61
Eng and IS Overhead	10/31/2022	\$ 159.85
Eng and IS Overhead	12/31/2022	\$ 26.64
		<u>\$ 173,735.78</u>

WO # 2200428 Dudley St \$269,900

<b>Charge Type</b>	<b>Date</b>	<b>Amount</b>
Eng and IS Overhead	01/31/2022	\$ 1,130.61
Eng and IS Overhead	02/28/2022	\$ 487.31
Imtek Reprographics	03/31/2022	\$ 96.24
Eng and IS Overhead	03/31/2022	\$ 727.64
Eng and IS Overhead	04/30/2022	\$ 91.71
Eng and IS Overhead	05/31/2022	\$ 133.21
Eng and IS Overhead	06/30/2022	\$ 106.57
Eng and IS Overhead	07/31/2022	\$ 133.21
Eng and IS Overhead	08/31/2022	\$ 1,106.50
Eng and IS Overhead	09/30/2022	\$ 6,886.36
Joseph P. Cardillo & Son, Inc.	09/30/2022	\$ 250,122.51
Eng and IS Overhead	10/31/2022	\$ 173.17
Joseph P. Cardillo & Son, Inc.	11/30/2022	\$ 8,425.57
Eng and IS Overhead	11/30/2022	\$ 93.25
Eng and IS Overhead	12/31/2022	\$ 186.49
		<u>\$ 269,900.35</u>

Posting of the work order was verified to:

331200 Distribution Mains-New	\$207,720.04	10/01/2022
331200 Distribution Mains-New	\$ 8,705.31	12/01/2022
331250 Dist Mains: Gate Valves	\$ 36,000.00	10/01/2022
333200 Renewed Services	\$ 11,460.00	10/01/2022
108001 Accum Deprec: Cost of Rem	\$ <u>6,015.00</u>	10/01/2022
Total Work Order	\$269,900.35	

There were quarterly retirements noted within each general ledger 33X account, but it is not clear if those retirements relate to any of these additions.

Audit noted the Engineering and IS Overhead figures within each monthly allocation detail.

The Imtek Reprographics invoice, dated 3/10/2022, as discussed in the reviews of prior work orders, was allocated among this work order, 2200430, 2200427, and 2200422.

Joseph P. Cardillo & Son, Inc. certificates of payments were reviewed, showing an original contract sum of \$587,665.23 with change orders in March 2022 of \$34,900, resulting in a revised contract sum of \$622,565.23. The 9/30/2022 entry of \$250,122.51 is an allocation of the \$410,852.53 for the 2022 small diameter water mains-south project. Allocation of the overall invoice was to work orders:

<u>work order</u>	Total Invoice <u>Cost</u>	Cost of <u>Removal</u>
2206578	\$ 86,090.00	\$ -
<b>2200428</b>	<b>\$ 250,122.51</b>	<b>\$ (6,015.00)</b>
2200427	\$ 72,240.01	\$ -
2200429	\$ 2,400.01	\$ -
	<u>\$ 410,852.53</u>	<u>\$ (6,015.00)</u>

The cost of removal is included in the total invoice, and Audit noted that the total for 2200428, \$250,122.51 included the \$6,015.00 cost of removal. Audit verified the cost of removal was properly debited to account 108001 Accumulated Depreciation, and credited to account 105222.

As of the billing period through 11/23/2022, an additional change order in the amount of \$12,706.43 had been included in the total contract sum, which was adjusted to \$635,271.66. The allocation of the November application and certificate for payment was:

Allocation of 11/23/2022	
2206578	\$ 40,300.00
2200428	\$ 8,425.57
2200429	\$ 3,500.00
2200427	\$ 51,980.86
	<u>\$ 104,206.43</u>
Retainage	\$ 10,241.45
Total Invoice	\$ 114,447.88

#### WO #2200501 Kessler Farm Tank Replacement \$200,776

Within the Audit report of DW 22-006, \$3,967,082 in costs associated with the Kessler Farm Tank Replacement were reviewed. That work order, 2101759, was included in the 2021 QCP asset additions.

The 2022 QCP work order, 2200501, was noted to be \$200,776 in actual costs as of 12/31/2022. The budget had been approved for \$300,000.

Also from the 2021 Audit report:

*“The Work Order Project Change Form on the E-22 indicates the 2021 Board Approved Capital Expenditures Form increase from \$4 million to \$4,240,000... The remaining work for 2022 includes site cleanup, landscaping, and paving. The reason for the cost increase is related to pre-demolition tank cleanout, 3<sup>rd</sup> party seismic monitoring, standby generator rental, ...”*

The 2022 closed work order cost detail report reflected:

<u>Charge Type</u>	<u>Date</u>	<u>Amount</u>
Tedder, Peter A.	01/31/2022	\$ 14.99
Southworth-Milton, Inc.	01/31/2022	\$ 300.00
Southworth-Milton, Inc.	01/31/2022	\$ 4,590.00
Eng and IS Overhead	01/31/2022	\$ 13,196.68
DN Tanks	01/31/2022	\$ 16,910.00
SLR International Group	01/31/2022	\$ 1,705.00
Johnson's Electric Supply, Inc.	02/28/2022	\$ 1,437.29
Eng and IS Overhead	02/28/2022	\$ 2,243.38
Eng and IS Overhead	03/31/2022	\$ 4,009.88
Miller Engineering & Testing, Inc.	04/30/2022	\$ 250.00
Eng and IS Overhead	04/30/2022	\$ 2,251.13
DN Tanks	05/31/2022	\$ 71,750.20
Eng and IS Overhead	05/31/2022	\$ 1,980.86
DN Tanks	06/30/2022	\$ 42,150.00
Eng and IS Overhead	06/30/2022	\$ 1,775.84
DN Tanks	07/31/2022	\$ 3,559.18
Eng and IS Overhead	07/31/2022	\$ 909.04
Miller Engineering & Testing, Inc.	08/31/2022	\$ 1,290.00
Eng and IS Overhead	08/31/2022	\$ 335.94
Eng and IS Overhead	09/30/2022	\$ 722.55
DN Tanks	09/30/2022	\$ 14,561.50
DN Tanks	10/31/2022	\$ 13,528.00
Eng and IS Overhead	10/31/2022	\$ 631.91
Eng and IS Overhead	11/30/2022	\$ 568.23
Eng and IS Overhead	12/31/2022	\$ 103.96
		<b>\$ 200,775.56</b>

By asset identifier on the CPR, Audit verified the following entries:

200-00008690	\$ 46,908.35	05/01/2022	330500 Distribution Reservoirs
200-00008968	\$ 117,656.90	07/01/2022	330500 Distribution Reservoirs
200-00009550	\$ 35,538.12	11/01/2022	330500 Distribution Reservoirs
200-00009631	\$ 672.19	12/01/2022	330500 Distribution Reservoirs
	<u>\$ 200,775.56</u>		

\$46,908.35 is the sum of all activity listed above for January 2022 through April 30, 2022. The \$46,908.35 was debited to account 330500 Distribution Reservoirs, on 5/1/2022 and credited to 105222 CWIP: Contractor Clearing.

\$117,656.90 is the sum of the May 2022 through June 2022 activity, debited to 330500 Distribution Reservoirs, on 7/1/2022 and credited to 105222 CWIP: Contractor Clearing.

\$35,538.12 is the sum of the July through October 2022 invoices above, debited to 330500 Distribution Reservoirs, on 11/1/2022 and credited to 105222 CWIP: Contractor Clearing.

\$672.19 is the sum of the December items above, debited to 330500 Distribution Reservoirs, on 11/1/2022 and credited to 105222 CWIP: Contractor Clearing. The date is accurate based on the interface of the plant accounting system with the general ledger system.

Retainage relating to the DN Tanks invoices were noted as debits to account 105222, with credit offsets noted in account 241350 Accrued Liability-Retainage. Audit verified that the cash payments made to DN Tanks was the progress payment invoice total (net of the retainage).

- \$14.99 was verified to an invoice from Ocean State Job Lot dated 1/12/2022, then a check request dated 1/13/2022 to reimburse P. Tedder. The purchase was a small space heater, used to prevent freezing in the check valve pit at the Kessler Farm.
- \$300.00 was verified to an invoice from Southworth-Milton for the rental of a 350KW generator from 2/24/2021 through 1/26/2022.
- \$4,590.00 was verified to page 2 of 2 of an invoice from Southworth-Milton, dated 1/25/2022 for rental of a 350KW generator, trailer, and 50' cable from 12/29/2021 through 1/25/2022.
- \$13,196.68 is the sum of six entries on the listing of Eng and IS overheads for January 2022. The total OH for the month was \$21,181.52, with the rest of the OH allocated to several other work orders. Refer to the Overheads section of this report.
- \$16,910.00 was traced to a January 2022 progress payment invoice from DN Tanks, Inc. The detail does agree with the \$16,910, but a 10% retainage amount of \$1,691 was deducted from the invoice for the period, resulting in a progress payment due of \$15,219. \$1,691 was debited to account 105222, CWIP: Contractor Clearing, as was \$15,219. Audit verified that the actual payment to DN Tanks was \$15,219.00
- \$1,705 was verified to a February 2022 invoice from SLR International Corporation, for 12/11/2021 through 1/14/2022 vibration monitoring. The inspection and report related to damages claimed to have been caused by the Kessler Farm tank replacement work. Audit requested clarification of the claim, and was informed that *“Monitoring is performed to ensure land vibration due to construction activity is not of sufficient magnitude to cause damage...there was not any claim associated for the work with which this invoice is associated.”*
- \$1,437.29 was verified to a detailed invoice from Johnson’s Electric dated 1/24/2022 for wiring materials for the new water tank at Kessler Farms, and labor associated with the installation.
- \$2,243.38 was verified to the listing of February 2022 OH, and was part of the total \$8,102.33 allocated for the month.
- \$4,009.88 is part of the March OH allocation total of \$19,242.57.
- \$250 was verified to an invoice from Miller Engineering & Testing, Inc. dated 3/31/2022. The service was concrete testing and inspection, and the trip charge.
- \$2,251.13 was verified to the April 2022 OH listing, which reflected a total for the month of \$14,792.24.
- \$71,750.20 was traced to a May 2022 progress payment invoice from DN Tanks, Inc. The detail does agree with the \$71,750.20, but a 10% retainage amount of \$7,175.02 was

deducted from the invoice for the period. Audit requested clarification of the actual due vs. the amount reflected, and was told that *“Retainage is withheld payment to the contract, however, these are still costs incurred on the project. We do capture the total cost of the project in the filing, however, the retainage is then back out in the filing within the Retainage Held line as we have not actually paid for this cost yet. If the retainage is paid in the following year, it would go into the following year’s filing on the Retainage Paid line.”*

- \$1,980.86 was verified to a listing of the Engineering and IS overhead for the month of May 2022. The total OH allocation, spread among a variety of work orders, was \$19,903.35.
- \$42,150.00 was traced to a June 2022 progress payment invoice from DN Tanks, Inc. The detail does agree with the \$71,750.20, but a 10% retainage amount of \$4,215.00 was deducted from the invoice for the period. \$4,215 was debited to 105222, CWIP.
- \$1,775.84 was noted as the Kessler Farm work order 2200501 portion of the overall June 2022 Engineering and IS overhead allocation \$17,708.51.
- The July 2022 progress payment invoice reflected the “current payment due” of \$193,901.46, representing half of the retainage and the net detail of the work completed for the period, \$3,559.18. PWW noted \$3,559.18 as the amount in the work order.
- \$909.04 was verified to the July 2022 listing of all Engineering and IS overhead charged for the month.
- \$1,290.00 was verified to a Miller Engineering & Testing, Inc. invoice dated 4/30/2022. The invoice reflected nine shotcrete cubes, testing on 3 different days in April, and the related trip charge. Shotcrete, as defined by the 2018 International Building Code, is mortar or concrete that is pneumatically projected at high velocity onto a surface. The cube is used as weight-bearing.
- \$335.94 was part of the overall August 2022 Engineering and IS overhead \$27,911.76
- \$722.55 was part of the overall September 2022 Engineering and IS overhead \$18,185.34.
- \$14,561.50 was noted as the “work completed this period” within the progress billing for September 2022, per a progress billing from DN Tanks. The “current payment due, however, as with the prior progress billings, was \$13,833.42, net 5% retainage of \$728.08.
- \$13,528.00 was noted as the “work completed this period” within the progress billing for October 2022, per a progress billing from DN Tanks. The “current payment due, however, as with the prior progress billings, was \$12,851.60, net 5% retainage of \$676.40.
- \$631.91 was verified to the October 2022 detailed listing of workorders to which the Engineering and IS overhead total of \$22,980.09 was allocated.
- \$568.23 was verified to the November 2022 detailed listing of workorders to which the Engineering and IS overhead total of \$21,284.40 was allocated.
- \$103.96 was verified to the December 2022 detailed listing of workorders to which the Engineering and IS overhead total of \$27,235.92 was allocated.

The overall contract plus change orders between Pennichuck Water and DN Tanks was \$3,842,053.44 for the Kessler Farms Tank. As of the last progress billing provided to Audit, October 2022, the “balance to finish” represented only the retainage of \$192,102.68. Audit requested clarification of the Kessler Farms project, as it was considered used, useful and in

service in December 2021. The Company noted that any 2022 charges were booked to 330500, Distribution Reservoirs.

Retirement of the replaced tank was verified to assets identifiers and the general ledger as follows:

Asset Identifier	Original Cost	Install Date	General Ledger
20000-005064	\$ 323.64	10/01/2002	304100 Source of Supply Structures
20000-005064.2	\$ 48,300.00	06/01/2002	304100 Source of Supply Structures
20000-005064.3	\$ 11,182.50	09/01/2002	304100 Source of Supply Structures
20000-005421	\$ 3,482.32	07/01/2003	304100 Source of Supply Structures
20000-005422	\$ 820,365.08	07/01/2003	304100 Source of Supply Structures
20000-005422.1	\$ 2,377.91	12/01/2003	304100 Source of Supply Structures
20000-005675	\$ 9,664.03	08/01/2004	304100 Source of Supply Structures
20000-5064.1.1	\$ 1,528.44	05/01/2002	304100 Source of Supply Structures
20000-5064.1.2	\$ 36,541.04	05/01/2002	304100 Source of Supply Structures
20000-5064.1.3	\$ 10,578.89	05/01/2002	304100 Source of Supply Structures
20000-5064.1.4	\$ 27,597.74	05/01/2002	304100 Source of Supply Structures
	<u>\$ 971,941.59</u>		
	\$ (971,941.59)	06/30/2022	Q2 retirement in general ledger 304100.

It appears that the original tank had been recorded into account 304100, Source of Supply Structures, but should have been reflected in account 330500, Distribution Reservoirs and Standpipes.

#### WO #2208205 Excavator \$125,303

Open work order details relating to a new Volvo ECR88D Excavator were noted to be:

Chadwick-Baross, Inc.	\$123,261.00	11/30/2022	NET price less trade-in allowance
Chadwick-Baross, Inc.	\$ 742.45	12/31/2022	camera
Chadwick-Baross, Inc.	\$ 1,300.00	12/31/2022	Volvo 12" bucket
	<u>\$125,303.45</u>		

An equipment sales order form noted a sale price of \$149,261 less a trade-in allowance of \$26,000, resulting in the net balance due of \$123,261. The trade-in was a Volvo EC55 with three buckets.

Audit noted the asset addition of \$125,303.45 was debited 12/1/2022 to account 345000, Power Operated Equipment, with a credit offset noted in account 105222, CWIP: Contractor Clearing. The only retirement noted in account 345000 was \$(330.97) on 12/31/2022. **Audit Issue #3**

An example of how the entry should have been posted is: **Audit Issue #3**

Debit Account 345000	\$149,261+\$742.45+\$1,300.00=	<b>\$151,303.45</b>
Credit 108002	Accumulated Depreciation Gain/Loss	\$ (26,000.00)
Credit 105222	CWIP Contractor Clearing or CASH	\$(125,303.45)

WO #2200381 Radio replacement \$236,311

The closed work order cost detail reflects 244 individual line items related to Neptune Radio -R900 assemblies. The majority of those were identified as Wall MIU (meter interface unit), and others identified as Pit MIU assemblies. The replacement program began in August 2022, with the wall assemblies priced at \$100.60 and the pit assemblies at \$137.58. In November, the price for the wall assembly increased to \$112.93 and the pit assembly to \$142.39. In December, the pricing reflected \$114.82 and \$146.21. Individual job tickets for over 2,000 customer contacts were provided. Each noted the system, customer account number, property location, customer name, and work performed. Part number U-10067 identified the radio.

Audit verified the quarterly posting to general ledger account 334100, Radios for Metering, as follows:

03/1/2022	\$ 35,515.59
06/1/2022	\$ 26,735.23
09/1/2022	\$ 58,002.44
12/1/2022	<u>\$116,057.39</u>
	\$236,310.65

Credit offsets were noted in account 184200, Inventory-WIP.

Retirements noted in account 334100 summed to \$(183,059.08).

**Insurance**

Two additions in the filing, funded by debt, were related to damage:

WO #2201770 Replacement 2022 Chevy Equinox	\$29,876
WO #2206244 Replacement for vandalized water quality equipment	\$38,922

WO #2201770

An insurance claim confirmation shows the 2015 GMC Terrain value of \$15,096, and the date of the loss 12/11/2021. The claim was reported 2/16/2022. The Company noted that it did receive an insurance check on 3/16/2022 in the amount of \$14,131 as a result of the damage. The insurance proceeds were credited to account 108002, Accumulated Gain/Loss as part of the \$15,131.00 March cash management entry. The debit was offset to account 131140 Cash-TD Bank.

Audit requested the supporting documentation relating to the vehicle replacement, reported to have been damaged in a storm. PWW provided the Open work order detail that showed a total 2/28/2022 charge from MacMulkin Chevrolet in the amount of \$29,876. A print-out of the GM Vehicle Locator (for MacMulkin) showed the suggested MSRP of \$31,444, but a note on the sheet indicating the vehicle was in stock and the Company would be charged \$29,876. The \$29,876 was verified to general ledger account 341000, Transportation Equipment, on 3/1/2022.

Within the Transportation Equipment account there was a total \$477,416 added during 2022, with retirements summing to \$(272,841.41).

WO #2206244

Similarly, work order #2206244 was noted on the filing as replacement for vandalized water quality monitoring equipment. The filing lists the replacement cost as \$38,922. The Company indicated it did not receive any insurance money as a result of the vandalism. The 12/31/2022 Open work order cost detail reflected:

08/31/2022	Engineering and IS Overhead	\$ 349.85
09/30/2022	American Express	\$ 1,534.00
10/31/2022	American Express	\$16,312.66
10/31/2022	American Express	\$ 265.46
12/31/2022	American Express	<u>\$20,460.21</u>
	Total Work Order #2206244	\$38,922.18

Audit verified the sum of the first four items above, \$18,461.97, to posting to account 320000 Purification System Equipment on 11/1/2022. The \$20,460.21 was posted to the same account on 12/1/2022.

- The overhead was part of the August 2022 monthly allocation total of \$27,911.76.
- The \$1,534 was noted in the 9/2022 reimbursement request of J. Boisvert. The invoice attached to the reimbursement request was from IEI, Intermountain Environmental, Inc which showed a 9/16/2022 shipment of a ramp flume, stilling well, and related hardware and gaskets.
- \$16,312.66 and \$265.46 were noted on an expense reimbursement request of J. Boisvert for October 2022. The American Express statement included both charges. Emails dated 9/30/2022 from OTT Hydromet Corp summarized the totals owed, but there is no documentation reflecting specifically what was ordered.
- The 12/31/2022 \$20,460.21 was included on the December expense reimbursement request of J. Boisvert, supported with an email invoice from OTT Hydromet Corp. The detailed invoice reflected accessories, lines, Xlink 500, power and grounding, hydrolab sensor, supply chain surcharge of \$2,230.16 and freight costs of \$325.

Audit reviewed each of the 320XXX accounts and was unable to determine if the replaced asset has been retired:

<u>GL #</u>	<u>Account Title</u>	<u>Debit Total</u>	<u>Credit Total</u>
320000	Purification System Equipment	\$ 65,923.31	\$ -
320100	Other Production Equipment	\$ -	\$ -
320101	Other Production Equip: CIAC	\$ -	\$ -
320200	Water Treatment Equipment	\$ 29,653.93	\$ (3,754.14)
320310	Water Treatment: Filter Media	\$ 1,439,130.02	\$ (1,178,180.68)

**Depreciation**

Audit recalculated several samples from the continuing property records to verify the accuracy, the rates, use of the straight line method, and the use of half-year convention for new additions and assets retired during 2022.

Within the 2021 filing and Audit report, the following deferred accounts and related amortization were noted:

GL #	Account Name	2021 Cost	2021 Amort	2021 End Bal	2022 Amort	2022 End Bal
186155	Northwest Pressure System Analysis	\$ 16,949.39	\$ (70.62)	\$ 16,878.77	\$ (847.44)	\$ 16,031.33
186160	Distribution system Analysis-Hudson	\$ 5,058.21	\$ (21.08)	\$ 5,037.13	\$ (252.96)	\$ 4,784.17
186165	PWW RRA-ERP 2021	\$ 15,762.21	\$ (187.64)	\$ 15,574.57	\$ (2,251.77)	\$ 13,322.80
186208	Union Negotiations-2021	\$ 1,355.50	\$ (37.65)	\$ 1,317.85	\$ (451.80)	\$ 866.05
186458	Harris Pond Dam LOD & Study	\$ 101,626.24	\$ (846.89)	\$ 100,779.35	\$ (10,162.68)	\$ 90,616.67
186459	Supply Pond Dam LOD & Study	\$ 48,517.87	\$ (404.31)	\$ 48,113.56	\$ (4,851.72)	\$ 43,261.84
186671	Pennichuck Brook Ponds Aerial	\$ 16,824.16	\$ (233.98)	\$ 16,590.18	\$ (2,779.89)	\$ 13,810.29

In response to an Audit question from the 2021 audit, related to the inclusion of deferred accounts and associated amortization in the QCPAC filing, the Company noted:

*“The Company is not seeking to amortize for collection in rates rather this expense is being paid for with money as approved in the Settlement Agreement pg. 39 in DW19-084 Order 26-425: ...*

*Therefore, the Settling Parties agree and recommend the Commission authorize that ,effective January 1, 2021 and thereafter, the Company re-prioritize its usage of funds available in its DSRR-0.1 account in the following manner, by order of priority:*

- 1) fund the cost of PWW’s deferred assets (i.e. studies, engineering design work completed in advance of construction bids and construction, and other intangible assets) that do not qualify for debt financing and, thus, QCPAC recovery;*
- 2) replenish PWW’s RSF fund balances to their fully approved imprest values; and*
- 3) fund PWW’s capital improvements, as previously authorized in DW 16-806.”*

The Company did not include any deferred accounts in the 2022 additions as filed in the current docket in February 2023. However, Audit reads the settlement section to literally mean that the Company should pay for things like the System Analyses, Union negotiations, studies, etc., not defer and amortize the initial cost.

## Revenues

Audit randomly sampled invoices from February 2022 and December 2022 for Commercial, Residential, and Municipal customers, to verify the rates charged complied with Commission Orders. Specifically:

<u>Commercial Meter</u>	<u>Feb 2022</u>	
PWW Water Usage 3 CCF @\$4.01	\$	12.03
PWW Monthly Meter 5/8"	\$	24.34 \$ 36.37
PWW Recoupment 2020	\$	0.70
PWW Rate Case Exp 2020	\$	0.50
PWQCPAC Recoupment	\$	2.26
PWQCPAC 3.90%	\$	1.42 = $\$36.37 \cdot .039$
Current Charges	\$	41.25

<u>Commercial Meter</u>	<u>Dec 2022</u>	
PWW Water Usage 3 CCF @\$3.99	\$	11.97
PWW Monthly Meter 5/8"	\$	24.34 \$ 36.31
PWQCPAC Recoup 2019	\$	2.26
PWQCPAC 7.25%	\$	2.63 = $\$36.31 \cdot .0725$
Current Charges	\$	41.20

<u>Residential Meter</u>	<u>Feb 2022</u>	
PWW Water Usage 16 CCF @\$4.01	\$	64.16
PWW Monthly Meter 5/8"	\$	24.34 \$ 88.50
PWW Recoupment 2020	\$	1.27
PWW Rate Case Exp 2020	\$	0.50
PWQCPAC Recoupment	\$	4.91
PWQCPAC 3.90%	\$	3.45 = $\$88.50 \cdot .039$
Current Charges	\$	98.63

<u>Residential Meter</u>	<u>Dec 2022</u>	
PWW Water Usage 10 CCF @\$3.99	\$	39.90
PWW Monthly Meter 5/8"	\$	24.34 \$ 64.24
PWQCPAC Recoup 2019	\$	4.91
PWQCPAC 7.25%	\$	4.65 = $\$64.24 \cdot .0725$
Current Charges	\$	73.80

<u>Municipal Meter</u>	<u>Feb 2022</u>	
PWW Water Usage 12 CCF @\$4.01	\$	48.12
PWW Monthly Meter 1"	\$	57.36 \$ 105.48
PWW Recoupment 2020	\$	1.39
PWW Rate Case Exp 2020	\$	0.50
PWQCPAC Recoupment	\$	4.12
PWQCPAC 3.90%	\$	4.12 = $\$105.48 \cdot 0.039$
Current Charges	\$	115.61

<u>Municipal Meter</u>	<u>Dec 2022</u>	
PWW Water Usage 1 CCF @\$3.99	\$	3.99
PWW Monthly Meter 1"	\$	57.04 \$ 61.03
PWQCPAC Recoup 2019	\$	4.12
PWQCPAC 7.25%	\$	4.43 = $\$61.03 \cdot .0725$
Current Charges	\$	69.58

The Volumetric and Monthly Meter charges were verified to the eighth and ninth revised page 43 of the tariff.

Audit verified that the Water Usage and the Monthly Meter charges were the base against which the PWQCPAC was calculated. Audit recalculated each with no exception.

The 2020 PWW Recoupment varied by customer class and was described by the Company as follows:

*“PWW Recoupment 2020 Calculation (DW 19-084) – bills from May 2020 through November 2020 were multiplied by the percentage increase for the service class. The May bill was prorated based on days of service from effective date of 4/14/2020. The QCPAC Surcharge billed during this time frame was then subtracted and the total recoupment amount was then divided by 18 to get the monthly amount to bill over 18 months.”*

The PWW rate case surcharge of \$0.50 was approved by Order 26,469 issued 4/8/2021 and verified to the tariff.

The PWQCPAC Recoupment (2019) also varied by customer class. The Company described each calculation:

*“PWQCPAC Recoupment (DW 20-020) - bills from May 2020 through December 4, 2020 were multiplied by the percentage increase for the service class per DW 19-084 then multiplied by QCPAC Surcharge percentage of 3.90%. The May bill was prorated based*

on days of service from effective date of 4/23/2020. The bills from December 10, 2020 through December 2021 were multiplied by the Surcharge percentage of 3.90%. The total recoupment amount was then divided by 12 to get the monthly amount to bill over 18 months.

*PWQCPAC Recoup 2019 (DW 20-020) – is the same as PWQCPAC Recoupment on February bill. When the QCPAC surcharge Order came in for DW 21-023 and this was still billing, we added the 2019 to the description on the bill to differentiate between the two recoupments on the bill.”*

The February QCPAC rate of 3.90% and the December rate of 7.25% were approved as described in the introduction section of this report.

**Summary of Property Tax Adjustments \$119,642**

RSA 83-F specifies Utility property, which is taxable for the statewide and local property tax purposes as follows:

*“V. "Utility property" means all real estate, buildings and structures, machinery, dynamos, apparatus, poles, wires, fixtures of all kinds and descriptions, and pipe lines located within New Hampshire employed in the generation, production, supply, distribution, transmission, or transportation of electric power or natural gas, crude petroleum and refined petroleum products or combinations thereof, water, or sewage subject to tax under RSA 72:6, 72:7 and 72:8, but not exempt under RSA 72:23; provided that no electric power fixtures which would otherwise be taxed under this chapter shall be taxed under this chapter if they are employed solely as an emergency source of electric power.”*

Audit reviewed the filing and related property tax rates. The filing includes property tax expenses within each funded type of asset addition as follows:

Debt funded	\$112,527
Debt and 0.1 DSRR	\$ 790
0.1 DSRR	\$ 6,325
Total property tax	\$119,642

As noted within the filing, the total for each location is inclusive of the municipal level property taxes, excluding the state education portion, plus the statewide \$6.60 education property tax rate. Audit verified the rates to the NH Department of Revenue Administration (DRA) website for the 2022 property tax rates. For Derry, Merrimack, and Nashua, the calculated municipal rates agree with the DRA:

	per filing			DRA 2022 Property Tax Rates			Muni without State Ed
	DLW-1	less state	calculated municipal	DRA Municipal	DRA County	DRA Local Ed	
Derry	\$ 24.62	\$ 6.60	\$ 18.02	\$ 5.68	\$ 0.67	\$ 11.67	\$18.02
Merrimack	\$ 22.87	\$ 6.60	\$ 16.27	\$ 3.86	\$ 0.88	\$ 11.53	\$16.27
Nashua	\$ 23.55	\$ 6.60	\$ 16.95	\$ 7.56	\$ 0.95	\$ 8.44	\$16.95

There are several project lines in the filing which refer to the property tax location as “various”, with a reported rate of \$23.78. Audit requested and was provided with the calculation which reflected all towns, the reported customers served in each town, the December 2022 tax rate and a calculated property tax figure. The total of those property tax figures is divided by the number of total customers, to arrive at an average for “various”. Specifically verified by Audit:

Municipality	per 2022 NH DRA Tax Rate website				State Ed	Total Rate	# of	# * Muni Total
	Municip	County	Local Ed	Muni Total			customers	
Amherst	\$ 4.32	\$ 0.93	\$ 14.71	\$ 19.96	\$ 6.60	\$ 26.56	1,495	\$ 29,840.20
Bedford	\$ 3.80	\$ 0.97	\$ 11.66	\$ 16.43	\$ 6.60	\$ 23.03	1,166	\$ 19,157.38
Derry	\$ 5.68	\$ 0.67	\$ 11.67	\$ 18.02	\$ 6.60	\$ 24.62	814	\$ 14,668.28
Epping	\$ 5.17	\$ 0.85	\$ 15.18	\$ 21.20	\$ 6.60	\$ 27.80	79	\$ 1,674.80
Hollis	\$ 5.19	\$ 1.18	\$ 14.84	\$ 21.21	\$ 6.60	\$ 27.81	134	\$ 2,842.14
Merrimack	\$ 3.86	\$ 0.88	\$ 11.53	\$ 16.27	\$ 6.60	\$ 22.87	433	\$ 7,044.91
Milford	\$ 4.51	\$ 0.92	\$ 14.24	\$ 19.67	\$ 6.60	\$ 26.27	255	\$ 5,015.85
Nashua	\$ 7.56	\$ 0.95	\$ 8.44	\$ 16.95	\$ 6.60	\$ 23.55	24,683	\$ 418,376.85
New Market	\$ 6.27	\$ 0.94	\$ 18.36	\$ 25.57	\$ 6.60	\$ 32.17	87	\$ 2,224.59
Plaistow	\$ 5.18	\$ 0.71	\$ 11.91	\$ 17.80	\$ 6.60	\$ 24.40	222	\$ 3,951.60
Salem	\$ 5.08	\$ 0.72	\$ 9.11	\$ 14.91	\$ 6.60	\$ 21.51	72	\$ 1,073.52
							<b>29,440</b>	<b>\$ 505,870.12</b>
							<b>Average Muni Rate</b>	<b>\$ 17.18</b>
							<b>State Ed Rate</b>	<b>\$ 6.60</b>
							<b>Total calculated "Various"</b>	<b>\$ 23.78</b>

Audit verified the number of customer using the 2021 PUC Annual Report. The 2022 Annual Report, filed on March 30, 2022 reflected a net reduction of 73 in the number of customers. Audit recalculated the Various property figure using those figures, and it changed by an immaterial one penny to \$23.79.

Certain projects reflected municipal property taxes that should not have had the property tax included in the filing. Specifically:

WO #2201770 Purchase 2022 Chevrolet Equinox property Nashua	\$ 704
WO #2201369 Bowers Dam Spillway reconstruction Merrimack/Nashua	\$2,788
WO #2209030 New Cubicle-Accounting Department Nashua	\$ 123
Amount of Property Tax calculated that should not have been included:	\$3,615

Audit requested the status of WO #2201369, the Bowers Dam Spillway, which was noted as “deferred due to supply chain issues and potential funding through NH DES HHDP”. However, the filing also notes that using 0.1 DSRR funds, \$120,140 was spent as of 12/31/2022. The Company noted that:

*“The money spent to date was for design and preparation of bid documents. The Company was informed by the NHDES Dam Bureau the upgrades to Bowers Dam might be eligible for partial grant funding in late June of 2022. At the time the Company was informed that the project was eligible for potential grant funding it had bid ready*

*documents and was prepared to go to bid. The Company deferred the bidding of the project and applied for grant funding in July of 2022. Grant funding was available through the NH Homeland Security and Emergency Management Division. The upgrade to the Bowers Dam was deemed as eligible for grant funding in November of 2022. The final approval of the grant, which must pass through FEMA and State Governor and Council. is not expected until May or June of 2023 at which point the Company will finally put the project out to bid. It is currently estimated that the grant will pay for between 35% to 65% of the project construction cost. The final percentage will be based on the available funds at the State level. Due to the time of year work limitations, the actual work on the Bowers Dam is not expected to be undertaken and completed until the summer/fall of 2024. The design work to date has been funded with 0.1 DSRR funds.”*

Audit recommends that once the spillway project is completed, then the total project should be used, useful and in service, and the municipal and state level property tax calculation should be noted as an eligible for property tax calculation and inclusion in that subsequent QCP filing. Until the spillway is in service, it should not be included property tax calculation total request for recovery. **Audit Issue #4**

## **Audit Issue #1**

### **Asset Additions in Construction Work in Progress**

#### **Background**

The Company included work order #2208041, Utility Network Migration in this 2022 qualified capital addition detail. The work order was noted to be funded by 01.DSRR funds (not part of the QCPAC calculation) and debt (which is part of the QCPAC calculation).

Work order 2208041 Utility Network Migration - debt	\$32,421
Work order 2208041 Utility Network Migration - cash	<u>\$ 1,128</u>
Total for work order 2208041	\$33,549

#### **Issue**

The Utility Network Migration WO #2208041 was verified to the open project work order detail as of 12/31/2022.

Audit understands that projects funded with 01.DSRR (cash) are not eligible for inclusion in the QCPAC calculation, but because the project was not complete as of 12/31/2022, none of the debt-funded portion should be part of the actual 2022 QCPAC calculation.

Audit noted the total \$33,549.40 in account 105444, CWIP Contractor Clearing-Other. RSA 378:30(a) specifically restricts inclusion of assets that are in the CWIP account to be part of rates charged to customers.

#### **Recommendation**

The filing 2022 additions should be reduced by \$32,421, resulting from the debt funded portion of the project. The project remained in account 105444, CWIP Contractor Clearing at the end of 2022, and RSA 378:30 prohibits utilities from charging customers for assets in the CWIP account.

#### **Company Response**

The Company agrees with the recommendation to reduce the additions by \$32,421.

#### **Audit Conclusion**

Audit concurs with the Company Response.

## Audit Issue #2

### Asset Additions Over-stated

#### Background

The Company included work order #2205056, Vehicle Replacement \$58,866 in this 2022 qualified capital addition detail.

#### Issue

WO #2205056 Vehicle replacement \$58,866 is the sum of five specific CPR line items:

Audit reviewed the open work order as of 12/31/2022 that shows:

MacMulkin Chevrolet	06/30/2022	\$43,269.00	Chevy Silverado-2022
Marshall Signs, LLC	07/31/2022	\$ 395.00	Lettering
Superior Interiors	07/31/2022	\$ 645.00	Accessories
Superior Interiors	08/31/2022	\$ 1,050.00	Two toolboxes
Kidders Repair Service	12/31/2022	<b><u>\$13,506.60</u></b>	not related to this vehicle
		<b>\$58,865.60</b>	

Audit requested clarification of the truck referenced on the Kidder Repair Service invoice. The Company researched the trucks and discovered that the invoice actually related to a truck that was capitalized in 2021.

#### Recommendation

The filing 2022 additions should be reduced by \$13,506.60, and the CPR detail should be clarified to ensure that the truck accessories are associated with the accurate vehicle identification.

#### Company Response

The Company agrees with the recommendation to reduce the additions by \$13,506.60.

#### Audit Conclusion

Audit understands the Company Response to reduce the 2022 QCPAC asset addition by the noted \$13,506.60. Audit concurs, and reminds the Company that the CPR should be updated to ensure all accessories are identified with the correct truck.

**Audit Issue #3**  
**Accounting for Vehicle Trade-in**

**Background**

Open work order #2208205 details relating to a new Volvo ECR88D Excavator were noted to be:

Chadwick-Baross, Inc.	\$123,261.00	11/30/2022	NET price less trade-in allowance
Chadwick-Baross, Inc.	\$ 742.45	12/31/2022	camera
Chadwick-Baross, Inc.	\$ 1,300.00	12/31/2022	Volvo 12” bucket
	\$125,303.45		

**Issue**

An equipment sales order form noted a sale price of \$149,261 less a trade-in allowance of \$26,000, resulting in the net balance due of \$123,261. The trade-in was a Volvo EC55 with three buckets.

Audit noted the asset addition of \$125,303.45 was debited 12/1/2022 to account 345000, Power Operated Equipment, with a credit offset noted in account 105222, CWIP: Contractor Clearing.

An example of how the entry should have been booked is:

Debit Account 345000	\$149,261+\$742.45+\$1,300.00=	<b>\$151,303.45</b>
<u>Credit 108002</u>	Accumulated Depreciation Gain/Loss	\$ (26,000.00)
<u>Credit 105222</u>	CWIP Contractor Clearing, or CASH	\$(125,303.45)

The only retirement noted in account 345000 was \$(330.97) on 12/31/2022.

**Recommendation**

The Company should adjust the general ledger and CPR details to reflect the actual original cost for the full amount of the excavator, not the net cash paid. The trade-in value should have been credited to the Accumulated Depreciation account.

The full original cost of the replaced excavator should have been credited to account 345000, and offset to Accumulated Depreciation 108000.

**Company Response**

The Company has made this adjustment for the trade in value of \$26,000 in 2023.

**Audit Conclusion**

Audit concurs relative to the \$26,000, and restates that the original excavator should be credited to the Plant in Service account, with the full book value debited to Accumulated Depreciation.

**Audit Issue #4****Property Tax****Background**

Audit reviewed the projects and related property tax rates reflected within the 2022 actual additions.

**Issue**

Certain projects reflected municipal property taxes that should not have had the property tax included in the filing. Specifically:

WO #2201770 Purchase 2022 Chevrolet Equinox property Nashua	\$ 704
WO #2201369 Bowers Dam Spillway reconstruction Merrimack/Nashua	\$2,788
WO #2209030 New Cubicle-Accounting Department Nashua	<u>\$ 123</u>
Amount of Property Tax calculated that should not have been included:	\$3,615

The Equinox and New Cubicle are not necessary for the provision of water service, and the Spillway project costs to date relate only to design and bid documents, thus would not have been used, useful and in service until the project is completed.

**Recommendation**

Audit recommends that the property tax figure of \$3,615 be removed from the calculation of the QCPAC for assets placed in service in 2022.

**Company Response**

The Company agrees with the recommendation and will reduce the filing by \$3,615.

**Audit Conclusion**

Audit concurs with the Company Response.

**ATTACHMENT C**

**Engineering Consulting Report – DW 23-015**

**Douglas W. Brogan, P.E.**

**July 28, 2023**

**MEMO REPORT**

Date: July 28, 2023

**From:** Douglas W. Brogan, P.E.**To:** Jayson Laflamme, Asst. Director - Water Group, Regulatory Support Div., NH Dept. of Energy**Re:** DW 23-015 Pennichuck Water Works, Inc.  
Petition for Approval of 2023 Qualified Capital Project Annual Adjustment Charge

I am writing this memo report as an engineering consultant to the Water Group, Regulatory Support Division to summarize my findings in the above-referenced docket. The Qualified Capital Project Annual Adjustment Charge (QCPAC) program was initially authorized for Pennichuck Water Works, Inc. (PWW or company) in DW 16-806 (Order 26,070, November 7, 2017). In the current docket PWW is seeking approval of a QCPAC surcharge for projects completed in 2022; preliminary approval of projects proposed for 2023; and has provided its capital budgets for 2024 and 2025 for informational purposes. My review is limited primarily to the engineering and operational aspects of the filing and is based on review of the filing, subsequent updates (in particular the most recent update provided July 5, 2023), case discovery, E-22 forms (Reports of Proposed Expenditures for Additions, Extensions and Capital Improvements to Fixed Capital), and associated materials.

**2022 Projects**

A significant portion of the company's capital investment each year has typically involved replacement of water mains, either as a result of the company's own prioritization or involving coordination with City of Nashua and Town of Amherst sewer, storm drain and repaving projects. According to the company, some 75 miles of water main of various types remain in the core system that are of concern due to material, age or other factors (testimony of John J. Boisvert, Bates p. 57, lines 4-13). In the past the company has generally aimed to replace 3 to 4 miles of such mains each year, but this number is often reduced when other significant capital investments are required in a given year. Recent years have been further impacted by Covid-related challenges and resource availability, as reflected in the numbers below:

	Feet Replaced	Miles Replaced
2015	10,384	2.0
2016	11,670	2.2
2017	7,713	1.5
2018	16,869	3.2
2019	10,168	1.9
2020	4,882	0.9
2021	1,004	0.2
2022	5,323	1.0

As a result, the company has recently begun to design water main replacement projects in the year prior to anticipated construction, to better accommodate supply chain and other delays. The company is also continuing to expand the use of its maturing asset management capabilities to select main replacement projects going forward.

As partially noted above, the company replaced 5,323 feet of water main in 13 separate projects in 2022, at a total cost of **\$1,920,134**. This accounted for 33 percent of the QCPAC-eligible costs of \$5,801,879 in 2022.

Several of the larger projects not involving main replacements are identified below. The company has affirmed that all 2022 projects proposed for inclusion in the QCPAC surcharge were used and useful as of December 31, 2022 (testimony of Donald L. Ware, Bates p. 19, lines 1-2).

#### A. Carbon Filter Media

The granular activated carbon (GAC) media at the company's Nashua water treatment plant requires periodic change-out as filtration effectiveness is exhausted. New standards for PFAS (per- and polyfluoroalkyl substances) have increased the needed frequency of these change-outs. Media was replaced in 8 of the plant's 12 filter beds in 2022 at a cost of **\$1,432,922**.

#### B. Prior Year Carryover Projects

The company completed work in 2022 on two larger projects begun in previous years:

- 1) Final site restoration and exterior tank finishing on the Kessler Farm Tank replacement in Nashua, at a cost of **\$200,776**.
- 2) Installation of remaining phase I valves in the ongoing Coburn Woods main replacement project in Nashua, at a cost of **\$183,474**.

## 2023 Projects

Apart from individual water main replacements, larger projects proposed for 2023 include the following:

### A. Carbon Filter Media

The company plans to complete replacement of GAC media in the remaining 4 of the Nashua treatment plant's 12 filter beds in 2023 at a cost of **\$600,000**.

### B. Water Treatment Plant Chemical Feed and Storage

This major upgrade is intended to address critical chemical feed and storage limitations that have emerged in recent years at the Nashua treatment plant. Final design, permitting and bidding are anticipated in 2023, at a cost of **\$600,000**.

### C. System Interconnections

The company plans to interconnect three small stand-alone systems with other nearby systems to address significant water supply deficiencies. These include connecting the Sweet Hill and Twin Ridge systems in Plaistow to the new Plaistow community water system, at costs of **\$420,000** and **\$270,000**, respectively; and the English Woods system in Bedford to the company's Powder Hill system in the same town at a cost of **\$350,000**.

## 2024-2025 Projects

Again apart from water main replacements, several larger projects loom on the horizon in the next two budget years:

### A. Water Treatment Plant Chemical Feed and Storage

This substantial upgrade to treatment plant chemical systems may also require expansion of the treatment facility itself. Early estimates put overall costs at **\$8,500,000** in 2024 and **\$3,900,000** in 2025.

### B. Bowers Pond Spillway Reconstruction

This project on the Nashua/Merrimack border is intended to address Department of Environmental Services requirements in relation to the ability to handle peak flood flows. It was previously deferred due to both supply chain issues and a final decision on likely federal grant assistance, and is now planned for 2024 at a cost of **\$2,300,000**.

### C. Other Projects

Other larger projects include:

- The next phase of main replacements in the Coburn Woods development (**\$1,500,000** in 2024 and **\$350,000** in 2025).
- Beginning the next round of carbon filter media replacements at the Nashua treatment plant (**\$1,500,000** in 2025).
- Construction of a Parrish Hills booster station and water mains to alleviate low pressures in the western portion of Nashua (**\$1,350,000** in 2024).

### **Conclusion**

I believe the company continues to demonstrate overall sound engineering competence in its planning and approach to the various capital improvement projects. For 2022, I would support a finding that each of the listed projects indicated as completed and in service at year-end was prudent, used and useful; and the 2023 projects as proposed appear reasonable.

**ATTACHMENT D**

**Department of Energy Discover Requests  
and PWW Responses – DW 23-015**

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-1

Date of Response: 5/22/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Testimony of Donald L. Ware (Ware Testimony); Page 5 (Bates 18); Lines 7-9 and Exhibit DLW-1, Pages 3-5 (Bates 32-37):** The testimony states that the Company is currently assuming an interest rate of 5.50% on the 30-year bonds it will be selling in 2024 for 2023 Qualified Capital Projects (QCP), 2025 for 2024 QPCs, and 2026 for 2025 QPCs. Please explain why the interest rates indicated on the corresponding Exhibit DLW-1 schedules relative to each QCP year are as follows:

- a) Exhibit DLW-1, Page 3 (Bates 33) – 2023, Cell E-115: 5.30%
- b) Exhibit DLW-1, Page 4 (Bates 35) – 2024, Cell E-116: 5.25%
- c) Exhibit DLW-1, Page 5 (Bates 37) – 2025, Cell E-94: 5.25%

**RESPONSE:**

The final projected interest that the Company decided to use was 5.50% per my testimony. The interest rate was not changed in Exhibit DLW-1, Pages 3-5 from 5.25% to 5.50% when this final projection was made. Please see the attached revised Exhibit DLW-1 which reflects 5.50% as the projected interest rate in lieu of 5.25% in Cell E-116 (Page 3), Cell E-117 (Page 4) and Cell E-96 (Page 5).

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-2

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Ware Testimony; Page 5 (Bates 18); Lines 14-20:**

- a) Please provide the date on which the 2023 bond sale occurred.
- b) Please indicate the amount for which the bonds were sold, and if necessary, please reconcile that amount to the projected amount of the bonding of \$5,847,807 indicated on Exhibit DLW-1, Page 2 (Bates 31) – 2022 Actual QCPAC Expenditures, Cell K163.
- c) Please provide the interest rate(s) of the bonds sold.
- d) Please update Exhibit DLW-1, Page 1 (Bates 29) and Page 2 (Bates 30-31) to reflect that bond sale.

**RESPONSE:**

- a) The bonds were sold on April 26, 2023
- b) The bonds were sold net project funds of \$5,815,385.00, which was the amount that could be bonded for after one project of \$32,422 was eliminated as ineligible to be bonded for (and was therefore funded with available DSRR 0.1 funds). The overall bond issuance was \$6,088,857.45 inclusive of bond premium of \$53,857.45, and cost of issuance of \$219,615.00 of cost of issuance.
- c) The average coupon for the hybrid bond issuance was 5.010471%, and a total “true interest cost” (TIC) of 5.005716%.
- d) Please see the attached, revised Exhibit DLW-1 which reflects updating the interest rate to the final TIC (Cell E169) and Bond amount (Cell K167).

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-3

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Ware Testimony; Page 10 (Bates 23); Lines 15-17:** Please confirm the date on which the first interest payment on the 2023 bonds will be due relative to the issuance date indicated by the Company in its response to DOE 1-2(a).

**RESPONSE:**

The first interest payment of \$130,309.79 for the 2023 bonds (Series A and B) is due on October 1, 2023, with the first principal and interest payment of \$220,496.25 due on April 1, 2024.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-4

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1, Page 1 (Bates 29), Column B:** Please update the amounts indicated relative to the DW 22-032 revenue requirement and calculated single-family average monthly bill to correspond with the pending settlement agreement in that docket.

**RESPONSE:**

The single-family average monthly bill on Page 1 of Exhibit DLW-1 was changed to reflect the settlement agreement in DW 22-032 on the attached, revised Exhibit DLW-1 in Cells B21, B41 and the projected impact in Cell F21.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-5

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1, Page 1 (Bates 29), Cells O10 & O11 and Page 5 (Bates 37), Cells G96 & K88:**

- a) The amount indicated on Page 1 (Bates 29) as the 2025 Operating Expense addition of \$753,483 (Cell O10), appears to actually be the 2025 Debt Service addition from Page 5 (Bates 37), Cell G96. Should this amount be \$209,611 from Page 5 (Bates 37), Cell K88? If so, please adjust.
- b) There is no amount indicated on Page 1 (Bates 29), Cell O11 for the 2025 Debt Service addition from Page 5 (Bates 37), Cell G96 (\$753,483). Please adjust.

**RESPONSE:**

- a) and b) The corrected amounts for operating expenses and Debt Service were inserted into the attached, revised Exhibit DLW-1 at Cells O10 and O11 on Page 1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
 2023 QCPAC - Qualified Capital Project Adjustment Charge  
 Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
 Request No. DOE 1-6

Date of Response: 5/23/2023  
 Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 2 – 2022 Actual QCPAC Expenditures (Bates 30-31); Column M (Taxable):** Please explain why the following projects, are designated as taxable for property tax purposes:

<u>Description</u>	<u>Cost</u>	<u>Tax</u>
a) Line 72: 2022 Chevy Equinox (Rep totaled # 151)	\$29,876	\$704
b) Line 86: Utility Network Migration	\$32,421	\$764
c) Line 87: Utility Network Migration	\$ 1,128	\$ 27
d) Line 111: Purchase Underwater Remote Operated Veh.	\$10,224	\$241
e) Line 120: Purchase New Wach’s Tav-L-Vaccum &	\$29,520	\$695
f) Line 144: Special Capital Project – New Laptop for	\$ 1,269	\$ 30

**RESPONSE:**

The projects noted above are not taxable. These projects were changed from taxable to non-taxable on the attached revised Exhibit DLW-1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-7

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 2 – 2022 Actual QCPAC Expenditures (Bates 30-31); Column N (Tax Rate):**

- a) Please provide supporting documentation and calculations for the “Various” tax rate of \$23.78 indicated in this column.
- b) Please explain why the “Various” tax rates indicated in Cells N157 and N158 are \$27.31 and please provide supporting documentation and calculations for this rate.

**RESPONSE:**

- a) Please see attachment DOE DR 1-7 for the calculation of the “Various” tax rate of \$23.78.
- b) The “Various” tax rates found on Page 2 in Cells N157 and N158 (Cells N159 and N160 on the attached revised Exhibit DLW-1) were not correct. These cells were changed to reflect the correct “Various” tax rate of \$23.78.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-8

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 2 – 2022 Actual QCPAC Expenditures (Bates 30-31):**

Line 102 indicates \$120,140 was spent associated with the Bowers Dam Spillway project, that the cost is QCPAC eligible, and that it resulted in \$2,788 of additional property tax requested to be included in the instant filing. Further, the notation for this project indicates it was deferred due to supply chain concerns and possible funding through the HHDP (High Hazard Dam Program). Please explain further.

**RESPONSE:**

The work completed to date on this project is limited to the design work required to develop the plans and specification for public bidding. The cost of this engineering work was paid for with 0.1 DSRR cash. There should not have been any request to recover property taxes associated with this work. The attached, revised Exhibit DLW-1 in Line 104 was changed to reflect that there are no property taxes on this work.

This project is under consideration for a FEMA grant as part of the High Hazard Dam Program administered by the State Homeland Security and Emergency Management Division in the amount of approximately \$700,000. Final determination for grant eligibility and the amount of the grant is anticipated to occur this summer. The project will go out to bid in the late fall of 2023, with the required upgrades to Bowers Pond being completed in 2024.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-9

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

REQUEST:

**Re: Exhibit DLW-1; Page 3 – 2023 Projected QCPAC Expenditures (Bates 33); Cell G111 (Total 0.1 DSRR 2023 Projects):** It does not appear that the budgeted cost of \$3,000 for the Palm Street Main Replacement Design project (Cell G58) is included in the Total 0.1 DSRR 2023 Project amount of \$874,000 (Cell G111) even though this project is indicated as a “0.1 DSRR Funds” project (Cell D58). Please explain.

RESPONSE:

The Palm Street Main Replacement Design project was inadvertently not included in the Total 0.1 DSRR 2023 Projects when it should have been included. The attached, revised Exhibit DLW-1 was corrected to include the project money in the 0.1 DSRR 2023 Project total of \$877,000 in Cell G112.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
 2023 QCPAC - Qualified Capital Project Adjustment Charge  
 Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
 Request No. DOE 1-10

Date of Response: 5/23/2023  
 Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 3 – 2023 Projected QCPAC Expenditures (Bates 32-33); Column D (Financing Docket No.):** Certain projects that are to be funded by the anticipated bond issuance in 2024 are indicated as related to a Financing Docket other than “DW 20-157”. With regard to the following, please explain these designations:

a) Line 41: Kendrick Street	\$ 12,000	DW 20-158 (Cell D41)
b) Line 64: Troy Street	\$ 27,000	DW 20-158 (Cell D64)
c) Line 68: Crown Street	\$ 95,000	DW 20-158 (Cell D68)
d) Line 76: Engineering Vehicle	\$ 30,000	DW 20-158 (Cell D76)
e) Line 79: Investment in Developer Services	\$100,000	DW 20-158 (Cell D79)
f) Line 83: Replace Radio Comms, Various	\$ 25,000	DW 20-158 (Cell D83)
g) Line 85: Misc. Structural Improvements	\$ 30,000	DW 20-156 (Cell D85)
h) Line 87: Misc. SCADA/Electrical	\$ 60,000	DW 20-158 (Cell D87)

**RESPONSE:**

All of the projects noted above are being funded with bonds to be issued in April 2024, as the third bond issuance under the multi-year approval obtained in DW 20-157, NHPUC Order 26,459 which was issued on March 2, 2021. The incorrect docket designated on each of the lines above were corrected on the attached, revised Exhibit DLW-1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-11

Date of Response: 5/23/2023  
Witness: John J. Boisvert

---

REQUEST:

**Re: Exhibit DLW-1; Page 3 – 2023 Projected QCPAC Expenditures (Bates 32); Line 44 (Twin Ridge Interconnection) and Line 45 (Sweet Hill Interconnection):** The combined cost of these projects to be funded by an SRF loan(s) is \$690,000 (Cell 113). However, Commission Order No. 26,673 (August 29, 2022) in Docket No. DW 22-033 contemplated and approved SRF loan funds for these projects of only \$540,000 (Sweet Hill - \$240,000; Twin Ridge - \$300,000), or a difference of \$150,000. Please reconcile and explain this difference between the Company's current projected SRF funded cost for these projects and the Commission's previous SRF financing approval for these projects.

RESPONSE:

When the projects were budgeted in 2020 the fees associated with connecting to the Town of Plaistow Water System were not known and were not included in the SRF estimates/requests. The connection fees were established in the latter half of 2022 by the Town of Plaistow and those fees were incorporated into the 2023 budget. In addition, since the SRF loans were approved, the Company has demonstrated that it is most cost effective to purchase 100% of its water demand for the Twin Ridge system from Plaistow. This will require discontinued use of the existing wells, treatment/booster station, and storage tanks. Demolition and closure of these facilities were not in the original SRF budgets. The \$150,000 increase in budget will be funded through regular bonding.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-12

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

REQUEST:

**Re: Exhibit DLW-1; Page 3 – 2023 Projected QCPAC Expenditures (Bates 32); Line 9 (Replacement Dump Truck - \$225,000):** Please explain why this anticipated vehicle/equipment purchase has been designated as “Taxable” (Cell J9) with a calculated property tax expense of \$5,351 (Cell L9).

RESPONSE:

This vehicle should have been designated as nontaxable. The attached, revised Exhibit DLW-1 at Cell J10 was corrected to reflect this truck as nontaxable.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-13

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 4 – 2024 Projected QCPAC Expenditures (Bates 35); Column I (Taxable):** For each of the following 2024 projects please explain why they have been designated as taxable for property tax purposes:

<u>Description</u>	<u>Cost</u>	<u>Tax</u>
a) Line 99: Purchase New Lab Equipment	\$20,000	\$ 471
b) Line 101: Replace Water Supply Vehicle	\$65,000	\$1,531
c) Line 102: Replace Water Supply Vehicle	\$40,000	\$ 942

**RESPONSE:**

The items above should have been classified as nontaxable. The designation for these items was reclassified as nontaxable on the attached, revised Exhibit DLW-1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-14

Date of Response: 5/23/2023  
Witness: Donald L. Ware

---

REQUEST:

**Re: Exhibit DLW-1; Page 5 – 2025 Projected QCPAC Expenditures (Bates 37); Line 78 (Purchase New Lab Equipment - \$20,000):** Please explain why this anticipated equipment purchase has been designated as “Taxable” (Cell I78) with a calculated property tax expense of \$476 (Cell K78).

RESPONSE:

New Lab equipment should have been designated as nontaxable. The attached, revised Exhibit DLW-1 was corrected to reflect the new lab equipment as nontaxable.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-15

Date of Response: 5/23/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Testimony of John J. Boisvert (Boisvert Testimony); Page 10 (Bates 60), Lines 8 through Page 12 (Bates 62) Line 3:** It appears that this portion of testimony is indicating a total budgeted cost of the described projects as \$6,134,650 (Page 10 (Bates 60) Line 11). However, the total budgeted amount indicated on Exhibit DLW-1, Page 3 – 2023 Projected QCPAC Expenditures (Bates 32-33), Cells G27- G40 and Cells G63-G71 appears to be \$6,122,650; a difference of \$12,000. Please reconcile and explain this apparent difference.

**RESPONSE:**

The correct line references on the attached, revised DLW-1 should be lines 28 through 42 and lines 64 through 72. The total budget of these lines corresponds to the amount in the testimony of \$6,134,650.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-16

Date of Response: 5/22/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Boisvert Testimony; Page 16 (Bates 66); Line 21:** The workorder reference for the Kessler Farm Tank is indicated as ‘W/O# 2101759’. However, the workorder reference for this project indicated in Exhibit DLW-1, Page 2 – 2022 Actual QCPAC Expenditures (Bates 30), Cell C39 appears to be ‘2200501’. Please identify the appropriate workorder reference.

**RESPONSE:**

The work order number of 2200501 is the correct workorder number for 2022. Work order number 2101759 in the testimony is an incorrect reference referring to work completed in 2021. Please see the attached corrected (redlined and clean) testimony at Page 16, line 21.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-17

Date of Response: 5/22/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Boisvert Testimony; Page 20 (Bates 70); Lines 1-14:** The budgeted cost for the 2023 AWIA RRA – ERP Projects is indicated as \$200,000. However, Exhibit DLW-1, Page 3 – 2023 Projected QCPAC Expenditures, Page 3 (Bates 33), Cell G74 appears to indicate a budgeted cost for this project of \$400,000, or a difference of \$200,000. Please reconcile and explain this apparent difference.

**RESPONSE:**

The pre-filed testimony stating a budget of \$200,000 is incorrect. The correct budget amount is \$400,000 as reported in the revised, attached DLW-1, Page 3. Please see the attached, corrected (redlined and clean) testimony at Page 20, line 1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
 2023 QCPAC - Qualified Capital Project Adjustment Charge  
 Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
 Request No. DOE 1-18

Date of Response: 5/22/2023  
 Witness: John J. Boisvert

**REQUEST:**

**Re: 2022 Water Main Replacements; Exhibit DLW-1; Page 2 – 2022 Actual QCPAC Expenditures (Bates 30-31); Lines 41-51 and 76; Boisvert Testimony; Page 8 (Bates 58); Lines 5-21:**

- a) Mr. Boisvert’s testimony regarding Coburn Woods, beginning on Bates 58, Line 51, appears to indicate the Company only replaced valves in Coburn Woods in 2022. Please confirm that no Coburn Woods mains were replaced in 2022.
- b) Please indicate the number of feet of original main replaced in each of the projects shown in lines 41 - 51.
- c) Please indicate the number of feet, type and diameter of original Nye Avenue main replaced in line 76.
- d) Please indicate the number of feet, type and diameter of new Nye Avenue main installed in line 76.
- e) Which of the main replacements in lines 41-51 and 76 were preplanned, as opposed to being the result of coordination with city projects?

**RESPONSE:**

a) Yes, no mains in Coburn Woods were replaced, only valves were replaced/installed in 2022. The valves were installed to isolate side streets and to minimize the number of customers impacted by partial system shutdowns during future water main replacement scheduled/budgeted in 2024.

b) The correct line references, as found on the attached revised DLW Exhibit 1, Page 2 are Lines 43 to 53.

Line 43- Miami Street	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL
Line 44 - Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL

Line 45- Faxon Avenue	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC
Line 46 - Faxon Street	Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL
Line 47 - Chataqua Ave	Broad St. to End Replaced 780 feet of 1.25"/4"/6" Installed in 1915-1963 with 4"/6" DICPL
Line 48 - Niquette Dr.	E. Dunstable Replaced 525 feet of 2" installed in 1960 with 4" PVC
Line 49 - Pine Hill Ave	Wright Rd. to End Replaced 300 feet of 1.25" installed in 1953 with 4" PVC
Line 50 - Mt. Pleasant St.	Merrimack St. to Manchester St. Replaced 400 feet of 1.5" installed in 1955 with 8" DICPL
Line 51- French St.	Merrimack St. to 10 French Replaced 340 feet of 2"/6" installed in 1887 & 1926 with 4"/6" DICPL
Line 52 - Dudley St.	June St. to E. Hobart St. Replaced 830 feet of 1.25"/8" CI/AC installed in 1957-1971 with 8"
Line 53 - Ledgewood Hills Dr. /Heather	Added 10 feet of 8" DIPCL to complete pipeline connection in the intersection

c) The correct line reference to Nye Avenue on the attached revised DLW Exhibit 1, Page 2 is Line 78. Approximately 360 feet of 1-inch and 2-inch diameter galvanized steel pipe was replaced with 4-inch diameter C-900 PVC pipe.

d) See response "c" above.

e) All except lines 45 and 46 (Faxon Avenue and Faxon Street) were pre-planned as opposed to coordinated.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
 2023 QCPAC - Qualified Capital Project Adjustment Charge  
 Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
 Request No. DOE 1-19

Date of Response: 5/22/2023  
 Witness: John J. Boisvert

---

**REQUEST:**

**Re: Water Main Replacement Goals; Boisvert Testimony; Page 7 (Bates 57); Lines 4-15:**

The company appears to have averaged less than a mile of mains replaced per year over the last several years: 4,882 feet in 2020 (DW 21-023, DOE Tech 2-6 attachment), 1,004 feet in 2021 (DW 22-006, DOE 2-12), and approximately 1 mile in 2022 (Exh DLW-1, lines 41-51, 55 and line 76). Pplans for 2023 aim for a significantly higher figure, about 4 miles (Exh DLW-1, lines 27-40 and 63-71). Please comment generally on the company’s aspirations in the longer term in regard to replacement strategies in light of the following:

- a) Ongoing challenges such as available resources, city/town coordination issues, supply chain concerns, emerging larger non-watermain projects, etc., and, also,
- b) The water main replacement goals of the WICA program that presumably carried over to some extent to the QCPAC program.

**RESPONSE:**

a) Available Resources: The Company means staffing, contractor availability, material availability, etc., are included within the meaning of “available resources.” So far 2023, although very busy from a construction perspective, is a return to a more normal year than 2022. Internal staffing resources are reasonably matched for this workload. However, there were times during peak construction months that challenged staff resources from a scheduling perspective.

City/Town Coordination: The Company is fortunate in that the relationships and communications with city/town staff are open and very good. Regular coordination meetings with municipal staff and other utilities allow for better planning. The Company compares our replacement needs driven by asset management to the work being completed by others. Where there is alignment, the Company works to coordinate our work with that of others.

Supply Chain: Both 2021 and 2022 were certainly impacted by the Covid-19 pandemic and the disruption to supply chains that it caused. In 2022, the Company pulled back on several water main projects planned in 2022 deferring them to 2023 simply because pipe and other materials would not be available to complete and turn work “used and useful” before the end of 2022. With this backdrop, the Company designed all of the scheduled 2023 water main projects in the fall of 2022, in order to receive bids in the January/February timeframe of 2023. This would

allow project awards in March giving contractors time to order and receive pipes and materials ahead of summer 2023 construction. The Company anticipates designing water main replacement projects in the year prior to anticipated construction. This timing helps ensure that material availability is matched with the project's construction schedule.

Non-Water Main Projects: From a major capital perspective, non-water main projects are projects associated with what are termed "vertical assets." These are typically treatment facilities, pumping facilities, and storage tanks. Projects associated with these types of assets are generally driven by asset age/condition, performance, technology, changing water quality, and changing regulations. The Company budgeted for the construction of additional coagulant and disinfectant chemical storage at the Nashua treatment plant in response to diminished raw water quality experienced over the last two decades. In addition, the US Environmental Protection Agency (EPA) is currently in the rulemaking process to set standards for PFAS compounds. The impact of these regulations, once established, may require capital investments to upgrade treatment processes that will likely result in higher operations costs.

b) The foundational elements of capital planning and construction of the WICA program have carried over into the QCPAC program. The biggest difference is that asset management at the Company is further along and playing a greater role in determining which assets the Company will replace and the planning for out-year budgeting that asset management affords.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-20

Date of Response: 5/22/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 3 – 2023 Actual QCPAC Expenditures (Bates 32-33); Line 43 (NH Rte. 101A - Amherst, NH):**

Please indicate the current status of this NHDOT water main relocation project.

**RESPONSE:**

NHDOT has not committed to a specific bid date for this project as of this date. Recent verbal communications indicate that NHDOT is hopeful for a late summer or early fall bid.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-21

Date of Response: 5/22/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Boisvert Testimony; Page 18 (Bates 68); Lines 15-23 (Chemical Feed and Storage); Exhibit DLW-1; Page 2 – 2022 Actual QCPAC Expenditures (Bates 30-31); Lines 93, 114, 119, and 121:**

Please indicate which of the smaller chemical or treatment related items below, if any, are related to, or are a result of, the larger evaluation of chemical feed and storage requirements, and not simply necessary equipment replacements or upgrades:

- a) Line 93, Replace Ferric Chloride feed pumps, Nashua WTP.
- b) Line 114, Rebuild WTP, Polymer Feed 1 Mixer/Motor.
- c) Line 119, Replace Heat Circulator Pump at WTP.
- d) Line 121, Replace Chlorine day tank #2, Nashua WTP.

**RESPONSE:**

None of the items listed above is part of, or the result of, the evaluation of the chemical fee and storage requirements project. All were simply necessary equipment replacements of failed equipment.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-22

Date of Response: 5/22/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Exhibit DLW-1; Page 3 – 2023 Actual QCPAC Expenditures (Bates 32-33); Line 89:** Exhibit DLW-1; Page 4 – 2024 Actual QCPAC Expenditures (Bates 34-35); Line 98: Exhibit DLW-1; Page 5 – 2025 Actual QCPAC Expenditures (Bates 36-37); Line 77: Please indicate the purpose of the various “WTP Structural/HVAC” items noted above.

**RESPONSE:**

The items noted above are placeholders for possible WTP Structural/HVAC items that may fail and need replacement in the noted years. The Company’s capital budget always includes placeholders for items that may fail and need replacement. If there are no failures or need to use the funds allocated to this budget line then none will be expended.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 1

Date Request Received: 5/10/23  
Request No. DOE 1-23

Date of Response: 5/22/2023  
Witness: Donald L. Ware

---

REQUEST:

**Re: Carbon Filter Media Replacement;**

**Boisvert Testimony; Page 17 (Bates 67); Line 20 through Page 18 (Bates 68); Line 2; Page 22 (Bates 72); Lines 5-8;**

**Page 26 (Bates 76); Line 21 through Page 27 (Bates 77); Line 2:**

The company replaced 8 filter beds (Filters 1a – 4b) in 2022 at a cost of \$1,432,922, and plans to replace the remaining 4 beds in 2023 at a cost of \$600,000 (5a through 6b as noted by the Company). However the Company’s intentions for 2025 are unclear, given a reference to “1/3<sup>rd</sup> of the filter beds” (so 4 beds?), “Filters 1a through 4b” (8 beds?), and a cost (\$1,500,000) that would appear to anticipate replacement of all 12 beds. Please clarify the company’s intentions in this regard.

RESPONSE:

In 2022, eight (8) of the WTP’s twelve (12) filter beds had the carbon media replaced. Each filter bed contains 73,710 pounds of carbon media. The cost of the carbon bed replacement in 2022 was \$2.43 per pound (price is inclusive of removing and disposing of existing carbon and replacement with new carbon) or \$179,115 per filter. This resulted in a total 2022 replacement cost of \$1,432,222 for the 8 filters (8 filters x \$179,114 per filter). The price for the carbon replacement in 2023 is \$2.02 per pound or \$148,894 per filter resulting in a total 2023 replacement cost of \$595,577 for 4 filters (4 filters x \$148,894 per filter). The Company plans to replace the carbon in Filters 1a – 4b, for a total of eight (8) filters in 2025. For budgeting purposes, the Company estimated a cost per pound for the carbon replacement of \$2.55 or \$187,960 per filter resulting in a total 2025 carbon replacement cost of \$1,500,000 for the 8 filters (8 filters x \$187,960 per filter) which was rounded down from \$1,503,684.

	Requested DW 22-032 Revenues	QCPAC For 2022 Capital Additions pro forma	QCPAC Surcharge for 2022 Capital Addition	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions	QCPAC For 2024 Capital Additions pro forma	QCPAC Surcharge for 2024 Capital Additions	QCPAC For 2025 Capital Additions pro forma	QCPAC Surcharge for 2025 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$ 7,729,032	\$ -	\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032
DW 22-032 Operating Expense Revenue Requirement, with MOEF, per Settlement Agreement	\$ 25,249,661 (1)	\$ 114,394 (4)	\$ 25,364,054	\$ 244,264 (4)	\$ 25,608,319	\$ 452,061 (4)	\$ 26,060,380	\$ 209,136 (4)	\$ 26,269,516
DW 22-032 Annual Principal and Interest Payments per Settlement Agreement	\$ 7,436,923 (2)	\$ 378,546 (7)	\$ 7,815,469	\$ 854,420 (8)	\$ 8,669,889	\$ 1,411,675 (8)	\$ 10,081,564	\$ 774,747 -8	\$ 10,856,311
Principal and Interest Coverage Requirement	1.10 (3)		1.10		1.10		1.10		1.10
DW 22-032 Principal and Interest Revenue Requirement	\$ 8,180,615		\$ 8,597,016		\$ 9,536,878		\$ 11,089,720		\$ 11,941,942
DW 22-032 RSF Debit	\$ (422,871) (11)								
DW 22-032 Revenue Requirement per Settlement Agreement inclusive of RSF Debit	\$ 40,736,437 (10)		\$ 41,690,102		\$ 42,874,228		\$ 44,879,132		\$ 45,940,489
DW 22-032 Revenue Requirement less Other Revenues	\$ 40,143,045		\$ 41,096,710		\$ 42,280,836		\$ 44,285,740		\$ 45,347,097
DW 22-032 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$ 39,057,359 (6)		\$ 40,011,024		\$ 41,195,150		\$ 43,200,054		\$ 44,261,411
Percent QCPAC Surcharge (5)			2.44%		3.03%		5.13%		2.72%
Cumulative QCPAC Surcharge (9)			2.44%		5.47%		10.61%		13.32%
Cumulative QCPAC monthly increase in average single family residential bill.			\$ 1.50		\$ 3.35		\$ 6.50		\$ 8.16
Average monthly single family residential bill with QCPAC.	\$ 61.28		\$ 62.77		\$ 64.63		\$ 67.78		\$ 69.44

Notes:

- (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses agreed to in the Settlement agreement for DW22-032
- (2) Annual Principal and interest payments for PWW debt associated with all plant in service as agreed to in the settlement agreement for DW22-032.
- (3) Principal and interest coverage of 1.10 is as approved in DW 16-806.
- (4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year
- (5) QCPAC percent revenue surcharges based on increase in revenues which are reflected in the Settlement agreement in DW22-032
- (6) Reduction in revenues associated with fixed contracts as follows:
 

Hudson Annual Fixed Chg	\$ 457,083	Milford Annual Fixed Chg	\$ 81,000	A-B Annual Fixed Chg	\$ 356,622	PEU Annual Fixed Chg	\$ 190,981
-------------------------	------------	--------------------------	-----------	----------------------	------------	----------------------	------------
- (7) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of 3.38%
- (7) QCPAC Principal and Interest expenses based on actual April 26, 2023 Bond issuance based on a 30 year bond with interest rate of 5.005716% (Total All In Interest Cost of all Series Bonds)
- (8) QCPAC Principal and Interest expenses for 2023, 2024 and 2025 QCP's are based on 30 year bond with interest rate of 5.50% for 2023 through 2025 Capital Expenditures unless funding is via an SRF/DWGTFF financing.
- (9) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues agreed to in the settlement in DW 22-032 that are impacted by the QCPAC.
- (10) Operating expense revenues agreed to in the Settlement Agreement per DW 22-032 less total Other Revenues of \$ 593,392
- (11) RSF debit agreed to in Settlement Agreement in DW 22-032

Impact on Single Family Residential Home:

	DW 22-032
Monthly meter charge agreed to in Settlement in DW 22-032 -	\$ 26.90
Average Single Family Consumption as filed in DW 22-032 (CCF) -	7.76
Volumetric Charge agreed to in Settlement in DW 22-032 -	\$ 4.43
Ave. Single Family monthly bill with rates projected upon completion of DW 22-032 -	\$ 61.28

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Year End Project Cost as of 09/30/2022	Estimated Project Cost as of 11/30/2022	Final Project cost as of 12/31/2022	Community	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Office Space for Const & Maint Supervisor	Permanent Office space for Construction & Maint Supervisor	n/a	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	\$ -	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Wash Sinks	Deep stainless wash sinks to replace existing sinks in male & female locker rooms	n/a	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	\$ 10,000	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Benches	Permanent Benches in Men's & Women's Locker Rooms	n/a	DW20-157	26,459	3/2/2021	\$ 7,500	Yes	\$ 7,500	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
2022 New Services (15)	Single Family, Owner Build, New Homes	Routine	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 75,000	\$ 102,500	\$ 102,500	Various	Yes	\$ 23.78	\$ 2,437	10 New Services installed in 2022
2022 Renewed Services (20)	Replacement of Failed Services	Routine	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	\$ 110,000	\$ 142,271	\$ 155,198	Various	Yes	\$ 23.78	\$ 3,691	32 Renewed Services completed in 2022.
2022 Hydrants (10)	Replacement of non functional hydrants	Routine	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	\$ 15,000	\$ 14,796	\$ 14,793	Various	Yes	\$ 23.78	\$ 352	2 Hydrants installed in 2022.
2022 Gates (20)	Replacement of Failed Gate Valves	Routine	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	\$ 72,000	\$ 82,863	\$ 76,944	Various	Yes	\$ 23.78	\$ 1,830	13 Gate Valves Replaced in 2022.
2022 Radios (250)	New Radios for new customers (250)	Routine	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	\$ 177,000	\$ 16,636	\$ 16,195	Various	Yes	\$ 23.78	\$ 385	163 Radios installed in 2022.
2022 Radios (2800)	Year 2 of 10 year Replacement of all PWW Radios installed in 2007 (2800)	2200381	DW20-157	26,459	3/2/2021	\$ 280,000	Yes	\$ 240,000	\$ 253,475	\$ 236,311	Various	Yes	\$ 23.78	\$ 5,619	2,142 Radios Replaced thru 11/30/2022. 300 additional radio replacements expected by year end.
2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)	Routine	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 60,000	\$ 82,786	\$ 82,204	Various	Yes	\$ 23.78	\$ 1,955	392 Meters Replaced in 2022.
Replacement Dump Truck	Replacement for Truck # 7, 2011 Peterbilt T-335, 100K+ miles, 2500 hrs, high maint & Repair	n/a	DW20-157	26,459	3/2/2021	\$ 125,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Deferred due to availability.
Replacement Utility Truck	New Utility Truck to replace #84, 2014 F-350, 120k miles, High maint & Repair costs	2204657		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,995	\$ 53,995	\$ 76,895	Merrimack	No	\$ 22.87	\$ -	
Replacement Utility Truck	New Utility Truck to replace #9, 2014 F-350, 120k miles, High Maint & Repair costs	2204656		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,600	\$ 53,600	\$ 76,500	Merrimack	No	\$ 22.87	\$ -	
Replacement Supervisor Pickup	New Full sized Pickup to replace #21, 2013 Chevy Equinox, 150k miles, Hi Maint & Repair costs	2204655	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 54,340	\$ 54,340	\$ 54,340	Merrimack	No	\$ 22.87	\$ -	
Prolectus Meter Upgrade	Prolectus Meter Upgrade	n/a	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Deferred due to availability.
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	n/a	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Budget money moved to a different unbudgeted project/projects.
New 22 Ton Tilt Trailer	22 Ton Tilt Trailer to transport Excavator for Distribution Crew Work	2205058	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ 39,421	\$ 39,421	\$ 39,421	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2206577		0.1 DSRF funds	26,459	\$ 12,000	Yes	\$ 18,450	\$ 4,572	\$ 4,572	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2206577	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 13,878	\$ 13,878	\$ 13,878	Merrimack	No	\$ 22.87	\$ -	Residual of Air Compressor cost (row 27) not covered by 0.1 DSRF funds.
New 3" Neptune Construction Meters	Purchase 2 new 3" Neptune Construction Meters to meet Demand	2203895		0.1 DSRF funds	26,459	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 23
New Cut Saws for Distribution	2 New Stihl Cust saws for Distribution	2203898		0.1 DSRF funds	26,459	\$ -	Yes	\$ 3,528	\$ 3,528	\$ 3,528	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 24
New Mechanics Field Service Vehicle	New Mechanics Field Service Vehicle	2204653	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 58,900	\$ 58,900	\$ 78,800	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Replacement Utility Trailer	Replacement Utility Trailer for Foreman	2204991	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,800	\$ 6,800	\$ 6,800	Merrimack	No	\$ 22.87	\$ -	
New Neptune Construction Meters	2 New Neptune Construction Meters for Contractor requests	2205668	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Irrigation Sys. Inst. at Dist. Facility	Installation of Irrigation System at Distribution Facility	2205669	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,120	\$ 3,120	\$ 3,120	Merrimack	No	\$ 22.87	\$ -	
Loam & Hydroseed at Dist. Facility	Installation of Loam and Hydroseeding at Distribution Facility	2205672	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 8,333	\$ 8,333	\$ 8,333	Merrimack	No	\$ 22.87	\$ -	
New Volvo ECR88D Excavator	New Volvo ECR88D Excavator	2208205	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 123,261	\$ 123,261	\$ 125,303	Merrimack	No	\$ 22.87	\$ -	
Purchase New 4-Ton hotbox w/30 Gal Tack Tank	Purchase New 4-Ton hotbox w/30 Gal Tack Tank	2208362	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 49,900	\$ 49,900	\$ 49,900	Merrimack	No	\$ 22.87	\$ -	
DynaPac Pavement Roller	DynaPac Pavement Roller	2208363	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 21,500	\$ 21,500	\$ 21,500	Merrimack	No	\$ 22.87	\$ -	
Trailer for Pavement Roller	Trailer for Pavement Roller	2208364	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,980	\$ 6,980	\$ 6,980	Merrimack	No	\$ 22.87	\$ -	
Purchase 4 New Pavement Saws	Purchase 4 New Pavement Saws	2209555	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,000	\$ 6,000	\$ 6,000	Merrimack	No	\$ 22.87	\$ -	
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2200501	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 272,000	\$ 200,103	\$ 200,776	Nashua	Yes	\$ 23.55	\$ 4,728	
Coburn Woods (all side streets) Phase 1	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	2200500	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 189,000	\$ 179,254	\$ 183,474	Nashua	Yes	\$ 23.55	\$ 4,321	
Miami Street	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL	2201253	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	\$ 187,550	\$ 186,176	\$ 185,648	Nashua	Yes	\$ 23.55	\$ 4,372	
Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL	2201252	DW20-157	26,459	3/2/2021	\$ 190,000	Yes	\$ 130,000	\$ 142,868	\$ 142,894	Nashua	Yes	\$ 23.55	\$ 3,365	Paving on this was deferred until 2023. Paving cost will be reduced and shared with the City.
Faxon Avenue	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC	2201254	DW20-157	26,459	3/2/2021	\$ 86,000	Yes	\$ 86,000	\$ 86,000	\$ 83,841	Nashua	Yes	\$ 23.55	\$ 1,974	
Faxon Street	Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL	2201255	DW20-157	26,459	3/2/2021	\$ 220,000	Yes	\$ 195,000	\$ 195,000	\$ 191,910	Nashua	Yes	\$ 23.55	\$ 4,519	Bid was lower than the engineer's estimate.
Chataqua Ave	Broad St. to End Replace/Add 780 feet of 1.25"4/6" installed in 1915-1963 with 4/6"	2200426	DW20-157	26,459	3/2/2021	\$ 209,000	Yes	\$ 267,000	\$ 267,068	\$ 267,095	Nashua	Yes	\$ 23.55	\$ 6,290	Paving restoration requirements were more than anticipated.
Niquette Dr.	E. Dunstable to service 12 Niquette Replace/Add 525 feet of 2" installed in 1960 with 4"	2200427	DW20-157	26,459	3/2/2021	\$ 131,000	Yes	\$ 127,200	\$ 128,323	\$ 128,363	Nashua	Yes	\$ 23.55	\$ 3,023	
Pine Hill Ave	Wright Rd. to End Replace/Add 300 feet of 1.25" installed in 1953 with 4"	2200422	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 92,400	\$ 92,367	\$ 92,394	Nashua	Yes	\$ 23.55	\$ 2,176	Old pipe records were not accurate requiring more pipe to be replaced.
Mt. Pleasant St.	Merrimack St. to Manchester St. Replace/Add 400 feet of 1.5" installed in 1955 with 8"	2200423	DW20-157	26,459	3/2/2021	\$ 117,000	Yes	\$ 204,200	\$ 195,922	\$ 195,948	Nashua	Yes	\$ 23.55	\$ 4,615	More paving and night work than anticipated.
French St.	Merrimack St. to 10 French Replace/Add 340 feet of 2/6" installed in 1887 & 1926 with 4/6"	2200424	DW20-157	26,459	3/2/2021	\$ 87,000	Yes	\$ 178,040	\$ 173,709	\$ 173,736	Nashua	Yes	\$ 23.55	\$ 4,091	More paving and night work than anticipated.
Dudley St.	June St. to E. Hobart St. Replace/Add 830 feet of 1.25/8" CI/AC installed in 1957-1971 with 8"	2200428	DW20-157	26,459	3/2/2021	\$ 256,000	Yes	\$ 300,000	\$ 269,714	\$ 269,900	Nashua	Yes	\$ 23.55	\$ 6,356	
Ledgewood Hills Dr. /Heather	To Intersection Replace/Add 10 feet of Unconnected installed in with 8"	2200429	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	\$ 5,500	\$ 11,059	\$ 11,059	Nashua	Yes	\$ 23.55	\$ 260	
Rita St.	Allids St. to 6 Rita Replace/Add 210 feet of 1.5" CI/CL installed in 1956 with 4"	2200430		0.1 DSRF funds	26,459	\$ 53,000	No	\$ 2,899	\$ 2,880	\$ 2,880	Nashua	No	\$ 23.55	\$ -	Design only
Salem St.	Whitney St. to Summer St. Replace/Add 855 feet of 4/6" installed in 1888-1927 with 6"	2200425		0.1 DSRF funds	26,459	\$ 253,000	No	\$ 300	\$ 728	\$ 848	Nashua	No	\$ 23.55	\$ -	Design only
Walnut St.	W. Pearl St. to W. Hollis St. Replace/Add 830 feet of 6/8" installed in 1888-1931 with 12"	2200431		0.1 DSRF funds	26,459	\$ 312,000	No	\$ 300	\$ 778	\$ 1,346	Nashua	No	\$ 23.55	\$ -	Design only
Garden Street	Emergency replacement of 150 LF of 6" CIP with 8" DIP	2208030	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 50,000	\$ 49,456	\$ 49,536	Nashua	Yes	\$ 23.55	\$ 1,167	City Sewer Project - Budget from row 54
Route 101A Water Main Relocation	Route 101A Water Main Relocation	n/a	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	n/a	DW20-157	26,459	3/2/2021	\$ 500,000	Yes	\$ -	\$ -	\$ -	Various	Yes	\$ 23.78	\$ -	Budget money moved to a different unbudgeted project/projects.
Milford Booster Station	Replace/Relocate Milford Booster Station (Design & Permitting)	2201853		0.1 DSRF funds	26,459	\$ 60,000	No	\$ 6,827	\$ 6,827	\$ 6,827	Milford	No	\$ 26.27	\$ -	Station to be designed, owned and operated by the Milford Water Department.
City Sewer Projects (2022)	Replace CI, AC, and other older main disrupted by sewer construction	n/a	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	No city sewer projects projected for remainder of year.
Coburn Tank Area HP Zone Watermain	Create new HP area with 1600 LF of Water Main and Check Valves	n/a		0.1 DSRF funds	26,459	\$ 800,000	Yes	\$ 5,000	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Coburn Tank Area HP Booster Station	New Domestic flow and pressure booster station	n/a		0.1 DSRF funds	26,459	\$ 550,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Investment in Developer Services	1x Annual Revenue	Routine	DW20-157	26,459	3/2/2021	\$ 140,000	Yes	\$ 75,000	\$ 69,449	\$ 77,276	Various	Yes	\$ 23.78	\$ 1,838	96 Developer Services through 11/30/2022. 10 more projected by year end.
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	2204654	DW20-157	26,459	3/2/2021	\$ 32,000	Yes	\$ 20,000	\$ 20,000	\$ 9,156	Merrimack	No	\$ 22.87	\$ -	
Sweet Hill Interconnection	Connecting Pipeline and Meter Pit	2208920	SRF			\$ 220,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Twin Ridge Interconnection	Connecting Pipeline and Meter Pit	2208919	SRF			\$ 100,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2201770.
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2206415.
Snow Station Building Addition	Addition of a third High Lift Pump (Design & Permitting)	n/a		0.1 DSRF funds	26,459	\$ 100,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Project deferred
Engineering Studies: WTP	Chemical Feed and Storage, PFAS treatment	2205826		0.1 DSRF funds	26,459	\$ 50,000	Yes	\$ 90,000	\$ 125,000	\$ 113,182	Nashua	No	\$ 23.55	\$ -	Design only
Atherton Commons	Install 9 Meter Boxes (Pits) and 45 inside meters with expansion tank	n/a													



Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Replacement Dump Truck	New Dump Truck to Replace #7, 2009 Peterbilt 335, 100K Miles, 6000 hrs Continuous High Maintenance, suspension issues, electrical issues	Bond	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Various	No	\$ 23.78	\$ -
2023 New Services (10)	Single Family, Owner Build, New Homes	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Renewed Services (20)	Replacement of Failed Services	Bond	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2023 Hydrants (10)	Replacement of non functional hydrants	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2023 Gates (20)	Replacement of Failed Gate Valves	Bond	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2023 Radios (200)	New Radios for new customers (200)	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
2023 Radios (2800)	Year 3 of 10 Replacement of all PWW Radios installed in 2007 (2800) by contractor	Bond	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters (200)	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Meter - PFOA (25)	New Meters for PFOA customers (25)	Bond	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84 2014 Ford F350 100K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9 2014 Ford F350 110K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing Veh #22 2013 Chevy Equinox w/150K miles that has been retired due to not passing inspection	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to replace Disconnect Vehicle #346 - 2017 Chevy Express 2500 Van w/67K miles - that will become Hydrant Painting Van	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Merrimack	Yes	\$ 22.87	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Foreman's Truck Truck	New Foreman's Truck to replace #357- 2018 Kenworth T170, 6K Hrs, 70K Miles - Continuous maintenance, electrical issues, compressor needs to be replaced, No onboard air system, underpowered engine.	Bond	DW20-157	26,459	3/2/2021	\$ 275,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ford Meter Test Bench Upgrade	Upgrade of Ford Meter Test Bench to replace failed computer components and associated hardware fittings	Bond	DW20-157	26,459	3/2/2021	\$ 90,000	Yes	Nashua	No	\$ 23.55	\$ -
N360 Meter Reading Upgrade	Upgrade of Hardware & Software needed as part of the N360 meter reading upgrade - 13 R900 Belt Clip Tranceivers, 3 MRX920 Mobile Data Collectors, N360 Software subscription for 38K customers.	Bond	DW20-157	26,459	3/2/2021	\$ 155,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,650
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 129,700	Yes	Nashua	Yes	\$ 23.55	\$ 3,054
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 42,250	Yes	Nashua	Yes	\$ 23.55	\$ 995
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 453,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,668
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 101,750	Yes	Nashua	Yes	\$ 23.55	\$ 2,396
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 184,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,333
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 171,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,027
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ -	No	Milford	No	\$ 23.55	\$ -
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 807,250	Yes	Nashua	Yes	\$ 23.55	\$ 19,011
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 311,500	Yes	Nashua	Yes	\$ 23.55	\$ 7,336
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 597,500	Yes	Nashua	Yes	\$ 23.55	\$ 14,071
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 247,000	Yes	Nashua	Yes	\$ 23.55	\$ 5,817
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 627,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,766
Kendrick Street	Carry over shared paving cost with City of Nashua - Spring 2023	Bond	DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	Yes	\$ 23.55	\$ 283
Kessler Farm Tank - landscape items	10+/- trees died and need replaced in spring 2023 - funds held in retainage until complete	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Nashua	Yes	\$ 23.55	\$ 236
NH Rte. 101A - Amherst, NH	Total Project Cost exclusive of NHDOT contribution	Bond	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Twin Ridge Interconnection	150 of 8" DI with Meter Vault plus Station Demolition and Well Abandonment	SRF	DW 22-033	26,673	8/29/2022	\$ 270,000	Yes	Plaistow	Yes	\$ 24.40	\$ 6,588
Sweet Hill Interconnection	1600 LF of new 4 inch PVC watermain and Treatment Equipment	SRF	DW 22-033	26,673	8/29/2022	\$ 420,000	Yes	Plaistow	Yes	\$ 24.40	\$ 10,248
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	0.1		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	0.1		0.1 DSRR Funds		\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program (Design)	0.1		0.1 DSRR Funds		\$ 8,000	Yes	Nashua	No	\$ 23.55	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 10,000	Yes	Nashua	No	\$ 23.55	\$ -
Jones Ct	Replacing 180 LF of 1.5 inch Galv with 4inch PVC	Bond	DW20-157	26,459	3/2/2021	\$ 66,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,554
Troy St.	Abandon Replacing 290 LF of 1.5" & 2"	Bond	DW20-157	26,459	3/2/2021	\$ 27,000	Yes	Nashua	Yes	\$ 23.55	\$ 636
Broadview Ave	Replacing 435 feet of 1.5 & 8 inch with 4 inch PVC & 8 inch DI	Bond	DW20-157	26,459	3/2/2021	\$ 168,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,956
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 88,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,072

Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 5/18/2023 - Revised per DOE DR Set 1

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 731,000	Yes	Nashua	Yes	\$ 23.55	\$ 17,215
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 95,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,237
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 194,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,569
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 135,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,179
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 866,000	Yes	Nashua	Yes	\$ 23.55	\$ 20,394
Water Treatment Facility Chemical Feed and Storage	Final Design, Permitting and Bidding	0.1	0.1 DSRR Funds			\$ 600,000	Yes	Nashua	No	\$ 23.55	\$ -
English Woods Alternative Source Interconnection	Interconnection of the English Woods Station to the Donald Street Area with building expansion to remove chloramines	Bond	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Beford	Yes	\$ 23.03	\$ 8,061
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	Bond	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Various	Yes	\$ 23.78	\$ 9,512
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Engineering Vehicle	SUV Relpaces (#34) 2010 with over 196,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 2 of 5.	0.1	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Investment in Developer Services	1x Annual Revenue	Bond	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Radio Comms, various stations	Replace Radio Comms, various stations	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Replace Roof, backwash return pump station	Replace Roof, backwash return pump station	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Misc. Structural Improvements	Misc. Structural Improvements	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	No	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	No	Various	Yes	\$ 23.78	\$ 1,427
Rebuild 1 High lift/Intermediate pump	Rebuild 1 High lift/Intermediate pump	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,178
WTP Structural/HVAC	WTP Structural/HVAC	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,413
Purchase new lab equipment	Purchase new lab equipment	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	vehicle replacement #39, 2012 w/ 120,000 + miles	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	vehicle replacement #40 2014 w/>100K miles, rust	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Nashua	No	\$ 23.55	\$ -
Re-paint FWPS ceiling	Re-paint FWPS ceiling	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	Yes	\$ 23.55	\$ 942
Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	Yes	\$ 23.55	\$ 707
Replace Filter Media 5A thru 6B	Replace Filter Media 5A thru 6B	Bond	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,130
Cameras for WTP	Cameras for WTP	0.1	0.1 DSRR Funds			\$ 106,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,496
ESRI Utility Network	ESRI Utility Network	Bond	DW20-157	26,459	3/2/2021	\$ 253,000	Yes	Various	No	\$ 23.78	\$ -
Distribution Intercom and Camera update addition	camera DVR system that is not under maintenance and should be updated due to age.	Bond	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	Merrimack	Yes	\$ 22.87	\$ 1,715
SEIM	On premise appliance that will sift through server logs looking for anomalies and notify IT of issues.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Nova	few years . Otherwise, this system and its sister will need to be replaced in 2024 because they will be 7 years old.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
IT User Hardware	Replacement Desktop Hardware for Jason, and Laptop fo Steve	Bond	DW20-157	26,459	3/2/2021	\$ 6,000	Yes	Various	No	\$ 23.78	\$ -
Clicksoft Replacement Project	Due to the retirement of ClickSoft by the vendor, a replacement must be purchased and implemented.	Bond	DW20-157	26,459	3/2/2021	\$ 343,000	Yes	Various	No	\$ 23.78	\$ -
iPad replacements	Replacement of iPad hardware as it becomes obsolete for field use.	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Various	No	\$ 23.78	\$ -
DoForms Replacement/Clarions	Replace Existing DoForms with Clarions Data collection for WTP field staff	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Software	Miscellaneous Software	Bond	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	Bond	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2023 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 303,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2023 Total Capital Expenditure Budget -</b>						<b>\$ 13,414,775</b>		<b>Projected Property Tax Expense associated with</b>		<b>\$ 244,264</b>	

**Total for 0.1 DSRR 2023 Projects - \$ 877,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2023 - \$ 11,847,775** minus the cost of the Milford Booster Station of \$ -  
**Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2023 - \$ 690,000** Milford to pay for and finance the Milford booster station

Estimated Bond Terms (Bonds to be sold in April 2024) - 30 Years @ 5.50% resulting in P&I of \$ 815,191  
 NHDES SRF terms - 20 Years @ 1.256% resulting in P&I of \$ 39,230

Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2024 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2024 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2024 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2024 Radios (4000)	Year 4 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Replacement Hydrant Crane Truck	New Hydrant/Crane Truck to replace #19 - 2011 Ford F-450 High Mileage & Hours, Extensive Vehicle & Crane Maint	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Dump Truck	New Dump Truck to replace #10, 2008 Peterbilt 335, 100K+ miles, 9000hrs, body rot & high Maint & repair costs	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
New Vacuum Excavator Truck	New Vacuum Excavator Truck for LCR pothole excavation & safe excavation around other utilities, minimize excavation costs, pavement repairs and reliance on outside contractors. Very safe excavation in tight places w/multiple utilities.	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Merrimack	No	\$ 22.87	\$ -
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 59,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,389
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 19,600	Yes	Nashua	Yes	\$ 23.55	\$ 462
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,168
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 106,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,508
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 57,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,354
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 71,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,684
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 65,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,543
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 375,250	Yes	Nashua	Yes	\$ 23.55	\$ 8,837
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 120,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,838
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 281,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,618
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 116,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,732
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI - Final Pavement and Restoration	DW20-156	26,459	3/2/2021	\$ 292,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,877
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 144,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,391
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 73,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,731
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 107,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,520
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 410,500	Yes	Nashua	Yes	\$ 23.55	\$ 9,667
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 325,250	Yes	Nashua	Yes	\$ 23.55	\$ 7,660
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,531
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 109,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,567
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 35,325
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	DW20-157	26,459	3/2/2021	\$ 800,000	Yes	Nashua	Yes	\$ 23.55	\$ 18,840
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program	DW20-157	26,459	3/2/2021	\$ 396,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,326
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 8,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 200,175
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,605	Yes	Nashua	No	\$ 23.55	\$ -
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,290	Yes	Nashua	No	\$ 23.55	\$ -
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI - Design only	0.1 DSRR Funds			\$ 4,125	Yes	Nashua	No	\$ 23.55	\$ -
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,280	Yes	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,175	Yes	Nashua	No	\$ 23.55	\$ -
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,740	Yes	Nashua	No	\$ 23.55	\$ -
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,640	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Design only	0.1 DSRR Funds			\$ 4,950	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Installing 115 LF of new 8" DI to complete loop - Design only	0.1 DSRR Funds			\$ 1,365	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 765	Yes	Nashua	No	\$ 23.55	\$ -
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 2,010	Yes	Nashua	No	\$ 23.55	\$ -

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 5/18/2023 - Revised per DOE DR Set 1

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 2,055	Yes	Nashua	No	\$ 23.55	\$ -
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 1,965	Yes	Nashua	No	\$ 23.55	\$ -
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 4,050	Yes	Nashua	No	\$ 23.55	\$ -
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 3,525	Yes	Nashua	No	\$ 23.55	\$ -
Haines St.	Abandoning 75 LF of 1934 1.5" main - Design only		0.1 DSRR Funds		\$ 450	Yes	Nashua	No	\$ 23.55	\$ -
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 5,670	Yes	Nashua	No	\$ 23.55	\$ -
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,985	Yes	Nashua	No	\$ 23.55	\$ -
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,305	Yes	Nashua	No	\$ 23.55	\$ -
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,590	Yes	Nashua	No	\$ 23.55	\$ -
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,910	Yes	Nashua	No	\$ 23.55	\$ -
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI - Design only		0.1 DSRR Funds		\$ 19,590	Yes	Nashua	No	\$ 23.55	\$ -
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI - Design only		0.1 DSRR Funds		\$ 6,840	Yes	Nashua	No	\$ 23.55	\$ -
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 1,710	Yes	Nashua	No	\$ 23.55	\$ -
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,570	Yes	Nashua	No	\$ 23.55	\$ -
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,075	Yes	Nashua	No	\$ 23.55	\$ -
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI - Design only		0.1 DSRR Funds		\$ 9,885	Yes	Nashua	No	\$ 23.55	\$ -
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	DW20-157	26,459	3/2/2021	\$ 200,000	Yes	Various	Yes	\$ 23.78	\$ 4,756
Investment in Developer Services	1x Annual Revenue	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering Pickup	Replace #105 2013 Chevy with >160k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace #31 2012 Chevy with >110k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 3 of 5.		0.1 DSRR Funds		\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Rotork Pakscan valve control system	Replace Rotork Pakscan valve control system	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Bowers Dam Spillway reconstruction/increase capacity	Bowers Dam Spillway reconstruction/increase capacity	DW20-157	26,459	3/2/2021	\$ 2,300,000	Yes	Merrimack	Yes	\$ 22.87	\$ 52,601
This replacement will flatten out our replacements over the next few years .	Runrate Business needs	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Typical IT Annual budget roughly runs about \$400K	typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2024 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 157,600	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -</b>					<b>\$ 21,604,535</b>					<b>Projected Property Tax Expense associated with \$ 452,061</b>

**Total for 0.1 DSRR 2024 Projects - \$ 387,610**  
**Total Projected Bond funded PWW QCPAC Capex for 2024 - \$ 12,016,925**  
**Special Project Bond for Chemical Feed Building - \$ 8,500,000**  
**FEMA Grant - \$ 700,000**

Estimated Bond Terms (Bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 826,829  
 Estimated Bond Terms (Special Project bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 584,846  
**Total Projected P&I - \$ 1,411,675**

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

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 5/18/2023 - Revised per DOE DR Set 1

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2025 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2025 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2025 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2025 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2025 Radios (2800)	Year 5 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickup to Replace Veh #22 that has been retired due to not passing inspection.	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickeup to replace Disconnect Vehicle that will become Hydrant Painting Van.	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 54,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,283
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 33,600	Yes	Nashua	Yes	\$ 23.55	\$ 791
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,260
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 198,500	Yes	Nashua	Yes	\$ 23.55	\$ 4,675
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 150,500	Yes	Nashua	Yes	\$ 23.55	\$ 3,544
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,250	Yes	Nashua	Yes	\$ 23.55	\$ 1,254
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 207,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,875
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021 - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Nashua	Yes	\$ 23.55	\$ 8,243
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 30,500	Yes	Nashua	Yes	\$ 23.55	\$ 718
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Nashua	Yes	\$ 23.55	\$ 589
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI	DW20-158	26,460	3/3/2021	\$ 94,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,214
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC	DW20-159	26,461	3/4/2021	\$ 49,000	No	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 47,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,107
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 35,500	Yes	Nashua	Yes	\$ 23.55	\$ 836
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC	DW20-156	26,459	3/2/2021	\$ 57,500	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 112,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,638
Long Ave	Installing 115 LF of new 8" DI to complete loop	DW20-157	26,459	3/2/2021	\$ 29,000	Yes	Nashua	Yes	\$ 23.55	\$ 683
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 15,500	Yes	Nashua	Yes	\$ 23.55	\$ 365
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 63,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,495
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 60,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,425
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 40,500	Yes	Nashua	Yes	\$ 23.55	\$ 954
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 41,000	Yes	Nashua	Yes	\$ 23.55	\$ 966
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 39,500	Yes	Nashua	Yes	\$ 23.55	\$ 930
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 78,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,837
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 68,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,613
Haines St.	Abandoning 75 LF of 1934 1.5" main	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	Nashua	Yes	\$ 23.55	\$ 118
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 122,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,873
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 64,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,519
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 92,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,167
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 98,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,308
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 62,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,460
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 166,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,909
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 37,500	Yes	Nashua	Yes	\$ 23.55	\$ 883
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 77,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,825
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 66,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,566
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 222,500	Yes	Nashua	Yes	\$ 23.55	\$ 5,240
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 3,900,000	Yes	Nashua	Yes	\$ 23.55	\$ 91,845
2026 Watermain Replacement (Design Only)	Various Streets, Diameters, and Materials	0.1 DSRR Funds			\$ 180,000	Yes	Nashua	No	\$ 23.55	\$ -
City Sewer Related Projects	Water Main Replacements Associated with Sewer Reconstruction	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	0.1 DSRR Funds			\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Investment in Developer Services	1x Annual Revenue	0.1 DSRR Funds			\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering SUV	Replace Highest Mileage SUV	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace Highest Mileage/Poorer Condition Pickup	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Rebuild High lift pump, WTP	Rebuild High lift pump, WTP	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,355
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
WTP Carbon Filter Replacement	Replaced Carbon in WTP Filters 1a through 4b	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Stellar	This replacement will flatten out our replacements over the next few years .	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Monitary placeholder	Typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2025 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 124,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2025 Total Capital Expenditure Budget -</b>					<b>\$ 11,799,975</b>					<b>Projected Property Tax Expense associated with \$ 209,136</b>

**Total for 0.1 DSRR 2024 Projects - \$ 540,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2025 - \$ 7,359,975**  
**Special Project Bond for Chemical Feed Building - \$ 3,900,000**

Estimated Bond Terms (Bonds to be sold in April 2026) -	30	Years @	5.50%	resulting in P&I of	\$ 506,406
Estimated Bond Terms (Special Project bonds to be sold in April 2026) -	30	Years @	5.5%	resulting in P&I of	\$ 268,341
Total Projected P&I -					<b>\$ 774,747</b>

1. Tax rate is the sum of the Dec 2022 local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
**Various Tax Rates Calculation**  
**DOE DRs Set 1 - DR1-7**  
**5/18/2023**

<b>Community</b>	<b>Number of Customers</b>	<b>Dec 2022 Tax Rate</b>	<b>Customer Tax Rate</b>	<b>Combine Local and State Rate</b>
Amherst	1,495	\$ 19.96	29840.2	\$ 26.56
Bedford	1,166	\$ 16.43	19157.38	\$ 23.03
Derry	814	\$ 18.02	14668.28	\$ 24.62
Epping	79	\$ 21.20	1674.8	\$ 27.80
Hollis	134	\$ 21.21	2842.14	\$ 27.81
Merrimack	433	\$ 16.27	7044.91	\$ 22.87
Milford	255	\$ 19.67	5015.85	\$ 26.27
Nashua	24,683	\$ 16.95	418376.85	\$ 23.55
New Market	87	\$ 25.57	2224.59	\$ 32.17
Plaistow	222	\$ 17.80	3951.6	\$ 24.40
Salem	72	\$ 14.91	1073.52	\$ 21.51
<b>Total PWW</b>	<b>29,440</b>		<b>505870.12</b>	
Various PWW Tax Rate -	\$	17.18		
State Tax Rate -	\$	6.60		
<b>Total Various Tax Rate -</b>	<b>\$</b>	<b>23.78</b>		

1 Line of Credit (“FALOC”) during construction. The FALOC is subsequently re-  
2 financed annually to long-term debt by issuing bonds using the New Hampshire  
3 Business Finance Authority as its conduit to the tax-exempt and taxable bond  
4 markets.

5 These “other major capital project” investments are associated with vertical  
6 assets, including storage tanks, pumping stations, treatment facilities, source of  
7 supply, and process related improvements (SCADA, Asset Management, etc.).

8 In some years there may be more need for horizontal asset investment (main  
9 replacements) rather than vertical assets. In other years the opposite may be  
10 true. The balancing of these focused objectives is necessary to maintain a  
11 balance between timely replacement of aging infrastructure, while also keeping  
12 water rates from increasing too quickly, in order to fund those incurred costs.

13  
14 **Q. What were the other major projects completed in 2022?**

15 A. The following projects are representative of the major capital work completed in  
16 2022.

17  
18 Meter Radio Replacement Year 2 (W/O# 2200381): The Company replaced  
19 2,142 radios in 2022 at a cost of \$236,311.

20  
21 Kessler Farm Tank (W/O# 2200501 at a cost of \$200,776): The Kessler Farm  
22 Tank was substantially complete, and used and useful in December 2021. There

1 Line of Credit (“FALOC”) during construction. The FALOC is subsequently re-  
2 financed annually to long-term debt by issuing bonds using the New Hampshire  
3 Business Finance Authority as its conduit to the tax-exempt and taxable bond  
4 markets.

5 These “other major capital project” investments are associated with vertical  
6 assets, including storage tanks, pumping stations, treatment facilities, source of  
7 supply, and process related improvements (SCADA, Asset Management, etc.).

8 In some years there may be more need for horizontal asset investment (main  
9 replacements) rather than vertical assets. In other years the opposite may be  
10 true. The balancing of these focused objectives is necessary to maintain a  
11 balance between timely replacement of aging infrastructure, while also keeping  
12 water rates from increasing too quickly, in order to fund those incurred costs.

13  
14 **Q. What were the other major projects completed in 2022?**

15 A. The following projects are representative of the major capital work completed in  
16 2022.

17  
18 Meter Radio Replacement Year 2 (W/O# 2200381): The Company replaced  
19 2,142 radios in 2022 at a cost of \$236,311.

20  
21 Kessler Farm Tank (W/O# ~~2101759-2200501~~ at a cost of \$200,776): The  
22 Kessler Farm Tank was substantially complete, and used and useful in  
23 December 2021. There was additional carry over work in 2022 for final site

1 AWIA RRA – ERP Projects (Budget \$400,000): The company will be completing  
2 assessments of the recommendations derived from the RRA-ERP to prioritize  
3 improvements that result in risk mitigation and improved emergency response.

4 These may include but limited to:

- 5 • Security enhancements at remote facilities including locks, alarms,  
6 security lighting, cameras, fencing, etc.
- 7 • Redundancy improvements/additions such as back up pumps, portable  
8 pumps and generators, or water main improvements
- 9 • Computer hardware and software upgrades and enhancements
- 10 • Cybersecurity initiatives
- 11 • Structural enhancements to building structures to withstand extreme  
12 weather events
- 13 • SCADA system improvements including a possible transition from radio  
14 telemetry to more reliable communication technologies.

15 English Woods Alternative Source Interconnection (Budget \$350,000): This  
16 project will be the completion of an interconnection water main from the  
17 Company's Powder Hill system to the English Woods CWS in Bedford. The  
18 English Woods CWS is served by bedrock wells that have limited capacity (there  
19 is a water restriction history at English Woods) and lack redundancy during  
20 maximum day conditions. There is no available ready land to install additional  
21 wells in a different aquifer. The interconnection watermain will connect from the  
22 Company's existing Powder Hill water main on Donald Street and run  
23 approximately 2,300 linear feet through a cross country easement to connect at

1 AWIA RRA – ERP Projects (Budget \$~~200~~400,000): The company will be  
2 completing assessments of the recommendations derived from the RRA-ERP to  
3 prioritize improvements that result in risk mitigation and improved emergency  
4 response. These may include but limited to:

- 5 • Security enhancements at remote facilities including locks, alarms,  
6 security lighting, cameras, fencing, etc.
- 7 • Redundancy improvements/additions such as back up pumps, portable  
8 pumps and generators, or water main improvements
- 9 • Computer hardware and software upgrades and enhancements
- 10 • Cybersecurity initiatives
- 11 • Structural enhancements to building structures to withstand extreme  
12 weather events
- 13 • SCADA system improvements including a possible transition from radio  
14 telemetry to more reliable communication technologies.

15 English Woods Alternative Source Interconnection (Budget \$350,000): This  
16 project will be the completion of an interconnection water main from the  
17 Company's Powder Hill system to the English Woods CWS in Bedford. The  
18 English Woods CWS is served by bedrock wells that have limited capacity (there  
19 is a water restriction history at English Woods) and lack redundancy during  
20 maximum day conditions. There is no available ready land to install additional  
21 wells in a different aquifer. The interconnection watermain will connect from the  
22 Company's existing Powder Hill water main on Donald Street and run  
23 approximately 2,300 linear feet through a cross country easement to connect at

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 2

Date Request Received: 6/7/23  
Request No. DOE 2-1

Date of Response: 6/19/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Company's Response to DOE 1-2(b) and Updated (05/18/2023) Exhibit DLW-1, Page 2 – 2022 Actual QCPAC Expenditures:** Please specifically identify the project(s) in the amount of \$32,422 deemed ineligible to be bonded and will, instead, be financed with available DSRR 0.1 funds.

**RESPONSE:**

Please see Rows 88 and 89, the Utility Network Migration on the attached, revised Exhibit DLW-1, Page 2. In the initial filing the funding of this project was split between Bond Funds (\$32,421) and 0.1 DSRR funds (\$1,128). This project was deemed ineligible for bond funding because it was fully funded with 0.1 DSRR Funds. Rows 88 and 89 have been corrected to reflect that the Utility Network Migration was fully funded with 0.1 DSRR Funds and as such the initial amount of \$32,491 was removed from the total amount to be bonded.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 2

Date Request Received: 6/7/23  
Request No. DOE 2-2

Date of Response: 6/19/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Company's Response to DOE 1-4 and Updated (05/18/2023) Exhibit DLW-1, Page 1 – Computation of QCPAC Surcharge, Line 14:** It would seem that the DW 22-032 RSF Debit amount of \$(422,871) indicated in Cell B14 should also be carried through to Cells F14, I14, M14, and Q14 in order to be incorporated into the respective QCPAC Surcharge Calculations in Columns F (2022), I (2023) M (2024), and Q (2025). Otherwise, it appears that the QCPAC calculated for each succeeding year also effectively includes a recovery provision equal to the DW 22-032 RSF Debit amount. Please comment and/or explain.

**RESPONSE:**

Staff is correct. The RSF Debit in the amount of (\$422,871) should have been carried through to Cells F14, I14, M14 and Q14. These cells have been revised on the attached, revised Exhibit DLW-1, Page 1.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 2

Date Request Received: 6/7/23  
Request No. DOE 2-3

Date of Response: 6/19/2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: Company's Response to DOE 1-11 and Updated (05/18/2023) Exhibit DLW-1, Page 3 – 2023 Projected QCPAC Expenditures, Cells G113 and G114:** In light of the Company's response, including especially that, "The \$150,000 increase in budget will be funded through regular bonding" should Cell G113 (bonding amount) now be \$11,997,775 (\$11,847,775 + \$150,000) and Cell G114 (SRF/DWGTf funds) now be \$540,000 (\$690,000 - \$150,000)? Please comment and/or explain.

**RESPONSE:**

Staff is correct. The available SRF funding for the Twin Ridge and Sweet projects is \$540,000. The projected additional cost of \$150,000 for these projects was incorrectly reflected in Exhibit DLW-1, Page 3, Cells G113 and G114 in terms of where those funds would come from. Cell G113 has been corrected to \$11,997,775, reflecting the addition of \$150,000 in costs that must be bonded for. Cell G114 has been reduced to \$540,000, the approved amount of the NHDES SRF funding.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 2

Date Request Received: 6/7/23  
Request No. DOE 2-4

Date of Response: 6/19/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Company's Response to DOE 1-11:** In light of the Company's response, please provide further clarification on why the estimated Twin Ridge cost decreased (from \$300,000 to \$270,000), while the estimated Sweet Hill cost increased by 75 percent (from \$240,000 to \$420,000).

**RESPONSE:**

When the projects were budgeted in 2020 the fees associated with connecting to the Town of Plaistow Water System were not know and were not included in the SRF estimates/requests. The connection fees were established in the latter half of 2022 by the Town of Plaistow and those fees were incorporated into the 2023 budget. In addition, since the SRF loans were approved the Company has demonstrated that it is most cost effective to purchase 100% of its water demand for the Twin Ridge system from Plaistow. This is a substantial change from when the original estimate was prepared in 2020, as it was still a possibility to retain the existing wells and treatment system using Plaistow as a supplemental source. Purchasing 100% of the Twin Ridge demand will require discontinued use of the existing wells, treatment/booster station, and storage tanks. Costs for demolition and closure of these facilities were not in the original 2020 SRF budgets.

To complete the interconnection at Sweet Hill, the Company anticipated that the Town of Plaistow's hydraulic grade line would be higher than where it ended up at with the system complete and operational. In order to ensure that the Company's customers do not see a decrease in their pressure, the Company will need to install an additional 900 feet of interconnecting water main and make piping modifications within the existing pump station. The additional 900 feet of interconnecting main and piping modifications account for the project increases.

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 2

Date Request Received: 6/7/23  
Request No. DOE 2-5

Date of Response: 6/19/2023  
Witness: John J. Boisvert

---

**REQUEST:**

**Re: Company's Response to DOE 1-19:** The details of the challenges faced, and lessons learned, are acknowledged and appreciated. In the longer term, does the company have specific strategies in mind to ensure that replacement of aging, substandard (or at least questionable) buried infrastructure - primarily water mains, of which many such miles remain - is not overtaken by other priorities, especially given that such replacement is costly, disruptive to customers, tends to be under-appreciated by the public, and lacks any external regulatory imperative? Or does the company feel that its asset management capabilities are beginning to keep pace with the true need for such replacements?

**RESPONSE:**

The process of asset management is expected to become more effective or efficient as the program continues to mature. New data specific to Company assets, as well as new and evolving tools to analyze that data will continue to become available. Those tools will allow the Company to make better informed and more reasoned decisions about which water mains are most critical, most at risk, and warrant increased maintenance or replacement. The Company is currently engaged in such a detailed analysis that is expected to yield replacement recommendations beyond the next three-year budget cycle.

Pennichuck Water Works, Inc.  
 DW 23-015  
 Computation of QCPAC Surcharge  
 2/13/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/19/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 1

	Requested 032 Revenues	DW 22- 032	QCPAC For 2022 Capital Additions pro forma	QCPAC Surcharge for 2022 Capital Addition	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions	QCPAC For 2024 Capital Additions pro forma	QCPAC Surcharge for 2024 Capital Additions	QCPAC For 2025 Capital Additions pro forma	QCPAC Surcharge for 2025 Capital Additions					
City Bond Fixed Revenue Requirement (CBFRR)	\$	7,729,032	\$ -	\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032					
DW 22-032 Operating Expense Revenue Requirement, with MOEF, per Settlement Agreement	\$	25,249,661	(1)	\$ 114,394	(4)	\$ 25,364,054	\$ 244,264	(4)	\$ 25,608,319	\$ 452,061	(4)	\$ 26,060,380	\$ 209,136	(4)	\$ 26,269,516
DW 22-032 Annual Principal and Interest Payments per Settlement Agreement	\$	7,436,923	(2)	\$ 378,546	(7)	\$ 7,815,469	\$ 856,213	(8)	\$ 8,671,682	\$ 1,411,675	(8)	\$ 10,083,357	\$ 774,747	-8	\$ 10,858,104
Principal and Interest Coverage Requirement		1.10	(3)			1.10			1.10			1.10			1.10
DW 22-032 Principal and Interest Revenue Requirement	\$	8,180,615				\$ 8,597,016			\$ 9,538,850			\$ 11,091,692			\$ 11,943,914
DW 22-032 RSF Debit	\$	(422,871)	(11)			\$ (422,871)			\$ (422,871)			\$ (422,871)			\$ (422,871)
DW 22-032 Revenue Requirement per Settlement Agreement inclusive of RSF Debit	\$	40,736,437	(10)			\$ 41,267,231			\$ 42,453,330			\$ 44,458,233			\$ 45,519,591
DW 22-032 Revenue Requirement less Other Revenues	\$	40,143,045				\$ 40,673,839			\$ 41,859,937			\$ 43,864,841			\$ 44,926,199
DW 22-032 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$	39,057,359	(6)			\$ 39,588,153			\$ 40,774,251			\$ 42,779,155			\$ 43,840,513
Percent QCPAC Surcharge (5)						1.36%			3.04%			5.13%			2.72%
Cumulative QCPAC Surcharge (9)						1.36%			4.40%			9.53%			12.25%
Cumulative QCPAC monthly increase in average single family residential bill.						\$ 0.83			\$ 2.69			\$ 5.84			\$ 7.50
Average monthly single family residential bill with QCPAC.	\$	61.28				\$ 62.11			\$ 63.97			\$ 67.12			\$ 68.78

Notes:

- (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses agreed to in the Settlement agreement for DW22-032
- (2) Annual Principal and interest payments for PWW debt associated with all plant in service as agreed to in the settlement agreement for DW22-032.
- (3) Principal and interest coverage of 1.10 is as approved in DW 16-806.
- (4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year
- (5) QCPAC percent revenue surcharges based on increase in revenues which are reflected in the Settlement agreement in DW22-032
- (6) Reduction in revenues associated with fixed contracts as follows:  

Hudson Annual Fixed Chg	\$ 457,083	Milford Annual Fixed Chg	\$ 81,000	A-B Annual Fixed Chg	\$ 356,622	PEU Annual Fixed Chg	\$ 190,981
-------------------------	------------	--------------------------	-----------	----------------------	------------	----------------------	------------
- (7) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of 3.38%
- (8) QCPAC Principal and Interest expenses based on actual April 26, 2023 Bond issuance based on a 30 year bond with interest rate of 5.005716% (Total All In Interest Cost of all Series Bonds)
- (9) QCPAC Principal and Interest expenses for 2023, 2024 and 2025 QCP's are based on 30 year bond with interest rate of 5.50% for 2023 through 2025 Capital Expenditures unless funding is via an SRF/DWGTIF financing.
- (10) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues agreed to in the settlement in DW 22-032 that are impacted by the QCPAC.
- (11) Operating expense revenues agreed to in the Settlement Agreement per DW 22-032 less total Other Revenues of \$ 593,392
- (12) RSF debit agreed to in Settlement Agreement in DW 22-032

Impact on Single Family Residential Home:

	DW 22-032
Monthly meter charge agreed to in Settlement in DW 22-032 -	\$ 26.90
Average Single Family Consumption as filed in DW 22-032 (CCF) -	7.76
Volumetric Charge agreed to in Settlement in DW 22-032 -	\$ 4.43
Ave. Single Family monthly bill with rates projected upon completion of DW 22-032 -	\$ 61.28

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Year End Project Cost as of 09/30/2022	Estimated Project Cost as of 11/30/2022	Final Project cost as of 12/31/2022	Community	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Office Space for Const & Maint Supervisor	Permanent Office space for Construction & Maint Supervisor	n/a	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	\$ -	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Wash Sinks	Deep stainless wash sinks to replace existing sinks in male & female locker rooms	n/a	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	\$ 10,000	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Benches	Permanent Benches in Men's & Women's Locker Rooms	n/a	DW20-157	26,459	3/2/2021	\$ 7,500	Yes	\$ 7,500	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
2022 New Services (15)	Single Family, Owner Build, New Homes	Routine	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 75,000	\$ 102,500	\$ 102,500	Various	Yes	\$ 23.78	\$ 2,437	10 New Services installed in 2022
2022 Renewed Services (20)	Replacement of Failed Services	Routine	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	\$ 110,000	\$ 142,271	\$ 155,198	Various	Yes	\$ 23.78	\$ 3,691	32 Renewed Services completed in 2022.
2022 Hydrants (10)	Replacement of non functional hydrants	Routine	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	\$ 15,000	\$ 14,796	\$ 14,793	Various	Yes	\$ 23.78	\$ 352	2 Hydrants installed in 2022.
2022 Gates (20)	Replacement of Failed Gate Valves	Routine	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	\$ 72,000	\$ 82,863	\$ 76,944	Various	Yes	\$ 23.78	\$ 1,830	13 Gate Valves Replaced in 2022.
2022 Radios (250)	New Radios for new customers (250)	Routine	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	\$ 177,000	\$ 16,636	\$ 16,195	Various	Yes	\$ 23.78	\$ 385	163 Radios installed in 2022.
2022 Radios (2800)	Year 2 of 10 year Replacement of all PWW Radios installed in 2007 (2800)	2200381	DW20-157	26,459	3/2/2021	\$ 280,000	Yes	\$ 240,000	\$ 253,475	\$ 236,311	Various	Yes	\$ 23.78	\$ 5,619	2,142 Radios Replaced thru 11/30/2022. 300 additional radio replacements expected by year end.
2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)	Routine	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 60,000	\$ 82,786	\$ 82,204	Various	Yes	\$ 23.78	\$ 1,955	392 Meters Replaced in 2022.
Replacement Dump Truck	Replacement for Truck # 7, 2011 Peterbilt T-335, 100K+ miles, 2500 hrs, high maint & Repair	n/a	DW20-157	26,459	3/2/2021	\$ 125,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Deferred due to availability.
Replacement Utility Truck	New Utility Truck to replace #84, 2014 F-350, 120k miles, High maint & Repair costs	2204657		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,995	\$ 53,995	\$ 76,895	Merrimack	No	\$ 22.87	\$ -	
Replacement Utility Truck	New Utility Truck to replace #9, 2014 F-350, 120k miles, High Maint & Repair costs	2204656		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,600	\$ 53,600	\$ 76,500	Merrimack	No	\$ 22.87	\$ -	
Replacement Supervisor Pickup	New Full sized Pickup to replace #21, 2013 Chevy Equinox, 150k miles, Hi Maint & Repair costs	2204655	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 54,340	\$ 54,340	\$ 54,340	Merrimack	No	\$ 22.87	\$ -	
Prolectus Meter Upgrade	Prolectus Meter Upgrade	n/a	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Deferred due to availability.
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	n/a	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Budget money moved to a different unbudgeted project/projects.
New 22 Ton Tilt Trailer	22 Ton Tilt Trailer to transport Excavator for Distribution Crew Work	2205058	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ 39,421	\$ 39,421	\$ 39,421	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2205777		0.1 DSRF funds	26,459	\$ 12,000	Yes	\$ 18,450	\$ 4,572	\$ 4,572	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2205777	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 13,878	\$ 13,878	\$ 13,878	Merrimack	No	\$ 22.87	\$ -	Residual of Air Compressor cost (row 27) not covered by 0.1 DSRF funds.
New 3" Neptune Construction Meters	Purchase 2 new 3" Neptune Construction Meters to meet Demand	2203895		0.1 DSRF funds	26,459	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 23
New Cut Saws for Distribution	2 New Stihl Cust saws for Distribution	2203898		0.1 DSRF funds	26,459	\$ -	Yes	\$ 3,528	\$ 3,528	\$ 3,528	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 24
New Mechanics Field Service Vehicle	New Mechanics Field Service Vehicle	2204653	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 58,900	\$ 58,900	\$ 78,800	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Replacement Utility Trailer	Replacement Utility Trailer for Foreman	2204991	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,800	\$ 6,800	\$ 6,800	Merrimack	No	\$ 22.87	\$ -	
New Neptune Construction Meters	2 New Neptune Construction Meters for Contractor requests	2205668	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Irrigation Sys. Inst. at Dist. Facility	Installation of Irrigation System at Distribution Facility	2205669	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,120	\$ 3,120	\$ 3,120	Merrimack	No	\$ 22.87	\$ -	
Loam & Hydroseed at Dist. Facility	Installation of Loam and Hydroseeding at Distribution Facility	2205672	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 8,333	\$ 8,333	\$ 8,333	Merrimack	No	\$ 22.87	\$ -	
New Volvo ECR88D Excavator	New Volvo ECR88D Excavator	2208205	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 123,261	\$ 123,261	\$ 123,261	Merrimack	No	\$ 22.87	\$ -	
Purchase New 4-Ton hotbox w/30 Gal Tack Tank	Purchase New 4-Ton hotbox w/30 Gal Tack Tank	2208362	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 49,900	\$ 49,900	\$ 49,900	Merrimack	No	\$ 22.87	\$ -	
DynaPac Pavement Roller	DynaPac Pavement Roller	2208363	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 21,500	\$ 21,500	\$ 21,500	Merrimack	No	\$ 22.87	\$ -	
Trailer for Pavement Roller	Trailer for Pavement Roller	2208364	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,980	\$ 6,980	\$ 6,980	Merrimack	No	\$ 22.87	\$ -	
Purchase 4 New Pavement Saws	Purchase 4 New Pavement Saws	2209555	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,000	\$ 6,000	\$ 6,000	Merrimack	No	\$ 22.87	\$ -	
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2200501	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 272,000	\$ 200,103	\$ 200,776	Nashua	Yes	\$ 23.55	\$ 4,728	
Coburn Woods (all side streets) Phase 1	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	2200500	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 189,000	\$ 179,254	\$ 183,474	Nashua	Yes	\$ 23.55	\$ 4,321	
Miami Street	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL	2201253	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	\$ 187,550	\$ 186,176	\$ 185,648	Nashua	Yes	\$ 23.55	\$ 4,372	
Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL	2201252	DW20-157	26,459	3/2/2021	\$ 190,000	Yes	\$ 130,000	\$ 142,868	\$ 142,894	Nashua	Yes	\$ 23.55	\$ 3,365	Paving on this was deferred until 2023. Paving cost will be reduced and shared with the City.
Faxon Avenue	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC	2201254	DW20-157	26,459	3/2/2021	\$ 86,000	Yes	\$ 86,000	\$ 86,000	\$ 83,841	Nashua	Yes	\$ 23.55	\$ 1,974	
Faxon Street	Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL	2201255	DW20-157	26,459	3/2/2021	\$ 220,000	Yes	\$ 195,000	\$ 195,000	\$ 191,910	Nashua	Yes	\$ 23.55	\$ 4,519	Bid was lower than the engineer's estimate.
Chataqua Ave	Broad St. to End Replace/Add 780 feet of 1.25"/4"6" installed in 1915-1963 with 4"6"	2200426	DW20-157	26,459	3/2/2021	\$ 209,000	Yes	\$ 267,000	\$ 267,068	\$ 267,095	Nashua	Yes	\$ 23.55	\$ 6,290	Paving restoration requirements were more than anticipated.
Niquette Dr.	E. Dunstable to service 12 Niquette Replace/Add 525 feet of 2" installed in 1960 with 4"	2200427	DW20-157	26,459	3/2/2021	\$ 131,000	Yes	\$ 127,200	\$ 128,323	\$ 128,363	Nashua	Yes	\$ 23.55	\$ 3,023	
Pine Hill Ave	Wright Rd. to End Replace/Add 300 feet of 1.25" installed in 1953 with 4"	2200422	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 92,400	\$ 92,367	\$ 92,394	Nashua	Yes	\$ 23.55	\$ 2,176	Old pipe records were not accurate requiring more pipe to be replaced.
Mt. Pleasant St.	Merrimack St. to Manchester St. Replace/Add 400 feet of 1.5" installed in 1955 with 8"	2200423	DW20-157	26,459	3/2/2021	\$ 117,000	Yes	\$ 204,200	\$ 195,922	\$ 195,948	Nashua	Yes	\$ 23.55	\$ 4,615	More paving and night work than anticipated.
French St.	Merrimack St. to 10 French Replace/Add 340 feet of 2"/6" installed in 1887 & 1926 with 4"/6"	2200424	DW20-157	26,459	3/2/2021	\$ 87,000	Yes	\$ 178,040	\$ 173,709	\$ 173,736	Nashua	Yes	\$ 23.55	\$ 4,091	More paving and night work than anticipated.
Dudley St.	June St. to E. Hobart St. Replace/Add 830 feet of 1.25"/8" CI/AC installed in 1957-1971 with 8"	2200428	DW20-157	26,459	3/2/2021	\$ 256,000	Yes	\$ 300,000	\$ 269,714	\$ 269,900	Nashua	Yes	\$ 23.55	\$ 6,356	
Ledgewood Hills Dr. /Heather	To Intersection Replace/Add 10 feet of Unconnected installed in with 8"	2200429	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	\$ 5,500	\$ 11,059	\$ 11,059	Nashua	Yes	\$ 23.55	\$ 260	
Rita St.	Allids St. to 6 Rita Replace/Add 210 feet of 1.5" CI/CL installed in 1956 with 4"	2200430		0.1 DSRF funds	26,459	\$ 53,000	No	\$ 2,899	\$ 2,880	\$ 2,880	Nashua	No	\$ 23.55	\$ -	Design only
Salem St.	Whitney St. to Summer St. Replace/Add 855 feet of 4"/6" installed in 1888-1927 with 6"	2200425		0.1 DSRF funds	26,459	\$ 253,000	No	\$ 300	\$ 728	\$ 848	Nashua	No	\$ 23.55	\$ -	Design only
Walnut St.	W. Pearl St. to W. Hollis St. Replace/Add 830 feet of 6"/8" installed in 1888-1931 with 12"	2200431		0.1 DSRF funds	26,459	\$ 312,000	No	\$ 300	\$ 778	\$ 1,346	Nashua	No	\$ 23.55	\$ -	Design only
Garden Street	Emergency replacement of 150 11 of 6" CIP with 8" DIP	2208030	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 50,000	\$ 49,456	\$ 49,536	Nashua	Yes	\$ 23.55	\$ 1,167	City Sewer Project - Budget from row 54
Route 101A Water Main Relocation	Route 101A Water Main Relocation	n/a	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	n/a	DW20-157	26,459	3/2/2021	\$ 500,000	Yes	\$ -	\$ -	\$ -	Various	Yes	\$ 23.78	\$ -	Budget money moved to a different unbudgeted project/projects.
Milford Booster Station	Replace/Relocate Milford Booster Station (Design & Permitting)	2201853		0.1 DSRF funds	26,459	\$ 60,000	No	\$ 6,827	\$ 6,827	\$ 6,827	Milford	No	\$ 26.27	\$ -	Station to be designed, owned and operated by the Milford Water Department.
City Sewer Projects (2022)	Replace CI, AC, and other older main disrupted by sewer construction	n/a	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	No city sewer projects projected for remainder of year.
Coburn Tank Area HP Zone Watermain	Create new HP area with 1600 LF of Water Main and Check Valves	n/a		0.1 DSRF funds	26,459	\$ 800,000	Yes	\$ 5,000	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Coburn Tank Area HP Booster Station	New Domestic flow and pressure booster station	n/a		0.1 DSRF funds	26,459	\$ 550,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Investment in Developer Services	1x Annual Revenue	Routine	DW20-157	26,459	3/2/2021	\$ 140,000	Yes	\$ 75,000	\$ 69,449	\$ 77,276	Various	Yes	\$ 23.78	\$ 1,838	96 Developer Services through 11/30/2022. 10 more projected by year end.
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	2204654	DW20-157	26,459	3/2/2021	\$ 32,000	Yes	\$ 20,000	\$ 20,000	\$ 9,156	Merrimack	No	\$ 22.87	\$ -	
Sweet Hill Interconnection	Connecting Pipeline and Meter Pit	2208920	SRF			\$ 220,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Twin Ridge Interconnection	Connecting Pipeline and Meter Pit	2208919	SRF			\$ 100,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2201770.
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2206415.
Snow Station Building Addition	Addition of a third High Lift Pump (Design & Permitting)	n/a		0.1 DSRF funds	26,459	\$ 100,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Project deferred
Engineering Studies: WTP	Chemical Feed and Storage, PFAS treatment	2205826		0.1 DSRF funds	26,459	\$ 50,000	Yes	\$ 90,000	\$ 125,000	\$ 113,182	Nashua	No	\$ 23.55	\$ -	Design only
Atherton Commons	Install 9 Meter Boxes (Pits)														

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Year End Project Cost as of 09/30/2022	Estimated Project Cost as of 11/30/2022	Final Project cost as of 12/31/2022	Community	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Rebuild 1 High lift/intermediate pump	Rebuild 1 High lift/intermediate pump	n/a	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Budget money moved to a different unbudgeted project/projects.
WTP Structural/HVAC	WTP Structural/HVAC	n/a	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Budget money moved to a different unbudgeted project/projects.
Purchase new lab equipment	Purchase new lab equipment	n/a	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to a different unbudgeted project/projects.
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	\$ -	\$ -	\$ -	Various	Yes	\$ 23.78	\$ -	Design only. Project deferred until 2024 when grant money will be available.
Bowers Dam Spillway reconstruction/increase capacity	Bowers Dam Spillway reconstruction/increase capacity	2201369		0.1 DSRF funds		\$ 1,850,000	Yes	\$ 110,263	\$ 125,000	\$ 120,140	Merrimack/Nashua	No	\$ 23.21	\$ -	Deferred due to supply chain issues and potential funding through NHDES HHDP.
Vehicle replacement	vehicle replacement	2205056	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	\$ 45,359	\$ 58,859	\$ 58,866	Nashua	No	\$ 23.55	\$ -	Deferred
Vehicle replacement	vehicle replacement	n/a	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	
Re-paint FWPS ceiling	Re-paint FWPS ceiling	n/a	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Budget money moved to a different unbudgeted project/projects.
Carbon Filter Media	Carbon Filter Media	2202953	DW20-157	26,459	3/2/2021	\$ 1,300,000	Yes	\$ 1,433,000	\$ 1,433,000	\$ 1,432,922	Nashua	Yes	\$ 23.55	\$ 33,745	
Rebuild Bulk Sodium Hypochlorite Piping	Rebuild Bulk Sodium Hypochlorite piping system in the bulk chemical storage area at WTP	2202391		0.1 DSRF funds		\$ -	Yes	\$ 6,092	\$ 6,092	\$ 6,092	Nashua	Yes	\$ 23.55	\$ 143	
Purchase (2) confined space gas	Purchase (2) confined space gas monitors and related equipment	2203399		0.1 DSRF funds		\$ -	Yes	\$ 3,521	\$ 3,521	\$ 3,521	Nashua	Yes	\$ 23.55	\$ 83	
Purchase (2) Hach DR 900 devices	Purchase (2) Hach DR 900 water testing devices	2204849	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 4,240	\$ 4,240	\$ 4,240	Nashua	Yes	\$ 23.55	\$ 100	
Replace valve & actuator, Pulsator	Replacement of the valve and electric actuator for Pulsator Extraction Valve 2A	2204850	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 11,269	\$ 11,269	\$ 11,269	Nashua	Yes	\$ 23.55	\$ 265	
Purchase Underwater Remote Operated Veh.	Purchase Underwater Remote Operated Vehicle to perform tank inspections	2204919	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 10,224	\$ 10,224	\$ 10,224	Nashua	No	\$ 23.55	\$ -	
Replace Radio Comm. - Shakespeare Tank	Replacement of the spread spectrum radio system with a cellular system	2205518	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 5,245	\$ 5,245	\$ 5,245	Nashua	Yes	\$ 23.55	\$ 124	
Replace Soft Starter Pump 1 Taylor Falls	Replace Soft Starter Pump 1 Taylor Falls	2206239	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,880	\$ 3,880	\$ 3,880	Nashua	Yes	\$ 23.55	\$ 91	
Rebuild WTP, Polymer Feed 1 Mixer/Motor	Rebuild WTP, Polymer Feed 1 Mixer/Motor	2206240	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 4,500	\$ 4,500	\$ 4,500	Nashua	Yes	\$ 23.55	\$ 106	
Replace Uranium Treatment System	Replace Uranium Treatment System	2207274	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ 22,942	\$ 22,942	Derry	Yes	\$ 24.62	\$ 565	Existing Uranium Treatment vessel developed a leak. Vessel replaced. Existing vessel must be disposed of at licensed landfill. Disposal will happen in 2023. New Vessel in service.
Replace Main Breaker Pump 1 Merrimack River	Replace 600 amp Main Breaker Pump 1 Merrimack River	2207860	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ 3,886	\$ 3,886	Nashua	Yes	\$ 23.55	\$ 92	
Replace 2 bin Sys. Iso Valve at Drew Woods	Replace 2 bin System Isolation Valves at Drew Woods	2207867	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,857	\$ 3,857	\$ 3,857	Derry	Yes	\$ 24.62	\$ 95	
Purchase New TOC Analyzer	Purchase New TOC Analyzer	2208043	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Not complete until 2023.
Replace Heat Circulator Pump at WTP	Replace Heat Circulator Pump at WTP	2208044	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ 6,000	\$ 5,499	Nashua	Yes	\$ 23.55	\$ 130	
Purchase New Wach's Trav-L-Vacuum & Trailer	Purchase New Wach's Trav-L-Vacuum & Trailer	2208178		0.1 DSRF funds		\$ -	Yes	\$ -	\$ 29,950	\$ 29,520	Nashua	No	\$ 23.55	\$ -	
Replace Chlorine day tank #2, Nashua WTP	Replace Chlorine day tank #2, Nashua WTP	2209086	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ 3,872	\$ 7,482	Nashua	Yes	\$ 23.55	\$ 176	
Redundant VPN Project	Replace current Firewall and add a second firewall and internet feed at Distribution	2201937		0.1 DSRF funds		\$ 14,000	Yes	\$ 13,772	\$ 13,772	\$ 13,772	Nashua	No	\$ 23.55	\$ -	
PLL Implementatin Project	2022 CMMIS PLL Implementation CO	2201250		0.1 DSRF funds		\$ 10,000	Yes	\$ 10,139	\$ 10,139	\$ 10,139	Nashua	No	\$ 23.55	\$ -	
SEIM	On premise appliance that will sift through server logs looking for anomalies and notify IT of issues.	n/a		0.1 DSRF funds		\$ 40,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Deferred to 2023
Cameras for Plant	Update and add additional cameras at WTP and pond intakes to enhanced security	2201772		0.1 DSRF funds		\$ 137,000	Yes	\$ 29,725	\$ 29,725	\$ 29,725	Nashua	No	\$ 23.55	\$ -	Remainder of work (\$100,000) to be completed in 2023.
Virtualization of Engineering Applications	Virtual desktop environment for Engineering so that a user can work anywhere with a network connection without the need for high end desptops or laptops.	2207263		0.1 DSRF funds		\$ 83,000	Yes	\$ 44,000	\$ 44,000	\$ 51,001	Nashua	No	\$ 23.55	\$ -	
Secondary Production Storage	Additional storage to our production environment	2203420		0.1 DSRF funds		\$ 52,000	Yes	\$ 22,147	\$ 22,147	\$ 22,147	Nashua	No	\$ 23.55	\$ -	
Veeam Back Licensing to support SCADA Servers	Standardization of Backup software for SCADA servers to be what the rest of the Company uses.	n/a		0.1 DSRF funds		\$ 16,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	No hardware required. Annual subscription, expensed.
5th Virtual Server	Due to our strategy of moving towards a virtualized infrastructure, this would give us the necessary redundancy incase on of our existing Virtual servers fails.	2203421		0.1 DSRF funds		\$ 45,000	Yes	\$ 30,946	\$ 30,955	\$ 30,955	Nashua	No	\$ 23.55	\$ -	
Boardroom Camera and Microphone	Needed as the equipment currently used from the previous facility is not providing a quality experience	2207849		0.1 DSRF funds		\$ 15,000	Yes	\$ 16,000	\$ 16,000	\$ 15,489	Nashua	No	\$ 23.55	\$ -	Equipment arrived. Installation completed in December.
Update Audio in Distribution Lunch/Training room	As we are doing more training at this location, additional configuration changes are needed.	n/a		0.1 DSRF funds		\$ 14,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Budget money used for various software projects noted below.
Miscellaneous Software	Miscellaneous Software	n/a		0.1 DSRF funds		\$ 12,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.50	\$ -	Budget money used for various hardware projects noted below.
Miscellaneous Hardware	Miscellaneous Hardware	n/a		0.1 DSRF funds		\$ 22,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to a different unbudgeted project/projects.
AV Updates for Distribution 2022 CO	AV Updates for Distribution 2022 CO	2200432		0.1 DSRF funds		\$ -	Yes	\$ 4,880	\$ 4,880	\$ 4,880	Merrimack	No	\$ 22.87	\$ -	Misc Hardware budget
2022 Laptops for Remote Workers CO	2022 Laptops for Remote Workers CO	2201235		0.1 DSRF funds		\$ -	Yes	\$ 1,475	\$ 1,475	\$ 1,475	Various	No	\$ 23.78	\$ -	Misc Hardware budget
2022 SCADA Network Update CO	2022 SCADA Network Update CO	2201333		0.1 DSRF funds		\$ -	Yes	\$ 87,177	\$ 87,177	\$ 88,223	Nashua	Yes	\$ 23.55	\$ 2078	
Laptop for New Employee (IS)	Laptop for New Employee (IS)	2201855		0.1 DSRF funds		\$ -	Yes	\$ 2,081	\$ 2,081	\$ 2,081	Nashua	No	\$ 23.55	\$ -	Misc Hardware budget
Network Load Balancer	Network Load Balancer for VPN connections	2204822		0.1 DSRF funds		\$ -	Yes	\$ 6,780	\$ 6,780	\$ 6,780	Nashua	No	\$ 23.55	\$ -	Misc software budget
Mobile Device Purchases/Upgrades	Upgrading Users Mobile Devices	2205399		0.1 DSRF funds		\$ -	Yes	\$ 55,000	\$ 47,853	\$ 48,453	Various	No	\$ 23.78	\$ -	
Replacement Laptop for IS Employee	Replacement Laptop for IS Employee	2207262		0.1 DSRF funds		\$ -	Yes	\$ 2,559	\$ 2,559	\$ 2,559	Nashua	No	\$ 23.55	\$ -	Misc Hardware budget
SumTotal LMS Implementation	SumTotal LMS Implementation	2209088		0.1 DSRF funds		\$ -	Yes	\$ -	\$ 9,006	\$ 18,012	Nashua	No	\$ 23.55	\$ -	Misc software budget
New Vehicle for PWSC Employee	New Vehicle for PWSC Employee	2206415		0.1 DSRF funds		\$ -	Yes	\$ 29,012	\$ 29,013	\$ 29,012	Nashua	No	\$ 23.55	\$ -	
New Cubicle - Accounting Department	New Cubicle - Accounting Department	2209030		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 5,220	Nashua	Yes	\$ 23.55	\$ 123	
Special Capital Project	New Laptop For Employee	2209703		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 1,269	Nashua	No	\$ 23.55	\$ -	
Special Capital Project	Rebuild Soft Starter Pump #2 Merrimack River Station	2300293		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 12,124	Merrimack	Yes	\$ 22.87	\$ 277	
Garden Street	Reconnect Nashua City Hall	2000388		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 1,215	Nashua	Yes	\$ 23.55	\$ 29	
Cataqua Avenue	Design Only	2101749		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 10,050	Nashua	No	\$ 23.55	\$ -	
Faxon Avenue Main Replacements	Faxon Avenue Main Replacements	2105579		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 1,233	Nashua	Yes	\$ 23.55	\$ 29	
Faxon Avenue Main Replacements	Faxon Avenue Main Replacements	2105580		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 2,089	Nashua	Yes	\$ 23.55	\$ 49	
AV Updates for Distribution	AV Updates for Distribution	2108535		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 8,854	Merrimack	No	\$ 22.87	\$ -	
Pinehill Avenue	Design Only	2109597		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 1,902	Nashua	No	\$ 23.55	\$ -	
Mount Pleasant Street	Design Only	2109598		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 4,072	Nashua	No	\$ 23.55	\$ -	
French Street	Design Only	2109599		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 3,424	Nashua	No	\$ 23.55	\$ -	
Niquette Street	Design Only	2109758		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 2,939	Nashua	No	\$ 23.55	\$ -	
Dudley Street	Design Only	2109759		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 1,111	Nashua	No	\$ 23.55	\$ -	
Ledgewood Hills Drive	Design Only	2109760		0.1 DSRF funds		\$ -	Yes	\$ -	\$ -	\$ 668	Nashua	No	\$ 23.55	\$ -	
Retainage	Paid out in 2022 on retainage held on 2023 projects.	N/A	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 190,342	\$ 231,442	\$ 479,371	Various	No	\$ 23.78	\$ -	
Retainage	Held on various projects listed above. Will be paid out in 2023.	N/A	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ (400,819)	\$ (370,098)	\$ (122,169)	Various	No	\$ 23.78	\$ -	
Projected short term interest on FALOC	Interest incurred to finance 2022 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 155,000	Yes	\$ 207,000	\$ 207,000	\$ 204,000	N/A	No	N/A	\$ -	Interest rate on FALOC Balance was 1.836% at beginning of 2022 and was 4.865% at year end.
<b>Pennichuck Water Works Projected 2022 Total Capital Expenditure Budget -</b>						<b>\$ 12,146,500</b>		<b>\$ 5,819,017</b>	<b>\$ 6,131,010</b>	<b>\$ 6,788,187</b>	<b>Projected Property Tax Expense associated with</b>			<b>\$ 114,394</b>	

Total for 0.1 DSRF 2022 Projects -	\$ 150,000	\$ 151,851	\$ 793,486	\$ 972,802
Total Projected Bond funded PWW QCPAC Capex for 2022 -	\$ 11,616,500	\$ 5,667,166	\$ 5,337,524	\$ 5,815,385
Total Projected NHDES SRF/DWGTf funded PWW QCPAC Capex for 2022 -	\$ 320,000			
<b>Final Bond Amount -</b>	<b>\$ 5,815,385</b>			

Estimated Bond Terms (Bonds sold on April 26 2023) -	30	Years @	5.005716% resulting in P&I of	\$ 756,162	\$ 368,898	\$ 347,440	\$ 378,546
Estimated SRF Terms -	20	Years @	3.38% resulting in P&I of	\$ 22,272	\$ -	\$ -	\$ -
<b>Total Projected P&amp;I -</b>				<b>\$ 778,434</b>	<b>\$ 368,898</b>	<b>\$ 347,440</b>	<b>\$ 378,546</b>

1. Tax rate is the sum of the Dec 2022 local community rate plus the Statewide Utility tax rate of \$6.60/\$1000  
 5. Available 0.1 DSRF at end of 2022 \$ 940,380 will be used to fund projects based on current projection that 2022 PWW RSF balance exceeds target Combined RSF amount of \$2,850,000  
 less \$ 60,000 for Milford Booster. Milford to pay for this work directly.  
 This note only applied to initial filing. Milford is now building the station and no Milford costs are in the QCPAC

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Replacement Dump Truck	New Dump Truck to Replace #7, 2009 Peterbilt 335, 100K Miles, 6000 hrs Continuous High Maintenance, suspension issues, electrical issues	Bond	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Various	No	\$ 23.78	\$ -
2023 New Services (10)	Single Family, Owner Build, New Homes	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Renewed Services (20)	Replacement of Failed Services	Bond	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2023 Hydrants (10)	Replacement of non functional hydrants	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2023 Gates (20)	Replacement of Failed Gate Valves	Bond	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2023 Radios (200)	New Radios for new customers (200)	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
2023 Radios (2800)	Year 3 of 10 Replacement of all PWW Radios installed in 2007 (2800) by contractor	Bond	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters (200)	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Meter - PFOA (25)	New Meters for PFOA customers (25)	Bond	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84 2014 Ford F350 100K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9 2014 Ford F350 110K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing Veh #22 2013 Chevy Equinox w/150K miles that has been retired due to not passing inspection	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to replace Disconnect Vehicle #346 - 2017 Chevy Express 2500 Van w/67K miles - that will become Hydrant Painting Van	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Merrimack	Yes	\$ 22.87	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Foreman's Truck Truck	New Foreman's Truck to replace #357- 2018 Kenworth T170, 6K Hrs, 70K Miles - Continuous maintenance, electrical issues, compressor needs to be replaced, No onboard air system, underpowered engine.	Bond	DW20-157	26,459	3/2/2021	\$ 275,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ford Meter Test Bench Upgrade	Upgrade of Ford Meter Test Bench to replace failed computer components and associated hardware fittings	Bond	DW20-157	26,459	3/2/2021	\$ 90,000	Yes	Nashua	No	\$ 23.55	\$ -
N360 Meter Reading Upgrade	Upgrade of Hardware & Software needed as part of the N360 meter reading upgrade - 13 R900 Belt Clip Tranceivers, 3 MRX920 Mobile Data Collectors, N360 Software subscription for 38K customers.	Bond	DW20-157	26,459	3/2/2021	\$ 155,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,650
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 129,700	Yes	Nashua	Yes	\$ 23.55	\$ 3,054
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 42,250	Yes	Nashua	Yes	\$ 23.55	\$ 995
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 453,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,668
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 101,750	Yes	Nashua	Yes	\$ 23.55	\$ 2,396
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 184,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,333
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 171,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,027
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ -	No	Milford	No	\$ 23.55	\$ -
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 807,250	Yes	Nashua	Yes	\$ 23.55	\$ 19,011
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 311,500	Yes	Nashua	Yes	\$ 23.55	\$ 7,336
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 597,500	Yes	Nashua	Yes	\$ 23.55	\$ 14,071
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 247,000	Yes	Nashua	Yes	\$ 23.55	\$ 5,817
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 627,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,766
Kendrick Street	Carry over shared paving cost with City of Nashua - Spring 2023	Bond	DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	Yes	\$ 23.55	\$ 283
Kessler Farm Tank - landscape items	10+/- trees died and need replaced in spring 2023 - funds held in retainage until complete	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Nashua	Yes	\$ 23.55	\$ 236
NH Rte. 101A - Amherst, NH	Total Project Cost exclusive of NHDOT contribution	Bond	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Twin Ridge Interconnection	150 of 8" DI with Meter Vault plus Station Demolition and Well Abandonment	SRF	DW 22-033	26,673	8/29/2022	\$ 270,000	Yes	Plaistow	Yes	\$ 24.40	\$ 6,588
Sweet Hill Interconnection	1600 LF of new 4 inch PVC watermain and Treatment Equipment	SRF	DW 22-033	26,673	8/29/2022	\$ 420,000	Yes	Plaistow	Yes	\$ 24.40	\$ 10,248
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	0.1		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	0.1		0.1 DSRR Funds		\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program (Design)	0.1		0.1 DSRR Funds		\$ 8,000	Yes	Nashua	No	\$ 23.55	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 10,000	Yes	Nashua	No	\$ 23.55	\$ -
Jones Ct	Replacing 180 LF of 1.5 inch Galv with 4inch PVC	Bond	DW20-157	26,459	3/2/2021	\$ 66,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,554
Troy St.	Abandon Replacing 290 LF of 1.5" & 2"	Bond	DW20-157	26,459	3/2/2021	\$ 27,000	Yes	Nashua	Yes	\$ 23.55	\$ 636
Broadview Ave	Replacing 435 feet of 1.5 & 8 inch with 4 inch PVC & 8 inch DI	Bond	DW20-157	26,459	3/2/2021	\$ 168,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,956
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 88,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,072

Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/19/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 731,000	Yes	Nashua	Yes	\$ 23.55	\$ 17,215
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 95,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,237
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 194,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,569
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 135,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,179
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 866,000	Yes	Nashua	Yes	\$ 23.55	\$ 20,394
Water Treatment Facility Chemical Feed and Storage	Final Design, Permitting and Bidding	0.1	0.1 DSRR Funds			\$ 600,000	Yes	Nashua	No	\$ 23.55	\$ -
English Woods Alternative Source Interconnection	Interconnection of the English Woods Station to the Donald Street Area with building expansion to remove chloramines	Bond	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Beford	Yes	\$ 23.03	\$ 8,061
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	Bond	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Various	Yes	\$ 23.78	\$ 9,512
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Engineering Vehicle	SUV Relpaces (#34) 2010 with over 196,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 2 of 5.	0.1	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Investment in Developer Services	1x Annual Revenue	Bond	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Radio Comms, various stations	Replace Radio Comms, various stations	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Replace Roof, backwash return pump station	Replace Roof, backwash return pump station	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Misc. Structural Improvements	Misc. Structural Improvements	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	No	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	No	Various	Yes	\$ 23.78	\$ 1,427
Rebuild 1 High lift/Intermediate pump	Rebuild 1 High lift/Intermediate pump	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,178
WTP Structural/HVAC	WTP Structural/HVAC	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,413
Purchase new lab equipment	Purchase new lab equipment	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	vehicle replacement #39, 2012 w/ 120,000 + miles	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	vehicle replacement #40 2014 w/>100K miles, rust	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Nashua	No	\$ 23.55	\$ -
Re-paint FWPS ceiling	Re-paint FWPS ceiling	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	Yes	\$ 23.55	\$ 942
Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	Yes	\$ 23.55	\$ 707
Replace Filter Media 5A thru 6B	Replace Filter Media 5A thru 6B	Bond	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,130
Cameras for WTP	Cameras for WTP	0.1	0.1 DSRR Funds			\$ 106,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,496
ESRI Utility Network	ESRI Utility Network	Bond	DW20-157	26,459	3/2/2021	\$ 253,000	Yes	Various	No	\$ 23.78	\$ -
Distribution Intercom and Camera update addition	camera DVR system that is not under maintenance and should be updated due to age.	Bond	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	Merrimack	Yes	\$ 22.87	\$ 1,715
SEIM	On premise appliance that will sift through server logs looking for anomalies and notify IT of issues.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Nova	few years . Otherwise, this system and its sister will need to be replaced in 2024 because they will be 7 years old.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
IT User Hardware	Replacement Desktop Hardware for Jason, and Laptop fo Steve	Bond	DW20-157	26,459	3/2/2021	\$ 6,000	Yes	Various	No	\$ 23.78	\$ -
Clicksoft Replacement Project	Due to the retirement of ClickSoft by the vendor, a replacement must be purchased and implemented.	Bond	DW20-157	26,459	3/2/2021	\$ 343,000	Yes	Various	No	\$ 23.78	\$ -
iPad replacements	Replacement of iPad hardware as it becomes obsolete for field use.	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Various	No	\$ 23.78	\$ -
DoForms Replacement/Clarios	Replace Existing DoForms with Clarios Data collection for WTP field staff	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Software	Miscellaneous Software	Bond	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	Bond	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2023 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 303,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2023 Total Capital Expenditure Budget -</b>						<b>\$ 13,414,775</b>		<b>Projected Property Tax Expense associated with</b>		<b>\$ 244,264</b>	

**Total for 0.1 DSRR 2023 Projects - \$ 877,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2023 - \$ 11,997,775** minus the cost of the Milford Booster Station of \$ -  
**Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2023 - \$ 540,000** Milford to pay for and finance the Milford booster station

Estimated Bond Terms (Bonds to be sold in April 2024) - 30 Years @ 5.50% resulting in P&I of \$ 825,512  
 NHDES SRF terms - 20 Years @ 1.256% resulting in P&I of \$ 30,701

Utility tax rate of \$6.60/\$1000

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (I)	QCPAC Eligible Property Tax Expense
2024 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2024 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2024 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2024 Radios (4000)	Year 4 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Replacement Hydrant Crane Truck	New Hydrant/Crane Truck to replace #19 - 2011 Ford F-450 High Mileage & Hours, Extensive Vehicle & Crane Maint	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Dump Truck	New Dump Truck to replace #10, 2008 Peterbilt 335, 100K+ miles, 9000hrs, body rot & high Maint & repair costs	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
New Vacuum Excavator Truck	New Vacuum Excavator Truck for LCR pothole excavation & safe excavation around other utilities, minimize excavation costs, pavement repairs and reliance on outside contractors. Very safe excavation in tight places w/multiple utilities.	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Merrimack	No	\$ 22.87	\$ -
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 59,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,389
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 19,600	Yes	Nashua	Yes	\$ 23.55	\$ 462
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,168
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 106,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,508
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 57,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,354
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 71,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,684
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 65,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,543
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 375,250	Yes	Nashua	Yes	\$ 23.55	\$ 8,837
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 120,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,838
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 281,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,618
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 116,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,732
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI - Final Pavement and Restoration	DW20-156	26,459	3/2/2021	\$ 292,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,877
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 144,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,391
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 73,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,731
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 107,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,520
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 410,500	Yes	Nashua	Yes	\$ 23.55	\$ 9,667
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 325,250	Yes	Nashua	Yes	\$ 23.55	\$ 7,660
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,531
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 109,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,567
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 35,325
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	DW20-157	26,459	3/2/2021	\$ 800,000	Yes	Nashua	Yes	\$ 23.55	\$ 18,840
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program	DW20-157	26,459	3/2/2021	\$ 396,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,326
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 8,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 200,175
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,605	Yes	Nashua	No	\$ 23.55	\$ -
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,290	Yes	Nashua	No	\$ 23.55	\$ -
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI - Design only	0.1 DSRR Funds			\$ 4,125	Yes	Nashua	No	\$ 23.55	\$ -
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,280	Yes	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,175	Yes	Nashua	No	\$ 23.55	\$ -
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,740	Yes	Nashua	No	\$ 23.55	\$ -
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,640	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Design only	0.1 DSRR Funds			\$ 4,950	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Installing 115 LF of new 8" DI to complete loop - Design only	0.1 DSRR Funds			\$ 1,365	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 765	Yes	Nashua	No	\$ 23.55	\$ -
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 2,010	Yes	Nashua	No	\$ 23.55	\$ -

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 2,055	Yes	Nashua	No	\$ 23.55	\$ -
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 1,965	Yes	Nashua	No	\$ 23.55	\$ -
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 4,050	Yes	Nashua	No	\$ 23.55	\$ -
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 3,525	Yes	Nashua	No	\$ 23.55	\$ -
Haines St.	Abandoning 75 LF of 1934 1.5" main - Design only		0.1 DSRR Funds		\$ 450	Yes	Nashua	No	\$ 23.55	\$ -
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 5,670	Yes	Nashua	No	\$ 23.55	\$ -
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,985	Yes	Nashua	No	\$ 23.55	\$ -
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,305	Yes	Nashua	No	\$ 23.55	\$ -
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,590	Yes	Nashua	No	\$ 23.55	\$ -
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,910	Yes	Nashua	No	\$ 23.55	\$ -
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI - Design only		0.1 DSRR Funds		\$ 19,590	Yes	Nashua	No	\$ 23.55	\$ -
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI - Design only		0.1 DSRR Funds		\$ 6,840	Yes	Nashua	No	\$ 23.55	\$ -
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 1,710	Yes	Nashua	No	\$ 23.55	\$ -
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,570	Yes	Nashua	No	\$ 23.55	\$ -
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,075	Yes	Nashua	No	\$ 23.55	\$ -
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI - Design only		0.1 DSRR Funds		\$ 9,885	Yes	Nashua	No	\$ 23.55	\$ -
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	DW20-157	26,459	3/2/2021	\$ 200,000	Yes	Various	Yes	\$ 23.78	\$ 4,756
Investment in Developer Services	1x Annual Revenue	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering Pickup	Replace #105 2013 Chevy with >160k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace #31 2012 Chevy with >110k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 3 of 5.		0.1 DSRR Funds		\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Rotork Pakscan valve control system	Replace Rotork Pakscan valve control system	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Bowers Dam Spillway reconstruction/increase capacity	Bowers Dam Spillway reconstruction/increase capacity	DW20-157	26,459	3/2/2021	\$ 2,300,000	Yes	Merrimack	Yes	\$ 22.87	\$ 52,601
This replacement will flatten out our replacements over the next few years .	Runrate Business needs	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Typical IT Annual budget roughly runs about \$400K	typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2024 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 157,600	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -</b>					<b>\$ 21,604,535</b>					<b>Projected Property Tax Expense associated with \$ 452,061</b>

**Total for 0.1 DSRR 2024 Projects - \$ 387,610**  
**Total Projected Bond funded PWW QCPAC Capex for 2024 - \$ 12,016,925**  
**Special Project Bond for Chemical Feed Building - \$ 8,500,000**  
**FEMA Grant - \$ 700,000**

Estimated Bond Terms (Bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 826,829  
 Estimated Bond Terms (Special Project bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 584,846  
**Total Projected P&I - \$ 1,411,675**

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

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2025 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2025 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2025 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2025 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2025 Radios (2800)	Year 5 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickup to Replace Veh #22 that has been retired due to not passing inspection.	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickupe to replace Disconnect Vehicle that will become Hydrant Painting Van.	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 54,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,283
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 33,600	Yes	Nashua	Yes	\$ 23.55	\$ 791
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,260
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 198,500	Yes	Nashua	Yes	\$ 23.55	\$ 4,675
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 150,500	Yes	Nashua	Yes	\$ 23.55	\$ 3,544
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,250	Yes	Nashua	Yes	\$ 23.55	\$ 1,254
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 207,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,875
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021 - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Nashua	Yes	\$ 23.55	\$ 8,243
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 30,500	Yes	Nashua	Yes	\$ 23.55	\$ 718
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Nashua	Yes	\$ 23.55	\$ 589
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI	DW20-158	26,460	3/3/2021	\$ 94,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,214
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC	DW20-159	26,461	3/4/2021	\$ 49,000	No	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 47,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,107
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 35,500	Yes	Nashua	Yes	\$ 23.55	\$ 836
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC	DW20-156	26,459	3/2/2021	\$ 57,500	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 112,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,638
Long Ave	Installing 115 LF of new 8" DI to complete loop	DW20-157	26,459	3/2/2021	\$ 29,000	Yes	Nashua	Yes	\$ 23.55	\$ 683
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 15,500	Yes	Nashua	Yes	\$ 23.55	\$ 365
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 63,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,495
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 60,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,425
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 40,500	Yes	Nashua	Yes	\$ 23.55	\$ 954
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 41,000	Yes	Nashua	Yes	\$ 23.55	\$ 966
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 39,500	Yes	Nashua	Yes	\$ 23.55	\$ 930
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 78,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,837
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 68,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,613
Haines St.	Abandoning 75 LF of 1934 1.5" main	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	Nashua	Yes	\$ 23.55	\$ 118
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 122,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,873
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 64,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,519
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 92,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,167
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 98,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,308
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 62,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,460
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 166,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,909
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 37,500	Yes	Nashua	Yes	\$ 23.55	\$ 883
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 77,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,825
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 66,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,566
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 222,500	Yes	Nashua	Yes	\$ 23.55	\$ 5,240
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 3,900,000	Yes	Nashua	Yes	\$ 23.55	\$ 91,845
2026 Watermain Replacement (Design Only)	Various Streets, Diameters, and Materials	0.1 DSRR Funds			\$ 180,000	Yes	Nashua	No	\$ 23.55	\$ -
City Sewer Related Projects	Water Main Replacements Associated with Sewer Reconstruction	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	0.1 DSRR Funds			\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Investment in Developer Services	1x Annual Revenue	0.1 DSRR Funds			\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering SUV	Replace Highest Mileage SUV	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace Highest Mileage/Poorer Condition Pickup	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Rebuild High lift pump, WTP	Rebuild High lift pump, WTP	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,355
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
WTP Carbon Filter Replacement	Replaced Carbon in WTP Filters 1a through 4b	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Stellar	This replacement will flatten out our replacements over the next few years .	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Monitary placeholder	Typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2025 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 124,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2025 Total Capital Expenditure Budget -</b>					<b>\$ 11,799,975</b>					<b>Projected Property Tax Expense associated with \$ 209,136</b>

**Total for 0.1 DSRR 2024 Projects - \$ 540,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2025 - \$ 7,359,975**  
**Special Project Bond for Chemical Feed Building - \$ 3,900,000**

Estimated Bond Terms (Bonds to be sold in April 2026) -	30	Years @	5.50%	resulting in P&I of	\$ 506,406
Estimated Bond Terms (Special Project bonds to be sold in April 2026) -	30	Years @	5.5%	resulting in P&I of	\$ 268,341
Total Projected P&I -					<b>\$ 774,747</b>

1. Tax rate is the sum of the Dec 2022 local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

**Pennichuck Water Works, Inc.**  
**DW 23-015**  
2023 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 3

Date Request Received: 6/30/23  
Request No. DOE 3-1

Date of Response: July 5, 2023  
Witness: Donald L. Ware

---

**REQUEST:**

**Re: DOE Final Audit Report (6/22/23) and Updated Exhibit DLW-1 (6/19/23), Page 1 – Computation of QCPAC Surcharge and Page 2 – 2022 Actual QCPAC Expenditures:**

Please amend Exhibit DLW-1, Pages 1 and 2 as necessary to reflect the adjustments agreed to by the Company regarding Audit Issues 1 through 4 as contained in the DOE's Final Audit Report issued on 6/22/23.

**RESPONSE:**

Attached please find a revised Exhibit DLW-1, with pages 1 and 2 revised to reflect the changes to the schedule that resulted from the Final Audit Report in this docket.

Pennichuck Water Works, Inc.  
 DW 23-015  
 Computation of QCPAC Surcharge  
 2/13/2023  
 Revised per DOE DR Sets 1, 2, and 3  
 5/18/2023 and 6/16/2023 and 6/29/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 1

	Requested 032 Revenues	DW 22- 032	QCPAC For 2022 Capital Additions pro forma	QCPAC Surcharge for 2022 Capital Addition	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions	QCPAC For 2024 Capital Additions pro forma	QCPAC Surcharge for 2024 Capital Additions	QCPAC For 2025 Capital Additions pro forma	QCPAC Surcharge for 2025 Capital Additions					
City Bond Fixed Revenue Requirement (CBFRR)	\$	7,729,032	\$ -	\$ 7,729,032		\$ 7,729,032		\$ 7,729,032		\$ 7,729,032					
DW 22-032 Operating Expense Revenue Requirement, with MOEF, per Settlement Agreement	\$	25,249,661	(1)	\$ 114,271	(4)	\$ 25,363,931	\$ 244,264	(4)	\$ 25,608,196	\$ 452,061	(4)	\$ 26,060,257	\$ 209,136	(4)	\$ 26,269,393
DW 22-032 Annual Principal and Interest Payments per Settlement Agreement	\$	7,436,923	(2)	\$ 377,666	(7)	\$ 7,814,589	\$ 856,213	(8)	\$ 8,670,802	\$ 1,411,675	(8)	\$ 10,082,477	\$ 774,747	-8	\$ 10,857,224
Principal and Interest Coverage Requirement		1.10	(3)			1.10			1.10			1.10			1.10
DW 22-032 Principal and Interest Revenue Requirement	\$	8,180,615				\$ 8,596,048			\$ 9,537,883			\$ 11,090,725			\$ 11,942,947
DW 22-032 RSF Debit	\$	(422,871)	(11)			\$ (422,871)			\$ (422,871)			\$ (422,871)			\$ (422,871)
DW 22-032 Revenue Requirement per Settlement Agreement inclusive of RSF Debit	\$	40,736,437	(10)			\$ 41,266,141			\$ 42,452,239			\$ 44,457,143			\$ 45,518,501
DW 22-032 Revenue Requirement less Other Revenues	\$	40,143,045				\$ 40,672,749			\$ 41,858,847			\$ 43,863,751			\$ 44,925,108
DW 22-032 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$	39,057,359	(6)			\$ 39,587,063			\$ 40,773,161			\$ 42,778,065			\$ 43,839,422
Percent QCPAC Surcharge (5)						1.36%			3.04%			5.13%			2.72%
Cumulative QCPAC Surcharge (9)						1.36%			4.39%			9.53%			12.24%
Cumulative QCPAC monthly increase in average single family residential bill.						\$ 0.83			\$ 2.69			\$ 5.84			\$ 7.50
Average monthly single family residential bill with QCPAC.	\$	61.28				\$ 62.11			\$ 63.97			\$ 67.11			\$ 68.78

Notes:

- (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses agreed to in the Settlement agreement for DW22-032
- (2) Annual Principal and interest payments for PWW debt associated with all plant in service as agreed to in the settlement agreement for DW22-032.
- (3) Principal and interest coverage of 1.10 is as approved in DW 16-806.
- (4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year
- (5) QCPAC percent revenue surcharges based on increase in revenues which are reflected in the Settlement agreement in DW22-032
- (6) Reduction in revenues associated with fixed contracts as follows:
- (7) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of 3.38%
- (8) QCPAC Principal and Interest expenses based on actual April 26, 2023 Bond issuance based on a 30 year bond with interest rate of 5.005716% (Total All In Interest Cost of all Series Bonds)
- (9) QCPAC Principal and Interest expenses for 2023, 2024 and 2025 QCP's are based on 5.50% for 2023 through 2025 Capital Expenditures unless funding is via an SRF/DWGTIF financing.
- (10) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues agreed to in the settlement in DW 22-032 that are impacted by the QCPAC.
- (11) Operating expense revenues agreed to in the Settlement Agreement per DW 22-032 less total Other Revenues of \$ 593,392
- (12) RSF debit agreed to in Settlement Agreement in DW 22-032

Impact on Single Family Residential Home:

	DW 22-032
Monthly meter charge agreed to in Settlement in DW 22-032 -	\$ 26.90
Average Single Family Consumption as filed in DW 22-032 (CCF) -	7.76
Volumetric Charge agreed to in Settlement in DW 22-032 -	\$ 4.43
Ave. Single Family monthly bill with rates projected upon completion of DW 22-032 -	\$ 61.28

Hudson Annual Fixed Chg	\$ 457,083	Milford Annual Fixed Chg	\$ 81,000	A-B Annual Fixed Chg	\$ 356,622	PEU Annual Fixed Chg	\$ 190,981
-------------------------	------------	--------------------------	-----------	----------------------	------------	----------------------	------------

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Year End Project Cost as of 09/30/2022	Estimated Project Cost as of 11/30/2022	Final Project cost as of 12/31/2022	Community	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Office Space for Const & Maint Supervisor	Permanent Office space for Construction & Maint Supervisor	n/a	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	\$ -	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Wash Sinks	Deep stainless wash sinks to replace existing sinks in male & female locker rooms	n/a	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	\$ 10,000	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
Locker Room Benches	Permanent Benches in Men's & Women's Locker Rooms	n/a	DW20-157	26,459	3/2/2021	\$ 7,500	Yes	\$ 7,500	\$ -	\$ -	Merrimack	Yes	\$ 22.87	\$ -	Deferred to 2023
2022 New Services (15)	Single Family, Owner Build, New Homes	Routine	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 75,000	\$ 102,500	\$ 102,500	Various	Yes	\$ 23.78	\$ 2,437	10 New Services installed in 2022
2022 Renewed Services (20)	Replacement of Failed Services	Routine	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	\$ 110,000	\$ 142,271	\$ 155,198	Various	Yes	\$ 23.78	\$ 3,691	32 Renewed Services completed in 2022.
2022 Hydrants (10)	Replacement of non functional hydrants	Routine	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	\$ 15,000	\$ 14,796	\$ 14,793	Various	Yes	\$ 23.78	\$ 352	2 Hydrants installed in 2022.
2022 Gates (20)	Replacement of Failed Gate Valves	Routine	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	\$ 72,000	\$ 82,863	\$ 76,944	Various	Yes	\$ 23.78	\$ 1,830	13 Gate Valves Replaced in 2022.
2022 Radios (250)	New Radios for new customers (250)	Routine	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	\$ 177,000	\$ 16,636	\$ 16,195	Various	Yes	\$ 23.78	\$ 385	163 Radios installed in 2022.
2022 Radios (2800)	Year 2 of 10 year Replacement of all PWW Radios installed in 2007 (2800)	2200381	DW20-157	26,459	3/2/2021	\$ 280,000	Yes	\$ 240,000	\$ 253,475	\$ 236,311	Various	Yes	\$ 23.78	\$ 5,619	2,142 Radios Replaced thru 11/30/2022. 300 additional radio replacements expected by year end.
2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)	Routine	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 60,000	\$ 82,786	\$ 82,204	Various	Yes	\$ 23.78	\$ 1,955	392 Meters Replaced in 2022.
Replacement Dump Truck	Replacement for Truck # 7, 2011 Peterbilt T-335, 100K+ miles, 2500 hrs, high maint & Repair	n/a	DW20-157	26,459	3/2/2021	\$ 125,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Deferred due to availability.
Replacement Utility Truck	New Utility Truck to replace #84, 2014 F-350, 120k miles, High maint & Repair costs	2204657		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,995	\$ 53,995	\$ 76,895	Merrimack	No	\$ 22.87	\$ -	
Replacement Utility Truck	New Utility Truck to replace #9, 2014 F-350, 120k miles, High Maint & Repair costs	2204656		0.1 DSRF funds	26,459	\$ 70,000	Yes	\$ 53,600	\$ 53,600	\$ 76,500	Merrimack	No	\$ 22.87	\$ -	
Replacement Supervisor Pickup	New Full sized Pickup to replace #21, 2013 Chevy Equinox, 150k miles, Hi Maint & Repair costs	2204655	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	\$ 54,340	\$ 54,340	\$ 54,340	Merrimack	No	\$ 22.87	\$ -	
Prolectus Meter Upgrade	Prolectus Meter Upgrade	n/a	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	Deferred due to availability.
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	n/a	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ -	\$ -	\$ -	Merrimack	No	\$ 22.87	\$ -	Budget money moved to a different unbudgeted project/projects.
New 22 Ton Tilt Trailer	22 Ton Tilt Trailer to transport Excavator for Distribution Crew Work	2205058	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ 39,421	\$ 39,421	\$ 39,421	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2205777		0.1 DSRF funds	26,459	\$ 12,000	Yes	\$ 18,450	\$ 4,572	\$ 4,572	Merrimack	No	\$ 22.87	\$ -	
Air Compressor for Vac/Valve Truck	Inline Air Compressor for Valve/Vac Truck for Jack Hammer & other equipment use	2205777	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 13,878	\$ 13,878	\$ 13,878	Merrimack	No	\$ 22.87	\$ -	Residual of Air Compressor cost (row 27) not covered by 0.1 DSRF funds.
New 3" Neptune Construction Meters	Purchase 2 new 3" Neptune Construction Meters to meet Demand	2203895		0.1 DSRF funds	26,459	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 23
New Cut Saws for Distribution	2 New Stihl Cust saws for Distribution	2203898		0.1 DSRF funds	26,459	\$ -	Yes	\$ 3,528	\$ 3,528	\$ 3,528	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 24
New Mechanics Field Service Vehicle	New Mechanics Field Service Vehicle	2204653	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 58,900	\$ 58,900	\$ 78,800	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Replacement Utility Trailer	Replacement Utility Trailer for Foreman	2204991	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,800	\$ 6,800	\$ 6,800	Merrimack	No	\$ 22.87	\$ -	
New Neptune Construction Meters	2 New Neptune Construction Meters for Contractor requests	2205668	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 2,890	\$ 2,890	\$ 2,890	Merrimack	No	\$ 22.87	\$ -	Misc Construction Equipment Budget - Row 25
Irrigation Sys. Inst. at Dist. Facility	Installation of Irrigation System at Distribution Facility	2205669	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 3,120	\$ 3,120	\$ 3,120	Merrimack	No	\$ 22.87	\$ -	
Loam & Hydroseed at Dist. Facility	Installation of Loam and Hydroseeding at Distribution Facility	2205672	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 8,333	\$ 8,333	\$ 8,333	Merrimack	No	\$ 22.87	\$ -	
New Volvo ECR88D Excavator	New Volvo ECR88D Excavator	2208205	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 123,261	\$ 123,261	\$ 125,303	Merrimack	No	\$ 22.87	\$ -	
Purchase New 4-Ton hotbox w/30 Gal Tack Tank	Purchase New 4-Ton hotbox w/30 Gal Tack Tank	2208362	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 49,900	\$ 49,900	\$ 49,900	Merrimack	No	\$ 22.87	\$ -	
DynaPac Pavement Roller	DynaPac Pavement Roller	2208363	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 21,500	\$ 21,500	\$ 21,500	Merrimack	No	\$ 22.87	\$ -	
Trailer for Pavement Roller	Trailer for Pavement Roller	2208364	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,980	\$ 6,980	\$ 6,980	Merrimack	No	\$ 22.87	\$ -	
Purchase 4 New Pavement Saws	Purchase 4 New Pavement Saws	2209555	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 6,000	\$ 6,000	\$ 6,000	Merrimack	No	\$ 22.87	\$ -	
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2200501	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 272,000	\$ 200,103	\$ 200,776	Nashua	Yes	\$ 23.55	\$ 4,728	
Coburn Woods (all side streets) Phase 1	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	2200500	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ 189,000	\$ 179,254	\$ 183,474	Nashua	Yes	\$ 23.55	\$ 4,321	
Miami Street	Complete main replacement and restoration in 2021 - Replace 429 LF of 2" CL pipe with 8" DIPCL	2201253	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	\$ 187,550	\$ 186,176	\$ 185,648	Nashua	Yes	\$ 23.55	\$ 4,372	
Kendrick Street	Sewer work forces replacement of outdated 6" CI pipe with 466 LF of new 6" DIPCL	2201252	DW20-157	26,459	3/2/2021	\$ 190,000	Yes	\$ 130,000	\$ 142,868	\$ 142,894	Nashua	Yes	\$ 23.55	\$ 3,365	Paving on this was deferred until 2023. Paving cost will be reduced and shared with the City.
Faxon Avenue	Nearby sewer work forces replacement of outdated 2" CI pipe with 205 LF of new 4" C900 PVC	2201254	DW20-157	26,459	3/2/2021	\$ 86,000	Yes	\$ 86,000	\$ 86,000	\$ 83,841	Nashua	Yes	\$ 23.55	\$ 1,974	Bid was lower than the engineer's estimate.
Faxon Street	Sewer work forces replacement of outdated 6" CI pipe with 528 LF of new 6" DIPCL	2201255	DW20-157	26,459	3/2/2021	\$ 220,000	Yes	\$ 195,000	\$ 195,000	\$ 191,910	Nashua	Yes	\$ 23.55	\$ 4,519	Paving restoration requirements were more than anticipated.
Chataqua Ave	Broad St. to End Replace/Add 780 feet of 1.25"/4"6" installed in 1915-1963 with 4"/6"	2200426	DW20-157	26,459	3/2/2021	\$ 209,000	Yes	\$ 267,000	\$ 267,068	\$ 267,095	Nashua	Yes	\$ 23.55	\$ 6,290	
Niquette Dr.	E. Dunstable to service 12 Niquette Replace/Add 525 feet of 2" installed in 1960 with 4"	2200427	DW20-157	26,459	3/2/2021	\$ 131,000	Yes	\$ 127,200	\$ 128,323	\$ 128,363	Nashua	Yes	\$ 23.55	\$ 3,023	
Pine Hill Ave	Wright Rd. to End Replace/Add 300 feet of 1.25" installed in 1953 with 4"	2200422	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	\$ 92,400	\$ 92,367	\$ 92,394	Nashua	Yes	\$ 23.55	\$ 2,176	Old pipe records were not accurate requiring more pipe to be replaced.
Mt. Pleasant St.	Merrimack St. to Manchester St. Replace/Add 400 feet of 1.5" installed in 1955 with 8"	2200423	DW20-157	26,459	3/2/2021	\$ 117,000	Yes	\$ 204,200	\$ 195,922	\$ 195,948	Nashua	Yes	\$ 23.55	\$ 4,615	More paving and night work than anticipated.
French St.	Merrimack St. to 10 French Replace/Add 340 feet of 2"/6" installed in 1887 & 1926 with 4"/6"	2200424	DW20-157	26,459	3/2/2021	\$ 87,000	Yes	\$ 178,040	\$ 173,709	\$ 173,736	Nashua	Yes	\$ 23.55	\$ 4,091	More paving and night work than anticipated.
Dudley St.	June St. to E. Hobart St. Replace/Add 830 feet of 1.25"/8" CI/AC installed in 1957-1971 with 8"	2200428	DW20-157	26,459	3/2/2021	\$ 256,000	Yes	\$ 300,000	\$ 269,714	\$ 269,900	Nashua	Yes	\$ 23.55	\$ 6,356	
Ledgewood Hills Dr. /Heather	To Intersection Replace/Add 10 feet of Unconnected installed in with 8"	2200429	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	\$ 5,500	\$ 11,059	\$ 11,059	Nashua	Yes	\$ 23.55	\$ 260	
Rita St.	Allids St. to 6 Rita Replace/Add 210 feet of 1.5" CI/CL installed in 1956 with 4"	2200430		0.1 DSRF funds	26,459	\$ 53,000	No	\$ 2,899	\$ 2,880	\$ 2,880	Nashua	No	\$ 23.55	\$ -	Design only
Salem St.	Whitney St. to Summer St. Replace/Add 855 feet of 4"/6" installed in 1888-1927 with 6"	2200425		0.1 DSRF funds	26,459	\$ 253,000	No	\$ 300	\$ 728	\$ 848	Nashua	No	\$ 23.55	\$ -	Design only
Walnut St.	W. Pearl St. to W. Hollis St. Replace/Add 830 feet of 6"/8" installed in 1888-1931 with 12"	2200431		0.1 DSRF funds	26,459	\$ 312,000	No	\$ 300	\$ 778	\$ 1,346	Nashua	No	\$ 23.55	\$ -	Design only
Garden Street	Emergency replacement of 150 11 of 6" CIP with 8" DIP	2208030	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ 50,000	\$ 49,456	\$ 49,536	Nashua	Yes	\$ 23.55	\$ 1,167	City Sewer Project - Budget from row 54
Route 101A Water Main Relocation	Route 101A Water Main Relocation	n/a	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	n/a	DW20-157	26,459	3/2/2021	\$ 500,000	Yes	\$ -	\$ -	\$ -	Various	Yes	\$ 23.78	\$ -	Budget money moved to a different unbudgeted project/projects.
Milford Booster Station	Replace/Relocate Milford Booster Station (Design & Permitting)	2201853		0.1 DSRF funds	26,459	\$ 60,000	No	\$ 6,827	\$ 6,827	\$ 6,827	Milford	No	\$ 26.27	\$ -	Station to be designed, owned and operated by the Milford Water Department.
City Sewer Projects (2022)	Replace CI, AC, and other older main disrupted by sewer construction	n/a	DW20-157	26,459	3/2/2021	\$ 300,000	Yes	\$ -	\$ -	\$ -	Nashua	Yes	\$ 23.55	\$ -	No city sewer projects projected for remainder of year.
Coburn Tank Area HP Zone Watermain	Create new HP area with 1600 LF of Water Main and Check Valves	n/a		0.1 DSRF funds	26,459	\$ 800,000	Yes	\$ 5,000	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Coburn Tank Area HP Booster Station	New Domestic flow and pressure booster station	n/a		0.1 DSRF funds	26,459	\$ 550,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Design only, project deferred
Investment in Developer Services	1x Annual Revenue	Routine	DW20-157	26,459	3/2/2021	\$ 140,000	Yes	\$ 75,000	\$ 69,449	\$ 77,276	Various	Yes	\$ 23.78	\$ 1,838	96 Developer Services through 11/30/2022, 10 more projected by year end.
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	2204654	DW20-157	26,459	3/2/2021	\$ 32,000	Yes	\$ 20,000	\$ 20,000	\$ 9,156	Merrimack	No	\$ 22.87	\$ -	
Sweet Hill Interconnection	Connecting Pipeline and Meter Pit	2208920	SRF			\$ 220,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Twin Ridge Interconnection	Connecting Pipeline and Meter Pit	2208919	SRF			\$ 100,000	Yes	\$ 10,000	\$ -	\$ -	Plaistow	Yes	\$ 24.40	\$ -	Design only, project deferred
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2201770.
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles.	n/a	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Budget money moved to 2206415.
Snow Station Building Addition	Addition of a third High Lift Pump (Design & Permitting)	n/a		0.1 DSRF	26,459	\$ 100,000	Yes	\$ -	\$ -	\$ -	Nashua	No	\$ 23.55	\$ -	Project deferred
Engineering Studies: WTP	Chemical Feed and Storage, PFAS treatment	2205826		0.1 DSRF	26,459	\$ 50,000	Yes	\$ 90,000	\$ 125,000	\$ 113,182	Nashua	No	\$ 23.55	\$ -	Design only
Atherton Commons															



Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/16/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense
Replacement Dump Truck	New Dump Truck to Replace #7, 2009 Peterbilt 335, 100K Miles, 6000 hrs Continuous High Maintenance, suspension issues, electrical issues	Bond	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Various	No	\$ 23.78	\$ -
2023 New Services (10)	Single Family, Owner Build, New Homes	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Renewed Services (20)	Replacement of Failed Services	Bond	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2023 Hydrants (10)	Replacement of non functional hydrants	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2023 Gates (20)	Replacement of Failed Gate Valves	Bond	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2023 Radios (200)	New Radios for new customers (200)	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
2023 Radios (2800)	Year 3 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	Bond	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters (200)	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2023 Meter - PFOA (25)	New Meters for PFOA customers (25)	Bond	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84 2014 Ford F350 100K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9 2014 Ford F350 110K+ miles, body rot	Bond	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing Veh #22 2013 Chevy Equinox w/150K miles that has been retired due to not passing inspection	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickeup to replace Disconnect Vehicle #346 - 2017 Chevy Express 2500 Van w/67K miles - that will become Hydrant Painting Van	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Merrimack	Yes	\$ 22.87	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Foreman's Truck Truck	New Foreman's Truck to replace #357- 2018 Kenworth T170, 6K Hrs, 70K Miles - Continuous maintenance, electrical issues, compressor needs to be replaced, No onboard air system, underpowered engine.	Bond	DW20-157	26,459	3/2/2021	\$ 275,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ford Meter Test Bench Upgrade	Upgrade of Ford Meter Test Bench to replace failed computer components and associated hardware fittings	Bond	DW20-157	26,459	3/2/2021	\$ 90,000	Yes	Nashua	No	\$ 23.55	\$ -
N360 Meter Reading Upgrade	Upgrade of Hardware & Software needed as part of the N360 meter reading upgrade - 13 R900 Belt Clip Tranceivers, 3 MRX920 Mobile Data Collectors, N360 Software subscription for 38K customers.	Bond	DW20-157	26,459	3/2/2021	\$ 155,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,650
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 40,350	Yes	Nashua	Yes	\$ 23.55	\$ 950
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 129,700	Yes	Nashua	Yes	\$ 23.55	\$ 3,054
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 42,250	Yes	Nashua	Yes	\$ 23.55	\$ 995
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 453,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,668
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI	Bond	DW20-157	26,459	3/2/2021	\$ 101,750	Yes	Nashua	Yes	\$ 23.55	\$ 2,396
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC	Bond	DW20-157	26,459	3/2/2021	\$ 184,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,333
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 171,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,027
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ -	No	Milford	No	\$ 23.55	\$ -
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 807,250	Yes	Nashua	Yes	\$ 23.55	\$ 19,011
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI	Bond	DW20-157	26,459	3/2/2021	\$ 311,500	Yes	Nashua	Yes	\$ 23.55	\$ 7,336
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 597,500	Yes	Nashua	Yes	\$ 23.55	\$ 14,071
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 247,000	Yes	Nashua	Yes	\$ 23.55	\$ 5,817
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 627,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,766
Kendrick Street	Carry over shared paving cost with City of Nashua - Spring 2023	Bond	DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	Yes	\$ 23.55	\$ 283
Kessler Farm Tank - landscape items	10+/- trees died and need replaced in spring 2023 - funds held in retainage until complete	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Nashua	Yes	\$ 23.55	\$ 236
NH Rte. 101A - Amherst, NH	Total Project Cost exclusive of NHDOT contribution	Bond	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Twin Ridge Interconnection	150 of 8" DI with Meter Vault plus Station Demolition and Well Abandonment	SRF	DW 22-033	26,673	8/29/2022	\$ 270,000	Yes	Plaistow	Yes	\$ 24.40	\$ 6,588
Sweet Hill Interconnection	1600 LF of new 4 inch PVC watermain and Treatment Equipment	SRF	DW 22-033	26,673	8/29/2022	\$ 420,000	Yes	Plaistow	Yes	\$ 24.40	\$ 10,248
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	0.1		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	0.1		0.1 DSRR Funds		\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program (Design)	0.1		0.1 DSRR Funds		\$ 8,000	Yes	Nashua	No	\$ 23.55	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 4,000	Yes	Nashua	No	\$ 23.55	\$ -
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 2,000	Yes	Nashua	No	\$ 23.55	\$ -
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 3,000	Yes	Nashua	No	\$ 23.55	\$ -
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 6,000	Yes	Nashua	No	\$ 23.55	\$ -
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 5,000	Yes	Nashua	No	\$ 23.55	\$ -
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021- Design only. Construction in 2024	0.1		0.1 DSRR Funds		\$ 10,000	Yes	Nashua	No	\$ 23.55	\$ -
Jones Ct	Replacing 180 LF of 1.5 inch Galv with 4inch PVC	Bond	DW20-157	26,459	3/2/2021	\$ 66,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,554
Troy St.	Abandon Replacing 290 LF of 1.5" & 2"	Bond	DW20-157	26,459	3/2/2021	\$ 27,000	Yes	Nashua	Yes	\$ 23.55	\$ 636
Broadview Ave	Replacing 435 feet of 1.5 & 8 inch with4 inch PVC & 8 inch DI	Bond	DW20-157	26,459	3/2/2021	\$ 168,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,956
Ritter St.	Replacing 210 LF of 1893 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 88,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,072
Dexter St.	Replacing 1885 LF of 1941-1949 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 731,000	Yes	Nashua	Yes	\$ 23.55	\$ 17,215
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 95,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,237
Hobbs Ave	Replacing 490 LF of 1906 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 194,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,569

Pennichuck Water Works, Inc.  
 DW 23-015  
 2023 Projected QCPAC Expenditures  
 2/10/2023  
 Revised per DOE DR Sets 1 and 2  
 5/18/2023 and 6/16/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 3

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (l)	QCPAC Eligible Property Tax Expense
Elm St.	Replacing 330 LF of 1892 6" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 135,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,179
Newbury St.	Replacing 2250 LF of 1888-1940 6" & 8" CI main with 8" DI	Bond	DW20-157	26,459	3/2/2021	\$ 866,000	Yes	Nashua	Yes	\$ 23.55	\$ 20,394
Water Treatment Facility Chemical Feed and Storage	Final Design, Permitting and Bidding	0.1	0.1 DSRR Funds			\$ 600,000	Yes	Nashua	No	\$ 23.55	\$ -
English Woods Alternative Source Interconnection	Interconnection of the English Woods Station to the Donald Street Area with building expansion to remove chloramines	Bond	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Beford	Yes	\$ 23.03	\$ 8,061
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	Bond	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Various	Yes	\$ 23.78	\$ 9,512
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Engineering Vehicle	SUV Replaces 2010 SUV #33 with over 118,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Engineering Vehicle	SUV Replaces (#34) 2010 with over 196,000 miles. Deferred from 2022	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 2 of 5.	0.1	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Investment in Developer Services	1x Annual Revenue	Bond	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Radio Comms, various stations	Replace Radio Comms, various stations	Bond	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Replace Roof, backwash return pump station	Replace Roof, backwash return pump station	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Misc. Structural Improvements	Misc. Structural Improvements	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	No	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	No	Various	Yes	\$ 23.78	\$ 1,427
Rebuild 1 High lift/Intermediate pump	Rebuild 1 High lift/Intermediate pump	Bond	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,178
WTP Structural/HVAC	WTP Structural/HVAC	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,413
Purchase new lab equipment	Purchase new lab equipment	Bond	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	Bond	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	vehicle replacement #39, 2012 w/ 120,000 + miles	Bond	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	vehicle replacement #40 2014 w/>100K miles, rust	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Nashua	No	\$ 23.55	\$ -
Re-paint FWPS ceiling	Re-paint FWPS ceiling	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	Yes	\$ 23.55	\$ 942
Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Replace 6 filter turbidimeters (manufacturer no longer supports current units)	Bond	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	Yes	\$ 23.55	\$ 707
Replace Filter Media 5A thru 6B	Replace Filter Media 5A thru 6B	Bond	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Nashua	Yes	\$ 23.55	\$ 14,130
Cameras for WTP	Cameras for WTP	0.1	0.1 DSRR Funds			\$ 106,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,496
ESRI Utility Network	ESRI Utility Network	Bond	DW20-157	26,459	3/2/2021	\$ 253,000	Yes	Various	No	\$ 23.78	\$ -
Distribution Intercom and Camera update addition	camera DVR system that is not under maintenance and should be updated due to age.	Bond	DW20-157	26,459	3/2/2021	\$ 75,000	Yes	Merrimack	Yes	\$ 22.87	\$ 1,715
SEIM	On premise appliance that will sift through server logs looking for anomalies and notify IT of issues.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Nova	few years . Otherwise, this system and its sister will need to be replaced in 2024 because they will be 7 years old.	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
IT User Hardware	Replacement Desktop Hardware for Jason, and Laptop fo Steve	Bond	DW20-157	26,459	3/2/2021	\$ 6,000	Yes	Various	No	\$ 23.78	\$ -
Clicksoft Replacement Project	Due to the retirement of ClickSoft by the vendor, a replacement must be purchased and implemented.	Bond	DW20-157	26,459	3/2/2021	\$ 343,000	Yes	Various	No	\$ 23.78	\$ -
iPad replacements	Replacement of iPad hardware as it becomes obsolete for field use.	Bond	DW20-157	26,459	3/2/2021	\$ 55,000	Yes	Various	No	\$ 23.78	\$ -
DoForms Replacement/Clarios	Replace Existing DoForms with Clarios Data collection for WTP field staff	Bond	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Software	Miscellaneous Software	Bond	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	Bond	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2023 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 303,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2023 Total Capital Expenditure Budget -</b>						<b>\$ 13,414,775</b>		<b>Projected Property Tax Expense associated with</b>		<b>\$ 244,264</b>	

**Total for 0.1 DSRR 2023 Projects - \$ 877,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2023 - \$ 11,997,775** minus the cost of the Milford Booster Station of \$ -  
**Total Projected NHDES SRF/DWGTf funded PWW QCPAC Capex for 2023 - \$ 540,000** Milford to pay for and finance the Milford booster station

Estimated Bond Terms (Bonds to be sold in April 2024) - 30 Years @ 5.50% resulting in P&I of \$ 825,512  
 NHDES SRF terms - 20 Years @ 1.256% resulting in P&I of \$ 30,701

Utility tax rate of \$6.60/\$1000

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (I)	QCPAC Eligible Property Tax Expense
2024 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2024 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2024 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2024 Radios (4000)	Year 4 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Replacement Hydrant Crane Truck	New Hydrant/Crane Truck to replace #19 - 2011 Ford F-450 High Mileage & Hours, Extensive Vehicle & Crane Maint	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Dump Truck	New Dump Truck to replace #10, 2008 Peterbilt 335, 100K+ miles, 9000hrs, body rot & high Maint & repair costs	DW20-157	26,459	3/2/2021	\$ 225,000	Yes	Merrimack	No	\$ 22.87	\$ -
New Vacuum Excavator Truck	New Vacuum Excavator Truck for LCR pothole excavation & safe excavation around other utilities, minimize excavation costs, pavement repairs and reliance on outside contractors. Very safe excavation in tight places w/multiple utilities.	DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Merrimack	No	\$ 22.87	\$ -
Swan Street	Replacing 160 LF of 1953 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Chapman St.	Replacing 160 LF of 1948 1.25" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 21,300	Yes	Nashua	Yes	\$ 23.55	\$ 502
Cote Ave	Replacing 470 LF of 1938 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 59,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,389
Savoy St.	Replacing 140 LF of 1947 1.25" main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 19,600	Yes	Nashua	Yes	\$ 23.55	\$ 462
Walnut St.	Replacing 1450 LF of 1888-1951 6" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 177,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,168
Salem St.	Replacing 1450 LF of 1888-1927 4" & 6" CI main with 6" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 106,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,508
Dawn St.	Replacing 450 LF of 1954 1.5" & 2" main with 4" PVC - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 57,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,354
Amory St.	Replacing 570 LF of 1887 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 71,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,684
Union St.	Replacing 520 LF of 1909-1978 1.25"-4" main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 65,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,543
Berkeley St.	Replacing 3080 LF of 1888-1912 6" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 375,250	Yes	Nashua	Yes	\$ 23.55	\$ 8,837
Temple St.	Replacing 975 LF of 1888 8" CI main with 12" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 120,500	Yes	Nashua	Yes	\$ 23.55	\$ 2,838
Raymond St.	Replacing 2300 LF of 1887 8" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 281,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,618
Hanover St.	Replacing 840 LF of 1888 4" CI main with 8" DI - Final Pavement and Restoration	DW20-157	26,459	3/2/2021	\$ 116,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,732
Blossom St.	Replacing 2395 LF of 1893-1916 4" & 6" CI main with 8" DI - Final Pavement and Restoration	DW20-156	26,459	3/2/2021	\$ 292,000	Yes	Nashua	Yes	\$ 23.55	\$ 6,877
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 144,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,391
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 73,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,731
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 107,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,520
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 410,500	Yes	Nashua	Yes	\$ 23.55	\$ 9,667
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 325,250	Yes	Nashua	Yes	\$ 23.55	\$ 7,660
Crown St.	Replacing 225 LF of 1901 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,531
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 109,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,567
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 35,325
Parrish Hills HP Water Main	Create new HP area with 1600 LF of Water Main and Check Valves	DW20-157	26,459	3/2/2021	\$ 800,000	Yes	Nashua	Yes	\$ 23.55	\$ 18,840
Parrish Hills HP Booster Station	New Domestic flow and pressure booster station	DW20-157	26,459	3/2/2021	\$ 550,000	Yes	Nashua	Yes	\$ 23.55	\$ 12,953
Misc. Nashua, NH Emergency Sewer	Projects associated with the City of Nashua Sewer Replacement program	DW20-157	26,459	3/2/2021	\$ 396,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,326
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 8,500,000	Yes	Nashua	Yes	\$ 23.55	\$ 200,175
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,605	Yes	Nashua	No	\$ 23.55	\$ -
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,290	Yes	Nashua	No	\$ 23.55	\$ -
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI - Design only	0.1 DSRR Funds			\$ 4,125	Yes	Nashua	No	\$ 23.55	\$ -
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,280	Yes	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,175	Yes	Nashua	No	\$ 23.55	\$ -
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 1,740	Yes	Nashua	No	\$ 23.55	\$ -
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,640	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Design only	0.1 DSRR Funds			\$ 4,950	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Installing 115 LF of new 8" DI to complete loop - Design only	0.1 DSRR Funds			\$ 1,365	Yes	Nashua	No	\$ 23.55	\$ -
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 765	Yes	Nashua	No	\$ 23.55	\$ -
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC - Design only	0.1 DSRR Funds			\$ 2,745	Yes	Nashua	No	\$ 23.55	\$ -
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE - Design only	0.1 DSRR Funds			\$ 2,010	Yes	Nashua	No	\$ 23.55	\$ -

Pennichuck Water Works, Inc.  
 DW 23-015  
 2024 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 4

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 2,055	Yes	Nashua	No	\$ 23.55	\$ -
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 1,965	Yes	Nashua	No	\$ 23.55	\$ -
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 4,050	Yes	Nashua	No	\$ 23.55	\$ -
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE - Design only		0.1 DSRR Funds		\$ 3,525	Yes	Nashua	No	\$ 23.55	\$ -
Haines St.	Abandoning 75 LF of 1934 1.5" main - Design only		0.1 DSRR Funds		\$ 450	Yes	Nashua	No	\$ 23.55	\$ -
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 5,670	Yes	Nashua	No	\$ 23.55	\$ -
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,985	Yes	Nashua	No	\$ 23.55	\$ -
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,305	Yes	Nashua	No	\$ 23.55	\$ -
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 4,590	Yes	Nashua	No	\$ 23.55	\$ -
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 2,910	Yes	Nashua	No	\$ 23.55	\$ -
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI - Design only		0.1 DSRR Funds		\$ 19,590	Yes	Nashua	No	\$ 23.55	\$ -
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI - Design only		0.1 DSRR Funds		\$ 6,840	Yes	Nashua	No	\$ 23.55	\$ -
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 1,710	Yes	Nashua	No	\$ 23.55	\$ -
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,570	Yes	Nashua	No	\$ 23.55	\$ -
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC - Design only		0.1 DSRR Funds		\$ 3,075	Yes	Nashua	No	\$ 23.55	\$ -
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI - Design only		0.1 DSRR Funds		\$ 9,885	Yes	Nashua	No	\$ 23.55	\$ -
PWW RRA- ERP	Implement Recommendations Evaluated in 2021	DW20-157	26,459	3/2/2021	\$ 200,000	Yes	Various	Yes	\$ 23.78	\$ 4,756
Investment in Developer Services	1x Annual Revenue	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering Pickup	Replace #105 2013 Chevy with >160k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace #31 2012 Chevy with >110k miles		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k year 3 of 5.		0.1 DSRR Funds		\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		0.1 DSRR Funds		\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 23.78	\$ 595
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Rotork Pakscan valve control system	Replace Rotork Pakscan valve control system	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 23.55	\$ 471
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle		0.1 DSRR Funds		\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Bowers Dam Spillway reconstruction/increase capacity	Bowers Dam Spillway reconstruction/increase capacity	DW20-157	26,459	3/2/2021	\$ 2,300,000	Yes	Merrimack	Yes	\$ 22.87	\$ 52,601
This replacement will flatten out our replacements over the next few years .	Runrate Business needs	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Typical IT Annual budget roughly runs about \$400K	typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2024 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 157,600	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -</b>					<b>\$ 21,604,535</b>					<b>Projected Property Tax Expense associated with \$ 452,061</b>

**Total for 0.1 DSRR 2024 Projects - \$ 387,610**  
**Total Projected Bond funded PWW QCPAC Capex for 2024 - \$ 12,016,925**  
**Special Project Bond for Chemical Feed Building - \$ 8,500,000**  
**FEMA Grant - \$ 700,000**

Estimated Bond Terms (Bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 826,829  
 Estimated Bond Terms (Special Project bonds to be sold in April 2025) - 30 Years @ 5.50% resulting in P&I of \$ 584,846  
**Total Projected P&I - \$ 1,411,675**

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

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2025 New Services (10)	Single Family, Owner Build, New Homes	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2025 Renewed Services (20)	Replacement of Failed Services	DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 23.78	\$ 2,616
2025 Hydrants (10)	Replacement of non-functional hydrants	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
2025 Gates (20)	Replacement of Failed Gate Valves	DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 23.78	\$ 1,902
2024 Radios (200)	New Radios for new customers (200)	DW20-157	26,459	3/2/2021	\$ 24,000	Yes	Various	Yes	\$ 23.78	\$ 571
2024 Radios - PFOA (25)	New Radios for PFOA Customers (25)	DW20-157	26,459	3/2/2021	\$ 3,000	Yes	Various	Yes	\$ 23.78	\$ 71
2025 Radios (2800)	Year 5 of 10 Replacment of all PWW Radios installed in 2007 (2800) by contractor	DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 23.78	\$ 8,656
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (200). Replacement of failed meters(200)	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
2024 Meters - PFOA (25)	New meters for PFOA customers (25)	DW20-157	26,459	3/2/2021	\$ 3,125	Yes	Various	Yes	\$ 23.78	\$ 74
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #84	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles #9	DW20-157	26,459	3/2/2021	\$ 85,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickup to Replace Veh #22 that has been retired due to not passing inspection.	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Replacement 1/2 Ton Pickup	New Full Sized Pickeup to replace Disconnect Vehicle that will become Hydrant Painting Van.	DW20-156	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.87	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ -
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.87	\$ -
Ferson St.	Replacing 430 LF of 1931-1938 8" CI main with 12" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 54,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,283
W. Otterson St.	Replacing 260 LF of 1936 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 33,600	Yes	Nashua	Yes	\$ 23.55	\$ 791
Thomas St.	Replacing 420 LF of 1908-1926 6" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,260
Sawyer St.	Replacing 1620 LF of 1896-1907 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 198,500	Yes	Nashua	Yes	\$ 23.55	\$ 4,675
Balcom St.	Replacing 1225 LF of 1911-1923 8" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 150,500	Yes	Nashua	Yes	\$ 23.55	\$ 3,544
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 53,250	Yes	Nashua	Yes	\$ 23.55	\$ 1,254
McKean St.	Replacing 1690 LF of 1888 6" CI main with 8" DI - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 207,000	Yes	Nashua	Yes	\$ 23.55	\$ 4,875
Coburn Woods	Replacing remaining 2" PE mains that were not completed in 2021 - Pavement & Surface Restoration	DW20-157	26,459	3/2/2021	\$ 350,000	Yes	Nashua	Yes	\$ 23.55	\$ 8,243
Reed Ct.	Replacing 170 LF of 1968 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 30,500	Yes	Nashua	Yes	\$ 23.55	\$ 718
Atwood Ct.	Replacing 130 LF of 1950 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Nashua	Yes	\$ 23.55	\$ 589
Lucier St.	Replacing 340 LF of 1928-1947 1.5" & 4" main with 8" DI	DW20-158	26,460	3/3/2021	\$ 94,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,214
Atherton Ave	Replacing 200 LF of 1959 2" main with 4" PVC	DW20-159	26,461	3/4/2021	\$ 49,000	No	Nashua	No	\$ 23.55	\$ -
Riverview St.	Replacing 190 LF of 1951 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 47,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,107
Foster Ct.	Replacing 165 LF of 1963 1" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 35,500	Yes	Nashua	Yes	\$ 23.55	\$ 836
Highland Pl	Replacing 230 LF of 1924 2" main with 4" PVC	DW20-156	26,459	3/2/2021	\$ 57,500	Yes	Nashua	No	\$ 23.55	\$ -
Palm St.	Replacing 420 LF of 1890 4" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 112,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,638
Long Ave	Installing 115 LF of new 8" DI to complete loop	DW20-157	26,459	3/2/2021	\$ 29,000	Yes	Nashua	Yes	\$ 23.55	\$ 683
Long Ave	Replacing 65 LF of 1939 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 15,500	Yes	Nashua	Yes	\$ 23.55	\$ 365
Short Ave	Replacing 210 LF of 1926 6" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 63,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,495
2nd St.	Replacing 235 LF of 1961 and 2005 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 60,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,425
Yvonne St.	Replacing 200 LF of 1929 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 40,500	Yes	Nashua	Yes	\$ 23.55	\$ 954
Daniels St.	Replacing 205 LF of 1955 1.5" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 41,000	Yes	Nashua	Yes	\$ 23.55	\$ 966
George St.	Replacing 195 LF of 1948 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 39,500	Yes	Nashua	Yes	\$ 23.55	\$ 930
Tetreau St.	Replacing 450 LF of 1957 1.25" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 78,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,837
Notre Dame St.	Replacing 385 LF of 1926 & 1950 1.5" & 2" main with 2" HDPE	DW20-157	26,459	3/2/2021	\$ 68,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,613
Haines St.	Abandoning 75 LF of 1934 1.5" main	DW20-157	26,459	3/2/2021	\$ 5,000	Yes	Nashua	Yes	\$ 23.55	\$ 118
Santerre St.	Replacing 530 LF of 1961 & 1962 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 122,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,873
Lakeside Ave	Replacing 266 LF of 1949 1.25" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 64,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,519
St. Lazare St.	Replacing 405 LF of 1955-1959 1.5" and 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 92,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,167
Spaulding Ave	Replacing 435 LF of 1924-1940 1.25", 2", and 6" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 98,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,308
Arlington Ave	Replacing 265 LF of 1920 & 1926 2" and 4" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 62,000	Yes	Nashua	Yes	\$ 23.55	\$ 1,460
Auburn St.	Replacing 1190 LF of 1882-1887 4" and 8" CI main with 8" DI	DW20-157	26,459	3/2/2021	\$ 446,000	Yes	Nashua	Yes	\$ 23.55	\$ 10,503
Eaton St.	Replacing 490 LF of 1912 6" CI main with 12" DI	DW20-157	26,459	3/2/2021	\$ 166,000	Yes	Nashua	Yes	\$ 23.55	\$ 3,909
N. 2nd St.	Replacing 140 LF of 1919 6" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 37,500	Yes	Nashua	Yes	\$ 23.55	\$ 883
Alstead Ave	Replacing 320 LF of 1920 4" CI main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 77,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,825
Bordeaux St.	Replacing 275 LF of 1960 2" main with 4" PVC	DW20-157	26,459	3/2/2021	\$ 66,500	Yes	Nashua	Yes	\$ 23.55	\$ 1,566
King St.	Replacing 865 LF of 1923 & 1957 6" CI main with 6" DI	DW20-157	26,459	3/2/2021	\$ 222,500	Yes	Nashua	Yes	\$ 23.55	\$ 5,240
Water Treatment Facility	Chemical Feed and Storage Facility Construction	New Financing Approval Required			\$ 3,900,000	Yes	Nashua	Yes	\$ 23.55	\$ 91,845
2026 Watermain Replacement (Design Only)	Various Streets, Diameters, and Materials	0.1 DSRR Funds			\$ 180,000	Yes	Nashua	No	\$ 23.55	\$ -
City Sewer Related Projects	Water Main Replacements Associated with Sewer Reconstruction	DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 23.55	\$ 9,420
Trimble GPS and Water (flow, level, quality) Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors	0.1 DSRR Funds			\$ 45,000	Yes	Nashua	No	\$ 23.55	\$ -
Investment in Developer Services	1x Annual Revenue	0.1 DSRR Funds			\$ 100,000	Yes	Various	Yes	\$ 23.78	\$ 2,378
Replace Engineering SUV	Replace Highest Mileage SUV	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Engineering Pickup	Replace Highest Mileage/Poorer Condition Pickup	0.1 DSRR Funds			\$ 35,000	Yes	Nashua	No	\$ 23.55	\$ -
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.	0.1 DSRR Funds			\$ 40,000	Yes	Various	No	\$ 23.78	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 23.78	\$ 951

Pennichuck Water Works, Inc.  
 DW 23-015  
 2025 Projected QCPAC Expenditures  
 2/13/2023  
 Revised per DOE DR Set 1  
 5/18/2023

PWW 2023 QCPAC Filing  
 Exhibit DLW-1  
 Page 5

Project Name/Description	Project Description	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Well Pump replacements	Well Pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Chemical Feed pump replacements	Chemical Feed pump replacements	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Rebuild High lift pump, WTP	Rebuild High lift pump, WTP	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 23.55	\$ 2,355
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 23.78	\$ 357
Misc. Structural Improvements	Misc. Structural Improvements	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 23.78	\$ 476
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 23.78	\$ 1,427
Well Rehabilitation	Well Rehabilitation	DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 23.78	\$ 1,189
WTP Structural/HVAC	WTP Structural/HVAC	DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 23.78	\$ 713
Purchase new lab equipment	Purchase new lab equipment	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	No	\$ 23.78	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 23.78	\$ 238
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 65,000	Yes	Nashua	No	\$ 23.55	\$ -
Replace Water Supply Vehicle	Replace Water Supply Vehicle	0.1 DSRR Funds			\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
WTP Carbon Filter Replacement	Replaced Carbon in WTP Filters 1a through 4b	DW20-157	26,459	3/2/2021	\$ 1,500,000	Yes	Nashua	No	\$ 23.55	\$ -
Replacement server for Stellar	This replacement will flatten out our replacements over the next few years .	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Software	Miscellaneous Software	DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 23.55	\$ -
Miscellaneous Hardware	Miscellaneous Hardware	DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 23.55	\$ -
Monitary placeholder	Typical IT Annual budget roughly runs about \$400K	DW20-157	26,459	3/2/2021	\$ 324,000	Yes	Nashua	No	\$ 23.55	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2025 Capex until permanent financing is achieved	DW20-157	26,459	3/2/2021	\$ 124,000	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2025 Total Capital Expenditure Budget -</b>					<b>\$ 11,799,975</b>					<b>Projected Property Tax Expense associated with \$ 209,136</b>

**Total for 0.1 DSRR 2024 Projects - \$ 540,000**  
**Total Projected Bond funded PWW QCPAC Capex for 2025 - \$ 7,359,975**  
**Special Project Bond for Chemical Feed Building - \$ 3,900,000**

Estimated Bond Terms (Bonds to be sold in April 2026) -	30	Years @	5.50%	resulting in P&I of	\$ 506,406
Estimated Bond Terms (Special Project bonds to be sold in April 2026) -	30	Years @	5.5%	resulting in P&I of	\$ 268,341
Total Projected P&I -					<b>\$ 774,747</b>

1. Tax rate is the sum of the Dec 2022 local community rate plus the Statewide Utility tax rate of \$6.60/\$1000