Pennichuck Water Works, Inc.
DW 20-020
Projected 2022 QCPAC Capital Expenditures
Revised 6/16/2020 per Staff Tech DR1
Revised 3/25/2020 per Staff DR2
Revised 6/16/2020 per Staff Tech DR1
6/30/2020 Update, No changes as of 9/30/2020

					2022 Approved Budgeted Amount,					QCPAC	
					Revised to reflect					Eligible	
		Financing	NHPUC Order	Date of	2020 QCPAC					Property Tax	
Project Name/Description	Project Description	Work Order # Docket No.	No.	NHPUC Order	activity	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	Expense	Explanation for Change/Addition/Deletion since 2/9/2020
2022 New Services (10)	Single Family, Owner Build, New Homes	F	iture Financing Pet	ition	\$ 50,000	Yes	Various	Yes	\$ 27.02	\$ 1,351	
2022 Renewed Services (20)	Replacement of Failed Services	F	iture Financing Pet	ition	\$ 110,000	Yes	Various	Yes	\$ 27.02	\$ 2,972	
2022 Hydrants (10)	Replacement of non-functional hydrants	F	iture Financing Pet	ition	\$ 60,000	Yes	Various	Yes	\$ 27.02		
2022 Gates (10)	Replacement of Failed Gate Valves	F	iture Financing Pet	ition	\$ 40,000	Yes	Various	Yes	\$ 27.02	\$ 1,081	
2022 Radios (4000)	Year 2 of 7 year replacement of all PWW radios (all initial radios installed in 2007).	F	iture Financing Pet	ition	\$ 520,000	Yes	Various	Yes	\$ 27.02	\$ 14,050	
2022 Meters (Growth) 5/8"-2" - Core & CWS	New meters for new customers (280). Replacement of failed meters (200).	F	iture Financing Pet	ition	\$ 50,000	Yes	Various	Yes	\$ 27.02	\$ 1,351	
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles.	Fi	iture Financing Pet	ition	\$ 70,000	Yes	Merrimack	No	\$ 28.86	\$ -	
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles.	F	iture Financing Pet	ition	\$ 70,000	Yes	Merrimack	No	\$ 28.86	\$ -	
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles.	F	iture Financing Pet	ition	\$ 35,000	Yes	Merrimack	No	\$ 28.86	\$ -	
Protectus Meter Upgrade	Protectus Meter Upgrade		0.1 DSRR		\$ 22,000	Yes	Nashua	Yes	\$ 26.63	\$ 586	
Sargent Street	Replace 1900 LF 6 inch CI with 1900 LF 16 inch DIPCL.	F	iture Financing Pet	ition	\$ 564,000	Yes	Nashua	Yes	\$ 26.63	\$ 15,019	Water main replacement deferred from 2021 to 2022.
Courtland Street	Replace 1170 LF 4 inch CI with 1170 LF 16 inch DIPCL.	F	iture Financing Pet	ition	\$ 347,000	Yes	Nashua	Yes	\$ 26.63	\$ 9,241	Water main replacement deferred from 2021 to 2022.
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL.	Fi	iture Financing Pet	ition	\$ 870,000	Yes	Nashua	Yes	\$ 26.63	\$ 23,168	Water main replacement deferred from 2021 to 2022.
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL.	Fi	iture Financing Pet	ition	\$ 492,000	Yes	Nashua	Yes	\$ 26.63	\$ 13,102	Water main replacement deferred from 2021 to 2022
Linwood Street	Replace 960 LF of 6 inch CI with 8 inch DIPCL.	Fi	iture Financing Pet	ition	\$ 31,000	Yes	Nashua	Yes	\$ 26.63	\$ 826	
Balcom Street	Replace 1240 LF 6 inch CI with 1240 LF 8 inch DIPCL.	Fi	iture Financing Pet	ition	\$ 40,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,065	
Euclid Avenue	Replace 425 LF 6 inch CI with 425LF 8 inch DIPCL.	F	iture Financing Pet	ition	\$ 14,000	Yes	Nashua	Yes	\$ 26.63	\$ 373	
Fairview Street	Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL.	F	iture Financing Pet	ition	\$ 26,000	Yes	Nashua	Yes	\$ 26.63	\$ 692	
Sargent Street	Replace 1900 LF 6 inch CI with 1900 LF 16 inch DIPCL.	Fi	iture Financing Pet	ition	\$ 62,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,651	
Courtland Street	Replace 1170 LF 4 inch CI with 1170 LF 16 inch DIPCL.	F	iture Financing Pet	ition	\$ 38,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,012	
Alld Street	Replace 1860 LF of 6 & 8 inch CI with 12 inch DIPCL.	F	iture Financing Pet	ition	\$ 96,000	Yes	Nashua	Yes	\$ 26.63	\$ 2,556	
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL.	F	iture Financing Pet	ition	\$ 54,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,438	
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL.	F	iture Financing Pet	ition	\$ 45,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,198	
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL.	F	iture Financing Pet	ition	\$ 15,000	Yes	Nashua	Yes	\$ 26.63	\$ 399	
2020 Nashua City Sewer Projects	Residual Paving Contribution for work complete in 2020.	F	iture Financing Pet	ition	\$ 200,000	Yes	Nashua	Yes	\$ 26.63	\$ 5,326	
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL.	F	iture Financing Pet	ition	\$ 189,000	Yes	Nashua	Yes	\$ 26.63	\$ 5,033	
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL.	F	iture Financing Pet	ition	\$ 325,000	Yes	Nashua	Yes	\$ 26.63	\$ 8,655	
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL.	F	iture Financing Pet	ition	\$ 72,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,917	
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL.	F	iture Financing Pet	ition	\$ 93,000	Yes	Nashua	Yes	\$ 26.63	\$ 2,477	
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL.	F	iture Financing Pet	ition	\$ 90,000	Yes	Nashua	Yes	\$ 26.63		
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL.	F	iture Financing Pet	ition	\$ 43,000	Yes	Nashua	Yes	\$ 26.63	\$ 1,145	
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL.	F	iture Financing Pet	ition	\$ 86,000	Yes	Nashua	Yes	\$ 26.63	\$ 2,290	
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL.		iture Financing Pet		\$ 122,000	Yes	Nashua	Yes	\$ 26.63	\$ 3,249	
Gray Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL.	F	iture Financing Pet	ition	\$ 100,000	Yes	Nashua	Yes	\$ 26.63		
Coburn Woods (all side streets)	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL.		iture Financing Pet		\$ 1,188,000	Yes	Nashua	Yes	\$ 26.63	\$ 31,636	
City Sewer Projects	Replace CI with DICLP.		iture Financing Pet		\$ 1,100,000	Yes	Nashua	Yes	\$ 26.63		
Sawyer Street	Replace 1600 LF of 6 inch CI with 12 inch DIPCL.		iture Financing Pet		\$ 475,000	Yes	Nashua	Yes	\$ 26.63		
Woodward Street	Replace 360 LF 8 inch CI with 470 LF 8 inch DIPCL.		iture Financing Pet		\$ 139,000	Yes	Nashua	Yes	\$ 26.63		
Blosson Street	Replace 2400 LF of 6 inch CI and 8 inch CI with 2400 LF of 8 inch DIPCL.		iture Financing Pet		\$ 712,000	Yes	Nashua	Yes	\$ 26.63		
Investment in developer installed services	1x annual revenue per tariff.		iture Financing Pet		\$ 60,000	Yes	Various	Yes	\$ 27.02		
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		iture Financing Pet		\$ 55,000	Yes	Various	Yes	\$ 27.02		
Well Pump replacements	Well Pump replacements		iture Financing Pet		\$ 18,750	Yes	Various	Yes	\$ 27.02		
Chemical Feed pump replacements	Chemical Feed pump replacements		iture Financing Pet		\$ 15,000	Yes	Various	Yes	\$ 27.02		
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS.		iture Financing Pet		\$ 15,000	Yes	Various	Yes	\$ 27.02		
Misc. Structural Improvements	Misc. Structural Improvements		iture Financing Pet		\$ 20,000	Yes	Various	Yes	\$ 27.02		
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		iture Financing Pet		\$ 20,000	Yes	Various	Yes	\$ 27.02		
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		iture Financing Pet		\$ 30,000	Yes	Various	Yes	\$ 27.02		
Well Rehabilitation	Well Rehabilitation		iture Financing Pet		\$ 50,000	Yes	Various	Yes	\$ 27.02		
WTP Structural/HVAC	WTP Structural/HVAC		iture Financing Pet		\$ 10,000	Yes	Nashua	Yes	\$ 26.63		
Purchase new lab equipment	Purchase new lab equipment		iture Financing Pet		\$ 20,000	Yes	Nashua	No	\$ 26.63		
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		iture Financing Pet		\$ 10,000	Yes	Various	Yes	\$ 27.02		
Replace Vehicle	Replace Vehicle		iture Financing Pet		\$ 65,000	Yes	Nashua	No	\$ 26.63		
Replace Vehicle	Replace Vehicle		iture Financing Pet		\$ 65,000	Yes	Nashua	No	\$ 26.63		
Replace Vehicle	Replace Vehicle		iture Financing Pet		\$ 40,000	Yes	Nashua	No	\$ 26.63		
Replace Vehicle	Replace Vehicle	Fi	iture Financing Pet	ition	\$ 40,000	Yes	Nashua	No	\$ 26.63		
Various IT intiatives	Various IT intiatives		0.1 DSRR		\$ 400,000	Yes	Nashua	No	\$ 26.63		

Total Projected PWW QCPAC Capex for 2022 (less 0.1 DSRR)- \$ 9,166,750

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 20-020

Schedule A - Modified Revenue Requirement sought in DW19-084

Computation of QCPAC Surcharge

Revised per Staff 3-1 to reflect final Bond TIC

2/9/2020, Revised 5/18/2020, Revised 6/16/2020 per Staff Tech DR's

9/30/2020 Update including reconcilation to approved DW19-084 Revenues

11/30/2020 update

	719-084 PWW oved Revenues		Capital	AC For 2019 Additions pro formas			SPAC Surcharge or 2019 Capital Additions		QCPAC For 2020 Capital Additions pro formas		for	AC Surcharge 2020 Capital Additions		Capita	AC For 2021 al Additions o formas	for	AC Surcharge 2021 Capital Additions	Capita	AC For 2022 al Additions o formas	for 2	AC Surcharge 2022 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$ 7,729,032		\$	-		\$	7,729,032		\$ -		\$	7,729,032		\$	-	\$	7,729,032			\$	7,729,032
Operating Expense Revenue Requirement	\$ 21,296,618	(1)	\$	416,593	(4)	\$	21,713,211		\$ 156,004	1 (4	\$)	21,869,215	(4)	\$	257,759	\$	22,126,974	\$	234,350	\$	22,361,324
Annual Principal and Interest Payments	\$ 6,176,477	(2)	\$	867,226	(5)	\$	7,043,703		\$ 419,270	5	\$	7,462,979		\$	659,296	\$	8,122,275	\$	596,310	\$	8,718,585
Principal and Interest Coverage Requirement	1.10	(3)					1.10					1.10					1.10				1.10
Principal and Interest Revenue Requirement	\$ 6,794,124					\$	7,748,073				\$	8,209,276				\$	8,934,502			\$	9,590,444
Proposed Revenue Requirement w/out special contract revenues	\$ 34,792,618	(8)				\$	36,163,160	(8)			\$	36,780,367	(8)			\$	37,763,353			\$	38,653,644
Current Water Revenues excluding CBFRR						\$	28,434,129				\$	29,051,336				\$	30,034,321			\$	30,924,612
Add: City Bond Fixed Revenue Requirement						\$	7,729,032				\$	7,729,032				\$	7,729,032			\$	7,729,032
Current Water Revenues with CBFRR						\$	36,163,160				\$	36,780,367				\$	37,763,353			\$	38,653,644
Percent QCPAC Surcharge (9)							3.94%					1.77%					2.83%				2.56%
Cumulative QCPAC Surcharge (13)							3.94%					5.71%					8.54%				11.10%
Cumulative QCPAC monthly increase in average single family residential bill						\$	2.17				\$	3.14				\$	4.70			\$	6.35
Average monthly single family residential bill with QCPAC	\$ 55.02					\$	57.19				\$	58.17				\$	59.72			\$	61.37
Notes: (1) Operating Expense Revenue requirement is the sum of the Total Operating				spense and Payroll	Tax E	xpenses	requested in DW19-08	34.													

5.00%

Milford Annual Fixed Chg

3.38%

30 year bond with an actual total all in interest rate of

81,000

for 2020 through 2022 Capital Expenditures unless funding is via an SRF/DWGTF financing.

A-B Annual Fixed Chg

4.261869%

371,430

that was not requested for recovery in DW19-084.

\$

121,213

PEU Annual Fixed Chg

(2) Annual Principal and interest payments for PWW debt associated with all plant in service as requested in DW19-084.

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

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

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2019 and 12/31/2019 based on a year bond with interest rate of

(6) QCPAC Principal and Interest expenses are based on

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

(8) Reduction in revenues associated with fixed contracts as follows: Hudson Annual Fixed Chg 32,800 (9) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of

(11) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues requested in DW19-084.

(12) Operating expense revenues requested in DW19-084 less total Other Revenues of

(13) QCPAC percent revenue surcharges based on requested revenues being sought in DW19-084.

Impact on Single Family Residential Home: DW19-084 Monthly meter charge requested in DW19-084 - \$ 24.35 Average Single Family Consumption per Dw19-084 (CCF) -7.77 Volumetric Charge requested in DW#19-084 - \$ 3.95 Ave. Single Family monthly bill with rates requested in DW19-084 - \$ 55.02

Assumes an GM metered customer class rate increase of

7.85% as requested in DW19-084

420,712

Pennichuck Water Works, Inc. DW 20-020 2020 QCPAC Filing Revised 3/27/2020 per Staff DR1 Revised 6/16/2020 per Staff Tech Session DR's

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Board Approved 2019 Capex Budget	Board Approved 2019 Capex Budge Revised 8/24/19	, Eligible for 2020 QCPAC Surcharge		stimated Project	Estimated Project Cost as of 11/30/2019	Final QCPAC eligible Project Costs as of 12/31/2019 Community	Taxable	QCPAC Eligible Property Tax Expense (Based on Tax Rate (1) Qrtly Update	Explanation for Change/Addition/Deletion since Petition Filing
New Services (10)	Single Family, Owner Build, New Homes	20 workorders	DW17-183	26,101	2/2/2018	\$ 46,000		Yes	\$ 46,000 \$	36,000		69,936 Various	Yes	,, , , , , ,	12 installed through 12/31.
Renewed Services (20)	Replacement of failed services	21, 22 & 23 workorders		26,101	2/2/2018	\$ 92,000	\$ 92,000	Yes	\$ 92,000 \$	96,000	\$ 103,000 \$	101,648 Various	Yes	\$ 27.02 \$ 2,747	29 installed through 12/31.
Hydrants (10) Gates (10)	Replacement of non-functional hydrants	30 & 31 workorders 12 & 13 workorders	DW17-183 DW17-183	26,101 26,101	2/2/2018	\$ 50,000 \$ 40,000			\$ 50,000 \$ \$ 40,000 \$	36,000 12,000		40,209 Various 10,573 Various	Yes Yes	\$ 27.02 \$ 1,080 \$ 27.02 \$ 280	
Radios (2750)	Replacement of Failed Gate Valves Replace out of warrantee failed radio meter readers	54 workorders	DW17-183	26,101	2/2/2018				\$ 40,000 \$	42,500		10,5/3 Various 48,942 Various	Yes		4 installed through 12/31. Deferred Radio Replacement program (Radios are 12 years old). 495 replaced through 12/31.
Meters (Growth) 5/8"-2" - Core & CWS (480)	Meters (Growth) 5/8"-2" - Core & CWS (480)	50 workorders	DW17-183	26,101	2/2/2018	\$ 48,000	\$ 48,000	Yes	\$ 48,000 S	240,000	\$ 200,000	8 207,025 Various	Yes	\$ 27.02 \$ 5,594	
Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)	Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)	50 workorders 1901598	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 300,000 \$ 75,000	\$ 300,000 \$ 75,000		\$ 300,000 ° \$ 75,000 \$	75,000		Various 66.204 Merrimack	Yes Yes	\$ 27.02 \$ - \$ 28.86 \$ 1.911	100-100-100-100-100-100-100-100-100-100
Entrance Security Gate & Perimeter Fence Replace 13 yr Vac Trailer - Safety & Maint issue	Entrance Security Gate & Perimeter Fence Replace 13 yr Vac Trailer - Safety & Maint issue	1917721	DW17-183	26,101	2/2/2018	\$ 100,000		Yes	\$ /5,000 \$	/5,000	\$ 75,000 \$	5 00,204 Merrimack 5 29,710 Merrimack			Then Company was leasing a vac machine for 2019. It was decided to buy out the lease.
Protectus Meter Upgrade	Spitbrook Rd Protectus Meter Upgrade	n/a	DW17-183	26,101	2/2/2018	\$ 21,000	\$ 21,000	Yes	\$ 21,000 \$	21,000		- Nashua	Yes	\$ 26.23 \$ -	Deferred until 2020
Pipe Freeze Kits (2)	RoFrost Turbo 2 Electric Pipe Freeze Kts	1915135 1918551	DW17-183 DW17-183	26,101 26,101	2/2/2018	S -	\$ 7,400 \$ 17,500		\$ 7,400 \$ \$ 17,500 \$	7,400 17,500	9 032.10 5	6,970 Nashua 15.888 Nashua	No No	\$ 26.23 \$ - \$ 26.23 \$ -	Existing Freeze kits have failed and not repairable, 15+ years old. Existing units have failed and parts for repair are not available.
Plate Compactors (4) Network Digital Display for Distribution Department	Replacement of failed compactors unable to obtain repair parts Relocate & network display to Assignment room & new 75" display in Conference Rm	1917719	0.1 DSRR	20,101	2/2/2010	-	\$ 2,700		\$ 2,700 \$	2,700	9 10,000 9	2,597 Merrimack		\$ 28.86 \$ -	Existing times have failed and parts for repair are not available. Existing steel sander rusted through and was replaced with new sander.
Poly-Caster Sander	Poly-Caster Sander	1917720	DW17-183	26,101	2/2/2018			Yes	\$	-	\$ 7,460 \$	7,460 Merrimack		\$ 28.86 \$ -	
2018 Dodge Ram 2500 (#313) 2018 Dodge Ram 2500 (#314)	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907613 1907612	0.1 DSRR 0.1 DSRR			S -	\$ 1,969 \$ 1,969	110	\$ 1,969 \$ \$ 1,969 \$	1,969	4 3,000 5	1,969 Merrimack 1,969 Merrimack		\$ 28.86 \$ - \$ 28.86 \$ -	
2018 Dodge Ram 2500 (#315)	Carryover Costs to 2018 projects not recovered in prior QCPAC	1907615	0.1 DSRR			\$ -	\$ 2,542	- 10	\$ 2,542 \$	2,542	4 3,000 5	2,542 Merrimack		\$ 28.86 \$ -	
2018 Dodge Ram Promaster 1500 Cargo Van (#347)	Carryover Costs to 2018 projects not recovered in prior QCPAC	1907987	0.1 DSRR			S -	\$ 1,060	- 10	\$ 1,060 \$	1,060		1,060 Merrimack	No	\$ 28.86 \$ -	
2018 Dodge Ram Promaster 1500 Cargo Van (#348) 2018 Dodge Ram Promaster 1500 Cargo Van (#349)	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907988	0.1 DSRR 0.1 DSRR			s -	\$ 1,060 \$ 1,060	- 10	\$ 1,060 \$ \$ 1,060 \$	1,060 1,060		1,060 Merrimack 1.060 Merrimack	No No	\$ 28.86 \$ - \$ 28.86 \$ -	
Meter Data Logging Equipment	Carryover Costs to 2018 projects not recovered in prior QCPAC	1907885	0.1 DSRR			S -	\$ 2,849	- 10	\$ 2,849 \$	2,849		2,850 Various	Yes	\$ 27.02 \$ 77	Equipment used in leak detection.
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL	1607377, 1702856,	DW17-183	26,101	2/2/2018	\$ 550,000	\$ 615,000	Yes	\$ 615,000 \$	718,063	\$ 661,000	661,270 Nashua	Yes	\$ 26.23	Pavement contribution to the City of Nashua paid in 2018 (\$127,264).
		1806433, 1901176 1702871, 1812907,												\$ 17,345	* * * * * * * * * * * * * * * * * * * *
Elm Street	Replace 875 LF of 6 inch CI with 12 inch DIPCL	1901599 1702866, 1812908,	DW17-183	26,101	2/2/2018	\$ 559,350	\$ 255,000		\$ 255,000 \$	378,600		373,328 Nashua	Yes	\$ 26.23 \$ 9,792	Pavement contribution to City of Nashua of \$67,650 included.
Monroe Street	Replace 310 LF of 4 inch CI with 8 inch DIPCL	1901602	DW17-183	26,101	2/2/2018	\$ 122,270	\$ 120,000	Yes	\$ 120,000 \$	174,926	\$ 105,000 \$	97,541 Nashua	Yes	\$ 26.23 \$ 2,558	Pavement contribution to City of Nashua of \$18,000 included. Connecting Nashua City Hall sprinkler connection that was missed during the Elm St project. Also
Garden Street	Replace 74 LF of 8" CIP with 8 inch DIPCL and reconnect City Hall Fire serviced missed during Elm St work	1918487	DW17-183	26,101	2/2/2018	s -	\$ -	Yes	\$ - \$	÷	\$ 97,000 S	61,918 Nashua	Yes	\$ 26.23 \$ 1,624	replaces a portion of the Garden Street water main. Per City almost all work had to be performed on Sunday nights. Final paving in Spring 2020 \$18,000 not included.
W.Pearl Street	Replace 340 LF of 8" CIP with 120 LF of 12" DIPCL and 220 LF of 8" DIPCL	1702869, 1812909, 1901603	DW17-183	26,101	2/2/2018	\$ 138,050	\$ 140,000	Yes	\$ 140,000 \$	224,486	\$ 175,000 \$	§ 178,120 Nashua	Yes	\$ 26.23 \$ 4,672	Pavement contribution to City of Nashua of \$27,200 included.
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	1814742, 1901604	DW17-183	26,101	2/2/2018				\$ 249,200 \$	249,200	\$ 260,000 \$	259,668 Nashua	Yes		Pavement contribution to City of Nashua of \$38,000 included.
West Hollis Street Check Valve Pit	Install at the int of W. Hollis St and Panther Dr.	n/a	DW17-183	26,101	2/2/2018			Yes	S - \$	-	S -	Nashua	Yes	\$ 26.23 \$ -	Deferred to future year to accommodate additional water main projects. Added security fence replacement (1,700 LF) along Manchester Street - some work will carry over into
NWS Improvements - Manchester Street	Add 2700 LF of 24 inch DIPCL on Manchester St.	1806805, 1900422				\$ 660,000	\$ 660,000	Yes	\$ 660,000 \$	730,000	\$ 650,000 \$	507,141 Nashua	Yes	\$ 26.23 \$ 13,302	2020 included.
NWS Improvements - Route 101A and Route 121 (Amherst)	Add 2200 LF of 12 inch DIPCL to close loop	1806810, 1901607	DWGTF			\$ 550,000	\$ 550,000	Yes	\$ 550,000 \$	550,000	\$ 694,000 \$	548,252 Nashua	Yes	\$ 26.23 \$ 14,381	Adjusted cost based on final installed materials in 2020 - some work will carry over into 2020.
NWS Improvements - Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL	1702835, 1806434, 1900421	Financing DW18-133	26,197	12/3/2018	\$ 522,500	\$ 522,500	Yes	\$ 522,500 \$	526,000	\$ 490,000 \$	369,378 Nashua	Yes	\$ 26.23 \$ 9,689	Adjusted cost based on final installed materials in 2020 - some work will carry over into 2021.
NWS Improvements - Deerwood Drive & Amherst St. Intersection NWS Improvements - Deerwood Dr. Northwest Blvd Loop	Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL Add 3400 LF of 20 inch HDPE including RR pipe jacking	1806808, 1901609 1806806, 1901610	4			\$ 467,500 \$ 635,800	9 107,500		\$ 467,500 \$ \$ 635,800 \$	480,000 655,000		5 158,469 Nashua 1 302 871 Nashua	Yes Yes		Adjusted cost based on final installed materials in 2020 - some work will carry over into 2022. Adjusted cost based on final installed materials in 2020 - some work will carry over into 2023.
NWS Improvements - Ponemah Rd/Route 101A Loop	Add 2200 LF of 12 inch DIPCL to close two loop major dead ends	1901611				\$ 484,000	\$ 484,000	1 03	\$ 484,000 \$	-	\$ - 5	- Nashua	Yes	\$ 26.23 \$ -	Project cancelled and replaced with piping in projects above.
NWS Improvements - Engineering Design and Inspection	Engineering and Inspection of NW System watermain improvements		0.1 DSRR			Incuded in NWS Improvemts above	Incuded in NWS Improvemts above	No	s - s	-	s - s	\$ 174,347 Nashua	Yes	\$ 26.23 \$ 4,573	
City of Nashua Sewer - Chase Street City of Nashua Sewer - Ash Street	Replace 470 LF of 6 inch CIP with 470 LF of 6 inch DIPCL Replace 710 LF of 6 inch CIP with 710 LF of 12 inch DIPCL	1829925, 1900484 1814367, 1915975	DW17-183 DW17-183	26,101	2/2/2018	\$ 176,000 \$ 242,000	\$ 190,000 \$ 162,800	103	\$ 190,000 \$ \$ 162,800 \$	174,882 225,666		5 175,370 Nashua 5 156,252 Nashua	Yes Yes		Project Complete Pavement contribution to City of Nashua of \$20,832 included.
City of Nashua Sewer - Ash Street	Replace 2950 LF of 6 inch CI with 12 inch DIPCL	1814740, 1915976	DW17-183	26,101	2/2/2018	\$ 990,000	\$ 1,710,500		\$ 1,890,050 \$	1,780,000		1,608,850 Nashua	Yes		Pavement contribution to City of Nashua of \$244,000 included. Pavement contribution to City of Nashua of \$344,000 included.
City of Nashua Paving - Vilna St.	Replace 15 LF of 1.5 inch steel with 2 inch HDPE for paving program	1915860	DW17-183	26,101	2/2/2018	\$ -	\$ 16,750	Yes	\$ 16,750 \$	20,566		17,400 Nashua	Yes	\$ 26.23 \$ 450	Includes final paving - complete.
Interconnection to BWC Woodward Avenue	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1900429 1910117	0.1 DSRR 0.1 DSRR			\$ -	\$ 3,400 \$ 2,200		\$ 3,400 \$ \$ 2,200 \$	3,400 2.640		- Nashua - Nashua	Yes Yes	\$ 26.23 \$ - \$ 26.23 \$ -	Carry over costs from project completed in 2018, pay for with 0.1 DSRR. Carry over costs from project completed in 2018, pay for with 0.1 DSRR.
Ritter Street	Carryover Costs to 2018 projects not recovered in prior QCPAC	1910116	0.1 DSRR			\$ -	\$ 6,890		\$ 6,890 \$	10,000		- Nashua	Yes	\$ 26.23 \$ -	Carry over costs from project completed in 2018, pay for with 0.1 DSRR.
Factory Street	Carryover Costs to 2018 projects not recovered in prior QCPAC	1909270	0.1 DSRR			s -	\$ 20,209	No	\$ 20,209 \$	24,250	\$ 20,209 \$	20,209 Nashua	Yes		Carry over costs from project completed in 2018, pay for with 0.1 DSRR.
Taylor Street Shakespeare HP System Exp	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1906988 1901942	0.1 DSRR 0.1 DSRR			S -	\$ 233 \$ 257	No No	\$ 233 \$ \$ 257 \$	233	\$ 233 \$ \$ 257 5	S 233 Nashua S 257 Nashua	Yes Yes	\$ 26.23 \$ (Carry over costs from project completed in 2018, pay for with 0.1 DSRR. Carry over costs from project completed in 2018, pay for with 0.1 DSRR.
City of Nashua Paving - Mill St.	Abandon 1.5" Steel water main and switch customers over to parrallel 8" water main	1915006	0.1 DSRR			\$ -	\$ 17,900	No	\$ 17,900 \$	18,261	\$ 18,261 \$	17,321 Nashua	No	\$ 26.23 \$ -	Includes final paving - complete Charged to Cost of Removal, Pay for with 0.1 DSRR.
City of Nashua Paving - Ferryalls Ct	Replace 35 ft of 1" copper water main crossing Canal St with a 4" DIPCL Water Main	1908316	DW17-183	26,101	2/2/2018	ş -	\$ 58,580	Yes	\$ 58,580 \$	58,580	\$ 58,580 \$	51,988 Nashua	Yes	\$ 26.23 \$ 1,364	Ferryalls was replaced last year to the limit of Canal St - complete this is phase 2 extending into Canal St - complete.
City of Nashua Paving - Salvail Ct	Replace 1.5" Steel water main and install a 4" DIPCL Water Main (contaminated area)	1908317	DW17-183	26,101	2/2/2018	\$ -	\$ 95,000		\$ 95,000 \$	94,800		79,258 Nashua	Yes		Includes final paving - complete.
City of Nashua Paving - Nutt St - Final Paving and restoration City of Nashua Paving - Cheshire St - Final Cleanup	Pavement restoration and final landscaping Fence repair and site clean up	1702842, 1907682 1908353	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ -	\$ 13,000 \$ 1,400	- 00	\$ 13,000 \$ \$ 1,400 \$	13,500 1.400	,	6,549 Nashua 486 Nashua	Yes Yes	\$ 26.23 \$ 172 \$ 26.23 \$ 13	\$6,240 of this will be recovered from Liberty Gas. Completion of 2018 Workorder Project.
City of Nashua - Simon St at Will St Upgrade	Abandon pump station pit and clean up intersection pipe work for improved flows	1915974	DW17-183	26,101	2/2/2018	\$ -	\$ 215,100		\$ 215,100 \$	233,250	, , , , , ,	5 174,754 Nashua	Yes		Includes base paving - Finished paving required in 2020 not included.
City of Nashua Paving - Main St.	Main St final paving at intersection with Factory St. Carry over from 2018	1900348, 1915859	DW17-183	26,101	2/2/2018	\$ -	\$ 24,500		\$ 24,500 \$	24,500		1,402 Nashua	Yes	\$ 26.23 \$ 37	Final paving bill for this project.
City of Nashua Paving - Lemon St - Carry over from 2017 City of Nashua Paving - Lowell St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2017	1702875, 1915858 1915857	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ -	\$ 24,850 \$ 37,000		\$ 24,850 \$ \$ 37,000 \$	24,850 40,000		8 18,316 Nashua 8 37.084 Nashua	Yes Yes		Final paving bill for this project. Final paving bill for this project.
City of Nashua Paving - Green St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2017	1915844	DW17-183	26,101	2/2/2018	\$ -	\$ 10,000		\$ 10,000 \$	11,000		8,906 Nashua	Yes		Final paving bill for this project.
City of Nashua Paving - Beard St - Carry over from 2017	Paving only - Carry over from 2017	1915845	DW17-183	26,101	2/2/2018	\$ -	\$ 25,900	Yes	\$ 25,900 \$	29,000	\$ 23,000 \$	21,689 Nashua	Yes		Final paving bill for this project.
City of Nashua Paving - Terrace St - Carry over from 2017 City of Nashua Paving - Warren St - Carry over from 2017	Paving only - Carry over from 2018 Paving only - Carry over from 2017	1915843 1702870, 1915842	DW17-183 DW17-183	26,101	2/2/2018	\$ - \$ -	\$ 20,500 \$ 19,500	Yes Yes	\$ 20,500 \$ \$ 19,500 \$	22,000	\$ 12,000 \$ \$ 15,892 \$	10,600 Nashua 16,762 Nashua	Yes		Final paving bill for this project. Final paving bill for this project.
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	1502180, 1601369, 1701489, 1807360, 1901612, 1908505	DWGTF Financing DW19-026	26,247	5/3/2019	\$ 5,500,000	\$ 6,600,000		\$ 6,600,000 \$	6,600,000		\$ 6,299,764 Merrimack	Yes		Bids higher than Engineer's estimate due to tight contractor market and changes in final permit requirements that impacted initial design that Engineer's estimate was based on. An estimated amount of \$336,2000 of Cean up work to be carred into 2020.
Asset Management Outside GIS Consulting Services	Outside GIS Consulting Services	1900414	DW17-183	26,101	2/2/2018				\$ 60,000 \$	20,000		7,961 Various	No	\$ 27.02 \$ -	prompton of Sharit up work to the Strayest IIIO 2020.
Asset Management Water Modeling Consulting Asset Management Trimble R2 Units	Water Modeling Consulting Trimble R2 Units	1900414 1900414	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018				\$ 36,000 \$ \$ 14,000 \$	20,000	\$ 20,000 \$	- Various - Various		\$ 27.02 \$ - \$ 27.02 \$ -	
WAM/Synergen Upgrade Cost & Functionality Study	WAM/Synergen Upgrade Cost & Functionality Study	1900568, 1910219	0.1 DSRR			\$ -	\$ 45,000	No	\$ 45,000 \$	45,000		27,804 Various	No	\$ 27.02 \$ -	Study to select replacement of Synergyn CMMS system which goes unsupported at the end of 2020.
Investment in developer installed services at 1xannual revenue 2019 Ford Escape	Per tariff	n/a 1907481	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018		\$ 60,000 \$ 23,998		\$ 60,000 \$ \$ 23,998 \$	85,000 23,988		90,434 Various 23,998 Merrimack		\$ 27.02 \$ 2,444 \$ 28.86 \$ -	Vehicle in accident. Vehicle totalled and needed to be replaced.
Bower Dam reconstruction and engineering			DW1/-103	20,101	2/2/2016	\$ 25,000			\$ 25,000 \$	25,000			No No	\$ 28.86 \$ -	Design Engineering Work for 2020 Dam rehabilitation.
Dower Dain reconstruction and engineering	Replace Totaled 2015 Ford Escape Bower Dam reconstruction and engineering	1824545, 1900432	0.1 DSRR			\$ 25,000	2 25,000								
Bowers Dam Letter of Defficiency design/analysis	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity	1824545, 1900432 1901734, 1907078	0.1 DSRR			\$ 25,000	\$ 35,000	No	\$ 35,000 \$	35,000		- Merrimack	No	\$ 28.86 \$ -	Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity	1824545, 1900432 1901734, 1907078 1907076	0.1 DSRR 0.1 DSRR			3 25,000	\$ 35,000 \$ 40,000		\$ 40,000 \$	40,000	\$ 40,000 \$	- Merrimack	No	\$ 28.86 \$ - \$ 28.86 \$ -	dam.
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficiency design/analysis	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63	0.1 DSRR 0.1 DSRR 0.1 DSRR	26 101	2/2/2018		\$ 35,000 \$ 40,000 \$ 35,000	No	\$ 40,000 \$ \$ 35,000 \$	40,000 35,000	\$ 40,000 \$ \$ 35,000 \$		-10	\$ 28.86 \$ - \$ 28.86 \$ - \$ 28.86 \$ -	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam.
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficercy design/analysis Booster Pump replacement/rebuild	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183	26,101 26,101	2/2/2018	\$ 40,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,448	No Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$	40,000 35,000 15,445	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$	5 - Merrimack 5 - Merrimack 5 11,260 Various	No No Yes	\$ 28.86 \$ - \$ 28.86 \$ - \$ 28.86 \$ - \$ 27.02 \$ 30	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. 0 pumps replaced, 5 rebuilds through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficncy design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63	0.1 DSRR 0.1 DSRR 0.1 DSRR	26,101 26,101 26,101		\$ 40,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,448 \$ 24,555	No Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$	40,000 35,000 15,445 24,555	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$	- Merrimack - Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua	No No Yes Yes	\$ 28.86 \$ - \$ 28.86 \$ - \$ 28.86 \$ - \$ 27.02 \$ 300 \$ 26.23 \$ 64	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WTP.
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficncy design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183	26,101	2/2/2018	\$ 40,000 \$ - \$ 15,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,445 \$ 24,555 \$ 15,000	No Yes Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$	40,000 35,000 15,445 24,555 15,000	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficncy design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63 workorders 60, 61, 62 & 63	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183	26,101 26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018 2/2/2018	\$ 40,000 \$ - \$ 15,000 \$ 10,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,445 \$ 24,555 \$ 15,000 \$ 150,000	No Yes Yes Yes Yes Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$ \$ 10,000 \$	40,000 35,000 15,445 24,555 15,000 10,000 150,000	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$ \$ 2,000 \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficncy design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware Twin Ridge rebuild Softener system, install radon treatment	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements Chemical Feed pump replacements Upgrade ScADA historian software, new hardware Twin Kidge rebuild softener system, install radon treatment	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63 workorders 60, 61, 62 & 63 19070731	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183 DW17-183	26,101 26,101 26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018	\$ 40,000 \$ - \$ 15,000 \$ 10,000 \$ 5,0000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,445 \$ 24,555 \$ 15,000 \$ 10,000 \$ 5,000 \$ 5,000	Yes Yes Yes Yes Yes Yes Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$ \$ 10,000 \$ \$ 150,000 \$	40,000 35,000 15,445 24,555 15,000 10,000 150,000 4,000	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$ \$ 2,000 \$ \$ 67,500 \$ \$ 4,000 \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficency design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63 workorders 60, 61, 62 & 63	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183 DW17-183 DW17-183 DW17-183	26,101 26,101 26,101 26,101 26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018	\$ 40,000 \$ - \$ 15,000 \$ 10,000 \$ 5,000 \$ 20,000 \$ 20,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,445 \$ 24,555 \$ 15,000 \$ 10,000 \$ 5,000 \$ 5,000	No Yes Yes Yes Yes Yes Yes Yes Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$ \$ 10,000 \$	40,000 35,000 15,445 24,555 15,000 10,000 150,000	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$ \$ 2,000 \$ \$ 67,500 \$ \$ 4,000 \$ \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficecy design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware Twin Ridge rebuild softener system, install radon treatment	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements Chemical Feed pump replacements Upgrade SCADA historian software, new hardware Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63 workorders n/a 1907731 n/a 1907102, 1910221	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183 DW17-183 DW17-183 DW17-183	26,101 26,101 26,101 26,101 26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018	\$ 40,000 \$ - \$ 15,000 \$ 10,000 \$ 5,000 \$ 20,000 \$ 20,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,44\$ \$ 24,555 \$ 15,000 \$ 150,000 \$ 5,000	No Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$ \$ 150,000 \$ \$ 50,000 \$	40,000 35,000 15,445 24,555 15,000 10,000 4,000 10,700	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$ \$ 2,000 \$ \$ 67,500 \$ \$ 4,000 \$ \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Opumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019
Bowers Dam Letter of Defficiency design/analysis Harris Dam Letter of Defficiency design/analysis Supply Pond Letter of Deficiency design/analysis Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements Chemical Feed pump replacements Lipgrade SCADA historian software, new hardware Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements Misc. Structural Improvements	Bower Dam reconstruction and engineering perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements Chemical Feed pump replacements Ungrade SCADA historian software, new hardware Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements Replace Fire Alarm System CPU	1824545, 1900432 1901734, 1907078 1907076 1907077 60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders 60, 61, 62 & 63 workorders 1914987 1907731 1907731 1907731 1907732, 1910221	0.1 DSRR 0.1 DSRR 0.1 DSRR DW17-183 DW17-183 DW17-183 DW17-183 DW17-183 DW17-183 DW17-183	26,101 26,101 26,101 26,101 26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018 2/2/2018	\$ 40,000 \$ - \$ 15,000 \$ 10,000 \$ 5,000 \$ 20,000 \$ 20,000	\$ 35,000 \$ 40,000 \$ 35,000 \$ 15,44\$ \$ 24,555 \$ 15,000 \$ 150,000 \$ 5,000	No Yes Yes	\$ 40,000 \$ \$ 35,000 \$ \$ 15,445 \$ \$ 24,555 \$ \$ 15,000 \$ \$ 150,000 \$ \$ 50,000 \$	40,000 35,000 15,445 24,555 15,000 10,000 4,000 10,700	\$ 40,000 \$ \$ 35,000 \$ \$ 16,995 \$ \$ 24,555 \$ \$ 11,000 \$ \$ 67,500 \$ \$ 4,000 \$ \$ 7 4,000 \$ \$ 9 4,000 \$ \$ 9 9,300 \$ \$ 9 9,300 \$	- Merrimack - Merrimack - Merrimack - 11,260 Various - 24,554 Nalshua - 16,995 Various	No No Yes Yes Yes	\$ 28.86 \$ \$ 28.86 \$ \$ 28.86 \$ \$ 27.02 \$ 30. \$ 26.23 \$ 64. \$ 27.02 \$ 45.	dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam. 0 pumps replaced, 5 rebuilds through 12/31/2019 Pump Bearings failed on Intermediate Booster Pump at WIP. 4 replaced through 12/31/2019 No replacements occurred during 2019.

Miscellaneous Equipment Purchased	Purchase Entry Tripod and Winch for WS Confined Space Program	1910296	DW17-183	26,101	2/2/2018	s -	\$ 3,004	Yes	\$ 3,004 \$	3,004 \$	3,004	\$ 3,004	Nashua	Yes	\$ 26.23	\$ 79 Routine Miscellaneous Equipment purchase
Miscellaneous Equipment Purchased	Replace Chlorine Analyzer, Twin Ridge	1915362	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	4,449 S	4,449	\$ 4,449	Nashua	Yes	\$ 26.23	\$ 117 Routine Miscellaneous Equipment purchase
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	DW17-183	26,101	2/2/2018	\$ 30,000	\$ 30,000	Yes	\$ 30,000 \$	\$ 27,800 \$	27,800	S -	Various	Yes	\$ 27.02	-
Miscellaneous SCADA/Electrical	Replace VFD, Pump #1 Bowers Landing	1916547	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	\$ 2,200 \$	2,200	\$ 2,118	Various	Yes	\$ 27.02	\$ 57
WTP Structural/HVAC	WTP Structural/HVAC	n/a	DW17-183	26,101	2/2/2018	\$ 10,000	S 10,000	Yes	S 10,000 S	\$ 10,000 \$	-	S -	Nashua	Yes	\$ 26.23	-
WTP Structural/HVAC	Replace Heat Exchanger, WTP Office	1917470	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	- S	8 328	\$ 8 328	Nashna	Yes	\$ 26.23	\$ 218 WTP Structural/HVAC project
Purchase new lab equipment	Purchase new lab equipment	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	\$ 18,500	Yes	\$ 18,500 \$	18,500 S	18,500	S -	Nashua	Yes	\$ 26.23	Reduced by purchase of HACH DR 900 below.
Purchase new lab equipment	HACH DR 900	1908450	DW17-183	26,101	2/2/2018	S -	S 1,500	Yes	S 1,500 S	1,500 S	1.500	\$ 1,435	Nashua	Yes	\$ 26.23	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	DW17-183	26,101	2/2/2018	\$ 10,000	S 10,000	Yes	S 10,000 S	3,256 \$	3,256	\$ -	Various	Yes	\$ 27.02	-
Miscellaneous Fencing and Security projects	WTP Perimeter Fence Carryover	1901608	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	6,744 S	6,744	\$ 6,744	Various	Yes	\$ 27.02	\$ 182
Purchase new vehicle for Water Supply Electrician	Purchase of a new vehicle for the Water Supply Electrician	1918314	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	s - s	32,400	\$ 28,897	Nashua	No	\$ 26.23	 Unbudgeted. Made necessary due to the premature retirement of 2 dept. vehicles.
Replace Ferric Chloride Feed pump	Replace Ferric Chloride Feed pump	1901613	DW17-183	26,101	2/2/2018	S -	S -	Yes	S - S	s - s	1,713	\$ 1,713	Nashua	Yes	\$ 26.23	\$ 45 Pump rebuild was determined to be best course.
Carbon media changeout-filters 1 & 2	Carbon media changeout-filters 1 & 2	1901614 & 1916780	DW17-183	26,101	2/2/2018	\$ 1,000,000	\$ 1,050,000	Yes	\$ 1,525,000 \$	\$ 975,000 \$	975,000	\$ 990,662	Nashua	Yes	\$ 26.23	over 6 month intervals. 8 of 12 filters to be replaced in 2019, remaining four filters to be replaced in Sprin, 2020.
Add 3rd pump at Main Dunstable Booster, replace 1 existing	Add 3rd pump at Main Dunstable Booster, replace 1 existing	n/a	DW17-183	26,101	2/2/2018		S -	Yes	S - S	- S	-	\$ -	Nashua	Yes	\$ 26.23	
Rebuild Main Dunstable pump #1	Rebuild Pump #1, Main Dunstable, Nashua	1901615	DW17-183	26,101	2/2/2018	S -	S -	Yes		\$ 15,995 \$	15,995	\$ 15,995	Nashua	Yes	\$ 26.23	\$ 420
	Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning			26,101	2/2/2018											
Replace Kessler Farm booster pump package	to pit	n/a	DW17-183	20,101	2/2/2010	\$ 75,000	\$ 75,000	Yes	\$ 75,000 \$	75,000 \$	-	\$ -	Nashua	Yes	\$ 26.23	S - Project deferred until 2020
Stump Pond Subwatershed assessment	Stump Pond Subwatershed assessment	n/a	0.1 DSRR			\$ 25,000		No	\$ 25,000 \$	\$ 25,000 \$	25,000	\$ -	Merrimack	No	\$ 28.86	
Stump Pond Stormwater BMP	Stump Pond Stormwater BMP	1908373	0.1 DSRR			\$ 20,000	\$ 20,000	No	\$ 20,000 \$	\$ 20,000 \$	20,000	\$ 1,310	Merrimack		\$ 28.86	
Public Education -Watershed signage	Public Education -Watershed signage	n/a	0.1 DSRR			\$ 20,000		No	\$ 20,000 \$	\$ 20,000 \$	20,000		Merrimack		\$ 28.86	
Replace 2 Hach Turbidimeters and associated control module	Replace 2 Hach Turbidimeters and associated control module	1901618	DW17-183	26,101	2/2/2018	\$ 10,000	*y	Yes	\$ 10,000 \$	\$ 8,000 \$	8,001	\$ 7,978	1 THORIGH	Yes	\$ 26.23	
Camera System Upgrade	Carryover Costs from 2018 Project	1819073, 1900413	0.1 DSRR			S -	\$ 7,500	No	\$ 7,500 \$	7,500 \$	7,500	\$ 9,756	Nashua	Yes	\$ 26.23	
Dredging Feasibility Study	Carryover Costs from 2018 study	1807145, 1901939	0.1 DSRR			S -	\$ 24,600	No	\$ 24,600 \$	\$ 24,600 \$	24,600		Merrimack		\$ 28.86	
Source Water Protection Study	Carryover Costs from 2018 study	1901740	0.1 DSRR			S -	\$ 12,000	No	\$ 12,000 \$	\$ 12,000 \$	12,000	\$ 11,000	merrinee		\$ 28.86	
Aquatic Vegetation Assessment	Carryover Costs from 2018 study	1807147, 1906080	0.1 DSRR			S -	\$ 4,200	No	\$ 4,200 \$	\$ 4,200 \$	4,200	\$ 9,545	Merrimack	No	\$ 28.86	Study - Pay for with 0.1 DSRR
Fiber Conduit between WTP and Dist	Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing Comcast Ethernet line to one of the buildings	1901619	DW17-183	26,101	2/2/2018	\$ 40,000	\$ 40,000	Yes	\$ 40,000	\$ 36,000 \$	24,985	\$ 22,896	Nashua	Yes	\$ 26.23	\$ 601
Munis FER Enhancements	Munis FER Enhancements	n/a	DW17-183	26,101	2/2/2018	\$ 35,000	\$ 35,000	Yes	\$ 35,000 \$	\$ 35,000 \$	-	\$ -	Merrimack	No	\$ 28.86	 No upgrades enhancements will be completed in 2019.
Wireless Access Points for Main Office	Wireless Access Points for Main Office	n/a	DW17-183	26,101	2/2/2018	\$ 14,000	S -	Yes	S - S	s - s	-	\$ -	Merrimack	No	\$ 28.86	Monies moved to Veeam Backup Project.
KVM for Data Center	Keyboard Video Mouse for Data Center so that multiple servers can be accessed by one console without having to move the Monitor/Keyboards/ Mouse connections each time.	n/a	DW17-183	26,101	2/2/2018	s 2.500	s -	Yes	s - s	s - s	_	s -	Merrimack	No	\$ 28.86	
IOS Charging Station	Charging Station for multiple iPads to allow for upgrades across multiple devices concurrently.	n/a	DW17-183	26,101	2/2/2018	s 1200	s -	Yes	s - s	s - s	_	s -	Merrimack	No	\$ 28.86	
Digital Signage for Distribution	Digital Signage for Distribution allowing notices and schedules to be more prominently displayed	1908376	0.1 DSRR	26,101	2/2/2018	\$ 2,000	\$ 1,270	No	\$ 1,270 \$	\$ 1,270 \$	1,270	\$ -	Merrimack	No	\$ 28.86	
	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our		DW17-183	26,101	2/2/2018										20.00	-
VDI Pilot	environment	n/a				\$ 12,000	S -	Yes	\$ - \$	s - s	-	\$ -	Merrimack	No	\$ 28.86	\$ -
Misc Hardware	Misc Hardware	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	\$ 20,000	Yes	\$ 20,000 \$	\$ 16,153 \$	16,153	\$ -	Merrimack	No	\$ 28.86	
Misc Hardware	Mount in Vehicles	1908308	0.1 DSRR		1		\$ -	No	\$	1,397 \$	1,397	\$ 1,248	Merrimack	No	\$ 28.86	
Misc Hardware	2 iPad Pros for IS Testing	1908309	0.1 DSRR		- /- /	1	S -	No		3 2,450 \$	2,450	\$ 2,298	MCITIHIACK	No	\$ 28.86	
Misc Software	Misc Software	n/a	DW17-183	26,101	2/2/2018	\$ 12,000	+	Yes	\$ 12,000 \$	12,000 \$	12,000	\$ -	Merrimack	No	\$ 28.86	5 -
Website upgrades	Website upgrades	n/a	DW17-183	26,101	2/2/2018			Yes	\$ 8,000 \$	8,000 \$	8,000	\$ -	Merrimack	No	\$ 28.86	5 -
Implement Customer Balances over the phone	Implement Customer Balances over the phone	n/a	DW17-183	26,101	2/2/2018	\$ 4,000	\$ 25,500	Yes	\$ 25,550 \$	- S	-	\$ -	Merrimack	No	\$ 28.86	\$ - Deferred
Click Resource Assistant	Allow for the moving of customer Appointment from an generic resource to a named resource.	1907952	0.1 DSRR			\$ -	\$ 22,828	No	\$ 22,828 \$	\$ 22,828 \$	22,828	\$ 22,828	Merrimack	No	\$ 28.86	ş -
Database Server License for GIS and other Apps	Purchase Server license for Virtual Environment	1915920	DW17-183	26,101	2/2/2018	Ş -	\$ -	Yes	S - S	\$ 7,200 \$	7,200	\$ 7,305	Merrimack	No	\$ 28.86	Previously licensed software was not suitable for virtual environment.
Veeam Backup Software	Replacement of existing backup software due to exorbitant vendor fees to keep original system running.	1909216	0.1 DSRR			\$ -	\$ 25,550	No	\$ 25,550 \$	\$ 25,500 \$	25,500	\$ 15,530	Merrimack	No	\$ 28.86	ş -
New RCO Manager Computer	New RCO Manager Computer	1917001	0.1 DSRR			S -		No	S - S	- Is	2,800	\$ 1,797	Merrimack	No	\$ 28.86	Replace failed desktop computer.
Kessler Farm Tank Design	Kessler Farm Tank Design	1915117	0.1 DSRR	26,101	2/2/2018	s		No	9		50,000	\$ 36,355	Nashna	No	\$ 26.23	
Retainage	Payment of Retainage for projects that were used and useful in 2018.	1713117	DW17-183	26,101	2/2/2018	Š	s	Yes	9 . 9	148 006 S	174 418	\$ 33,586	ivasiiua	No	\$ 28.86	
Short term interest on the PWW Fixed Asset Line of Credit	Capitalized interest incurred on FALOC draws to fund 2019 Capex from 1/1/2019 thru 4/2/2020)	DW17-183	26,101	2/2/2018		Š	Yes	9 . 9	170,000 3	1/7,110	\$ 230,645	Various	No.	20.00	Treatming c pand in 2017 for 2010 QCI TTC projects.
Performance Management Platform Implementation & Technical Integration	Performance Management Platform Implementation & Technical Integration	1916551	DW17-183	-, -	2/3/2018		Š	Yes	9 . 9	3 13.804 S	13,804	\$ 230,043 \$ 13.804	THIOUS	No	\$ 28.86	· .
		1918363	DW17-183	26,101	2/3/2018		e	Yes	- 9	15,004 3	1.5,004	\$ 3,708		No	\$ 28.86	
Papercut MF Software for copiers	Papercut MF Software for copiers															

Total Projected PWW QCPAC Capex for 2019 -	\$ 16,832,524	\$ 14,898,170	\$ 17,169,748	\$ 16,704,314	\$ 16,072,602	\$ 15,374,227
Amount funded by SRF/DWGTF -	\$ 8,819,800	\$ 8,819,800	\$ 8,819,800	\$ 8,819,800	\$ 8,812,000	\$ 8,219,379
Amount to be funded by 2020 Bond Issue -	\$ 8,012,724	\$ 6,078,370	\$ 8,349,948	\$ 7,884,514	\$ 7,260,602	\$ 7,154,848

11/30/2019 12/31/2019
469,651 \$ 427,640 The 12/31/2019 0.1 DSRR amount has been increased by \$ 21,175 to reflect the Staff DR21 response indicating that of the project costs being funded with DWGTF is being funded with 0.1 DSRR monies.

2021 1-11 PWW QCPAC 2020 11-30-2020 Update Page 4 of 7 2019 PWW QCPAC Additions

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

				Board Approve	-d	Estimated Project	Estimated Project	Estimated Project	er .		QCPAC Eligible
Project Name/Description	Project Description	Work Order #	Financing Docket No. NHPUC Order No. Date of NHI	JC 2020 Capex Budget	QCPAC Eligit	Cost as of	Cost as of 9/30/2020	Cost as of 11/30/2020	Final Project cost as of 12/31/2020 Community Taxable	Tax Rate	Property Tax
New Services (10) Renewed Services (20)	Single Family, Owner Build, New Homes Replacement of failed services	20 workorders workorders	Future Financing Petition Future Financine Petition	\$ 50,0 \$ 110.0	00 Yes 00 Yes	\$ 25,000 \$ 60,000	\$ 25,000 \$ 75,000	\$ 31,09 \$ 68.05	0 Various Yes 2 Vorious Yes	\$ 27.5 \$ 27.5	12 \$ 840 S new services through 11/30/20. Projecting no additional new services by year end. 12 \$ 1.830 19 Renowed Services Installed through 11/30/2000. Projecting no additional replacements by end of year.
Hydrants (10) Gates (10)	Replacement of non functional hydrants (Run rate) (8 YTD) Replacement of Failed Gate Valves	30 & 31 workorders 12 & 13 workorders	Future Financing Petition Future Financing Petition	\$ 60,0		\$ 44,000 \$ 40,000	\$ 55,000 \$ 50,000		0 Various Yes 0 Various Yes	\$ 27.0 \$ 27.0	17 S 1 (81 10 Gates Renaired/Replaced through 11/30/2020. Projecting 1 more replacement by end of year.
Radios (560)	Replacement of out of Warrantee Failed Radios (280), New Meters for new customers (280)	54 workorders	Future Financing Petition Future Financine Petition	\$ 58,0	00 Yes	\$ 40,000 \$ 55,300	\$ 50,000	\$ 51,00	0 Various Yes	\$ 27.5	32 \$ 1,378 467 Radios Installed/Replaced through 11/30/2020. Projecting 40 more replacments by end of year
Meters (Growth) 5/8"-2" - Core & CWS (280) Meters 5/8"-6" - Replace faled meters - Core & CWS (200) Replace Mud sucker pump	Meters (Growth) 5/8"-2" - Core & CWS (280) Meters 5/8"-6" failed meters - Core & CWS (200) Replace 15+ vest old dirtch pump	50 workorders 50 workorders 2005200	Future Financing Petition Future Financing Petition	\$ 29.0 \$ 21,0	00 Yes Yes	\$ -			Various Yes	\$ 27.1 \$ 27.1 \$ 27.1	32 \$ - Total included in row above
Replacement Utility Truck	Replacement for #47 - 2006 Ford f-350, 130K miles Does not pass inspection Replacement for #76 - 2008 Ford F-350, 150K miles. Does not pass inspection	2006391	Future Financing Petition Future Financing Petition	\$ 70,0	00 Yes	\$ 70,000	\$ 70,000	\$ 70,00	0 Merrimack No	\$ 283	% \$.
Replacement Utility Truck Replacement Utility Truck	Replacment for #76 - 2008 Ford F-350, 150K miles, Does not pass inspection Replacement for #4 - 2010 Ford f-350, 140K miles Does not pass inspection	2006390 2006389	Future Financing Petition	\$ 70,0 \$ 70,0		\$ 70,000 \$ 70,000			0 Merrimack No 0 Merrimack No	\$ 283 \$ 283	
Valve Turner & Vac Truck Foreman's Truck	Replacement for #60 - 14 Year Vac Trailer w/excessive rot, will not pass inspection Replacement for #59 - 2011 International, 120K Miles, High Hours, Electrical, body issues.	n/a 2004436	Future Financing Petition Future Financing Petition	\$ 160,0 \$ 140.0		\$. \$ 140,000	\$. \$ 140,000	\$. \$ 140,00	Merrimack No Merrimack No	\$ 283 \$ 283	
Locker Room Benches @ Distribution Facility	Permanent Benches for Male & Female locker rooms	n/a	Future Financing Petition Future Financing Petition	\$ 7,5 \$ 7,5	00 Yes	\$ 7,500 \$ 7,500	\$ -	s .	Merrimack Yes	\$ 283 \$ 283	86 \$ - Defered until 2021 due to COVID19 delays
Locker Room Deep Wash Sinks Office Space for Const & Maint Supervisor	Deep stainless wash sinks to replace existing sinks in male & female locker rooms Permanent office space for Contruction & Maintenance Supervisor	n/a n/a	Future Financing Petition	\$ 12,0	00 Yes	\$ 12,000	s -		Merrimack Yes	\$ 283	86 \$ Deferred until 2020 due to COVID19 delays
Landscape improvements Automatic Entrance Gate @ Distribution Facility	Repair Hill Sides @ 16 DWH and overseed with erosion mix Reolace manual oute @ Distribution facility with automatic outre	n/a 2000718	Future Financing Petition 0.1 DSRR	\$ 12,0 \$ 10.0		\$ 12,000 \$ 10,000			0 Merrimack Yes Merrimack Yes	\$ 283 \$ 283	
Emergency Gas Detection Meters Replacement Equipment/Excavator Trailer	Emergency Gas Detection Meters Replacement Equipment/Excavator Trailer	2006033	Future Financing Petition Future Financing Petition	s .	Yes Yes	s .	\$ 10,411	\$ 10,41 \$ 19,45	1 Merrimack Yes	\$ 283	
Buyout Lease of HP T2530PS Large Format Printer (OPS) West Hollis Street Check Valve Pit	Buyout Lease of HP T2530PS Large Format Printer (OPS) Install at the intersection of W. Hollis St and Panther Dr.	n/s	Future Financing Petition Future Financing Petition	S - S 88,0	Yes	\$.	s .	\$ 6,99		\$ 283	86 \$ 202
NWS Improvements - Decrwood Dr. Northwest Blvd Loop	Install 1700 LF of 24 inch DI and new Fencino Add 3400 LF of 20 inch HDPE including RR ripe jacking	2000383 2000386	DWGTF DWGTF	\$ 125.0 \$ 40.0	00 Yes	\$ 140,000 \$ 25,000	\$ 140,000 \$ 25,000	\$ 86,00 \$ 18,50	0 Nashua Yes		23 \$ 2.256
NWS Improvements Veteran's Rd/Route 101A Loop	Add 2200 LF of 12 inch DIPCL to close two loop major dead ends	2000384	DWGTF DWGTF	\$ 125,0	00 Yes	\$ 125,000	\$ 125,000	\$ 125,00	0 Nashua Yes	\$ 26.3	23 \$ 3,279
NWS Improvements Tinker Road Paving and restoration Simon & Will Street - Paving	NWS Improvements Tinker Road Paving and restoration Simon & Will Street - Paving	2000385 2000387	Future Financing Petition	\$ 125,0 \$ 30,0	00 Yes	\$ 32,000 \$ 30,000	\$ 30,000	\$.	Nashua Yes	\$ 26.	23 \$ -
Garden Street - Final Paving City of Nashua Sewer - Lake Street	Garden Street - Final Paving Replace 2950 LF of 6 inch CI with 12 inch DIPCL (Paving)	2000388 2000378	Future Financing Petition	\$ 18,0 \$ 30,0	00 Yes 00 Yes	\$ 18,000 \$ 30,000	\$ 18,000 \$ 30,000		Nashua Yes Nashua Yes	\$ 26.3 \$ 26.3	23 \$
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	2000380	DWGTF Financing DW19-026 26,247 5/3/2019	\$ 140,3	Yes	\$ 192,109	\$ 192,109	\$ 192,10	9 Merrimack Yes	\$ 283	\$ 5,544
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	2000380	Future Financing Petition	\$ 221.6		\$ 247.891				\$ 283	Budget to be increased as a portion of site work for the Kessler Farm Tank was transferred to this project. Winning project b
Replace Kessler Farm booster pump package	Replace 31 year old package booster station pumps and piping. Complete Risk and Resilience Assessment and Emergency Response Plan as required by the	2000389	Future Financing Petition	\$ 75,0	Yes	\$ 178,000				\$ 26.	\$ 4,931 was higher than engineer's estimate.
Risk and Resilience Assessment and Emergency Response Plan Asset Management - GIS QA/QC ahead of NEW CMMS	Complete tisks and Resilience Assessment and Emergency Response Plan as required by the USEPA GIS QA/QC Ahead of NEW CMMS	2002053 1900414, 2000362	Future Financing Petition Future Financing Petition	\$ 120,0 \$ 40,0		\$ 120,000 \$ 40,000	\$ 120,000 \$ 40,000	\$ 120,00 \$ 40,00	0 Various No 0 Merrimack Yes	\$ 27.0 \$ 28.0	\$ -
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch DIPCL	2003423 2003422	Future Financing Petition Future Financing Petition	\$ 380,0 \$ 87,0	00 Yes	\$ 274,000 \$ 63,000	\$ 209,000 \$ 142,000		0 Nashua Yes	\$ 26.	23 \$ 7,239 Restoration work slated for 2021 was completed in 2020.
Hamilton Street Burritt Street Runnit Street	Replace 420 LF of 6 inch CI with 4 inch DIPCI. Replace 425 LF of 4 inch CI with 8 inch DIPCI. Replace 125 LF of 4 inch CI with 4 inch DIPCI.	2003420	Future Financing Petition Future Financing Petition	\$ 141,0 \$ 38,0	00 Yes	\$ 63,000 \$ 95,000 \$ 27,000	\$ 108,700		0 Nashua Yes	\$ 26.1 \$ 26.1 \$ 26.1	23 \$ 3,851
Buritt Street Verons Street Vannon Ava	Replace 125 LF of 4 inch CI with 4 inch DIPCI. Replace 675 LF of 6 inch CI with 8 inch DIPCI. Replace 250 LF of 6 inch CI with 8 inch DIPCI.	n/a n/a n/a	Future Financing Petition Future Financing Petition	\$ 226,0 \$ 83,0	00 Yes	\$ 27,000 \$ 162,000 \$ 62,000	\$ 173,900	\$ 205,10	0 Nashua Yes	\$ 26.	\$ 5,380 Required the use of temporary main that was not initially part of the design.
Sarasota Ave Amherst Dodge Rd Watermain Abandonment	Abandon Approx. 700 LF of AC Main, Transfer 2 services & 1 Hyd to parallel 8" DIPCL	n/a 2001229	Future Financing Petition	\$ 20,0		\$ 71,000				\$ 28.	
Kessler Farm Tank Replacement	water main Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2000379	0.1 DSRR	\$ 3,388,0	00 No	\$ 60,000	\$ 60,000		0 Nashua No	\$ 26.	23 \$. Design only. Construction deferred until 2021.
Replace Engineering Pickup Replace Engineering SUV #34	2020 Ford Escape SE - Replace Vehicle #101 2020 Ford Escape SE - Replace Vehicle #401	2006652 2006755	Future Financing Petition Future Financing Petition	\$ 35.0 \$ 30,0		\$ 35,000 \$ 30,000	\$ 24.431 \$ 23,474			\$ 283 \$ 283	
Investment in developer installed services at Ixannual revenue Asset Management Trimble R2 Units	Per tariff Add two new GPS units for additional staff	n/a 2003535	Future Financing Petition Future Financing Petition	\$ 60,0 \$ 24.0		\$ 84,000 \$ 24,000				\$ 27.0 \$ 28.0	
Merrimack River Pumping Station	Add third 350 horsepower pump and motor with variable frequency drive.	2003759	Future Financing Petition	\$ 260,0	00 Yes	\$ 360,000	\$ 600,000	\$ 600,00	0 Merrimack Yes	\$ 28.	Added Pump Station roof hatches and roofing to facilitate pump replacement in the future. Bid price received for new pump- happed pump from anticipated. Added Electrical system upgrades for code and redundency. There will be an additional \$1.40,000 of \$17.16 coperadiures to complete this project in 2021.
Crescent Street (sewer related)	Replace 250 LF of 4 inch CI and 96 LF of 1 1/4 inch CL with 150 LF of 4* PVC	2001230	Future Financing Petition	\$ -	Yes	\$ 44,700	\$ 33,600	\$ 39,00	0 Nashua Yes	\$ 26.	
Crescent Street (paving contribution) School Street	Replace 250 LF of 4 inch CI and 96 LF of 1 1/4 inch CL with 150 LF of 4* PVC Replace 400 LF of 4 inch CI with 680ff of 6 inch DIPCL (creates a looped system)	2003533	Future Financing Petition Future Financing Petition	s -	Yes Yes	\$ 8,000 \$ 244,000			0 Nashua Yes 0 Nashua Yes	\$ 26.3 \$ 26.3	\$ 393 Added due to Kessler Farm Tank deferral to 2021.
Fulton Street(Lake St Area PH2)	Replace 180 LF of 2" CL with 4" DIPCL - addition to Lake St Ph 2 project	2007556	Future Financing Petition Future Financing Petition	\$.	Yes	\$ 40,000	\$ 93,950	\$ 92.90	0 Nashua Yes	\$ 26.	23 S 2.437 Added due to Kessler Farm Tank deferral to 2021.
Manatee St (Lake St Area PH2) Ash St (Lake St Area PH2)	Replace 240 LF of 6 inch CI with 8" DIPCL, - addition to Lake St Ph 2 project Replace 480 LF of 6 inch CI with 8 and 6 inche DIPCL, - added to Lake StPh 2	2007543 2007540	Future Financing Petition Future Financing Petition	s -	Yes Yes	\$ 55,000 \$ 102,000				\$ 26.	
Fields Grove Crossing(Lake St Area PH2) Pine St (Lake St Area PH2) Manatee and Sarasota intersection work	Cross Grey park with 16* HDPE direction bore - 890 LF- added to Lake St Ph 2. Cut in tees for manatre and sarssora.	2007557 2007541	Future Financing Petition Future Financing Petition	s -	Yes Yes	\$ 60,000	\$ 60,000	\$ 20,00 \$ 31,50		\$ 26.3 \$ 26.3	
Ingalls St - complete in 2020	Emergency water main replacement - 175' of Galy (1921) replaced with 4" PVC	2007541	Future Financing Petition	\$.	Yes	\$ 38,000		\$ 37,00	0 Nashua Yes	\$ 26.	
Walnut St - water main (added to crescent/school st project)	Paving related to water main replacement - replace 56' of 12" CI and 230' of 8" CI (1925- unlined) with 286' of 12" DIP	2006558	Future Financing Petition	s .	Yes	\$ 70,000		\$ 84,00	Yes	\$ 26.	
Walnut St (paving contribution) Coburn Woods (all side streets)	Paving Contribution for paving in 2021 Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	2002685	Future Financing Petition Future Financing Petition	\$.	Yes Yes	\$ 20,000 \$ 900,000		\$ 118,00	Nashua Yes 0 Nashua Yes	\$ 26.	Added due to Kessler Farm Tank deferral to 2021. The majority of this project will be occurring in 2021 due to later than
Pennichuck Brook Ponds Aerial Survey	Pennichuck Brook Ponds Aerial Survey	2006039	Future Financing Petition	s -	Yes	ŝ .	s 21.700			\$ 26.	\$ 3,095 expected bid opening.
Upgrade SCADA historian software, new hardware Bowers Dam LOD response engineering	Upgrade SCADA historian software, new hardware Bowers Dam LOD response engineering	2000376 2000373	Future Financing Petition 0.1 DSRR	\$ 65,0 \$ 10,0		\$ 65,000 \$ 10,000			0 Nashua Yes	\$ 26.3	23 \$ 1,705
Harris LOD response engineering	Harris LOD response engineering	1907076, 2000375	0.1 DSRR 0.1 DSRR	\$ 20,0	00 No	\$ 20,000	\$ 20,000	\$ 20,00	0 Nashua/Merrimack No	\$ 27.	55 \$ -
Supply Pond LOD response engineering Rebuild Pump 1, Northwest, Nashua	Supply Pond LOD response engineering final costs for reinstallation and alignment	1907077, 2000374 1619402, 1701898,	U.I DNR Future Financing Petition	\$ 32,0 \$ 5.0		\$ 32,000 \$ 53,457				\$ 27.1 \$ 26.1	Previous Year work was instrumental in the completion of the rebuild of NW Pump #1, remaining \$50,000 for the rebuild of
New Vehicle for WS electrician	final costs for fit up of new truck purchased in 2019	1918550, 2000438 2000437	Future Financing Petition	\$ 3,0	00 Yes	\$ 3,000	\$ 3,000			\$ 26.	\$ 91 NWS Pump #2. See row 94 below.
MSDC payment to MWW	MSDC payment for MSDC gallons beyond that currently purchased	2009023	Future Financing Petition	s -	Yes	s -	s -	\$ 166,34	6 Various No	\$ 27.0	During 2020, PWW used 47,341 MSDC gallons beyond what had been purchased. 3,450 of the MSDC gallons were purchase with cash collected via MSDC tariff. The remaining 43,891 gallons were used by existing customers.
		60, 61, 62 & 63	Future Financing Petition								
Booster Pump replacement/rebuild Booster Pump replacement/rebuild	Booster Pump replacement/rebuild Replace Booster #1, Donald Street	workorders 2008275	Future Financing Petition	\$ 40,0 \$.	00 Yes Yes	\$ 40,000	\$ 35,000	\$ 25,00 \$ 6,00	0 Various Yes 0 Bedford	\$ 27.0	\$ 676 9 Booster Pumps Repaired/Replaced through 11/30/2020. 1 additional rebuilds projected by end of year.
Booster Pump replacement/rebuild Well Pump replacements	WTP Intermediate pump #2 electric motor rebuild Well Pump replacements	2007216 60, 61, 62 & 63	Future Financing Petition Future Financing Petition	\$ - \$ 15.0	Yes 00 Yes	\$ - \$ 10,000	\$ 12,644	\$ 12,64 \$ 5.02		\$ 26.3 \$ 27.3	
		workorders 60, 61, 62 & 63	Future Financing Petition	2 13,0			,	,	141045	7 213	\$ 136
Chemical Feed pump replacements Chemical Feed pump replacements	Chemical Feed pump replacements Rebuild Ferric Feed Pumps 2 & 3	workorders 2002269	Future Financing Petition	\$ 10,0 \$.	00 Yes Yes	\$ 6,757 \$ 3.243	\$ 3,500 \$ 3,243	\$ 4,93 \$ 3.24		\$ 27.0	 \$ 133 3 Chemical Pumps Repaired/Replaced through 11/30/2020. Projecting no additional chem pump replacements by end of yea \$ 88
Harris Dam raise earthen embankment, raise dike wall Misc. Structural Improvements	Harris Dam raise earthen embankment, raise dike wall Mise. Structural Improvements	n/a n/a	Future Financing Petition Future Financing Petition	\$ 965,0 \$ 20,0		\$. \$ 16,700	s .	s .	Nashua/Merrimack Yes Various Yes	\$ 27.1 \$ 27.1	
Misc. Structural Improvements	Replace Fire Alarm System Control Boards - Damaged by Lightning Strike	2006032	Future Financing Petition	\$ -	Yes	\$ -	\$ 15,120		0 Nashua Yes	\$ 26.	
Misc. Structural Improvements Miscollanous Equipment Prophered	Replace Maple Haven Pump Station Rood Miccollanguage Equipment Deschared	2008269	Future Financing Petition Future Financing Petition	\$ 17.5	Yes 00 Yes	\$ - \$ 8.437	\$. \$ 8.473	\$ 4,23	5 Deny Yes Nashua Yes	\$ 26.	\$.
Miscellaneous Equipment Purchased Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchused Replace Sewage Ejection Pump, Snow Station	n/a 2003515	Future Financing Petition	s 17,5	Yes	\$ 3,300	\$ 3,300	\$ 3,30	0 Nashua Yes	\$ 26.	23 \$ 87
Miscellaneous Equipment Purchased Miscellaneous Equipment Purchased	WTP Replace Filter-to-Waste Valve Replace Shidge Pump #2, WTP	1918552 2004525	Future Financing Petition Future Financing Petition	s -	Yes Yes	\$ 2,353 \$ 3,410				\$ 26.3 \$ 27.3	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	Future Financing Petition Future Financing Petition	\$ 30,0	00 Yes	\$ 8,500 \$ 9,500	\$ 8,500	s .	Various Yes	\$ 27.0	12 \$.
Miscellaneous SCADA/Electrical Miscellaneous SCADA/Electrical	Replace VFD, Pump #3 - High Pines Booster Install cellular SCADA device, HI and LO, Derey	2003512 2004180	Future Financing Petition	\$ -	Yes Yes	\$ 9,500 \$ 2,500				\$ 26.3	
Miscellaneous SCADA/Electrical Miscellaneous SCADA/Electrical	SCADA control system. Powder Hill. Donald St. Replace Intermediate Pump 3, VFD at WTP	2004989 2008126	Future Financing Petition Future Financing Petition	s -	Yes Yes	\$ 9,500 \$.	\$ 9,500 \$ -	\$ 9.50 \$ 5,50	0 Bedford Yes 0 Nashua Yes	\$ 27.0 \$ 26.0	12 \$ 257 26 \$ 144
Rebuild NWS booster pump #2	Rebuild NWS booster pump #2	2003436	Future Financing Petition Future Financing Petition	\$ 40,0	00 Yes	\$.	\$ 50,000 \$ 10,000	\$ 50,00	0 Nashua Yes	\$ 26.3	23 \$ 1,312
WTP Structural/HVAC Purchase new lab equipment	WTP Structural/HVAC Purchase new lab equipment	n/a n/a	Future Financing Petition	\$ 10,0 \$ 20,0	00 Yes	\$ 10,000 \$ 20,000	\$ 20,000			\$ 26.3	\$ 131
Missellaneous Fencing and Security projects Replace Vehicle 200	Miscellaneous Fencing and Security projects replace Vehicle 200	n/a n/a	Future Financing Petition Future Financing Petition	\$ 10,0 \$ 40.0		\$ 10,000 \$ 40,000		s .	Various Yes	\$ 27.0 \$ 26.0	12 S -
Replace Vehicle 201	Replace Vehicle 201	2004137	Future Financing Petition Future Financing Petition	\$ 55,0	00 Yes	\$ 55,000	\$ 55,000		0 Nashua No	\$ 26.3	23 \$.
Replace Vehicle 63 Repair/Replace Soffit and Fascia, Boat House Bldg.	Replace Vehicle 63 Repair/Replace Soffit and Fascia, Boat House Bldg.	n/a n/a	Future Financing Petition	\$ 40,0 \$ 30,0		\$ 40,000 \$ 30,000		5 -	Nashua No Nashua Yes	\$ 26.3 \$ 26.3	23 \$ - No contractors available. Deferred until 2021.
Carbon media changeout-filters 5 & 6 Install new Day Fuel Tank, Controller and related equip., FWPS Generator	Carbon media changeout-filters 5 & 6 Install new Day Fuel Tank, Controller and related equip., FWPS Generator	2003490 n/a	Future Financing Petition Future Financing Petition	\$ 500,0 \$ 75,0		\$ 500,000 \$ 75,000		\$ 450,00 \$ -		\$ 26.3 \$ 26.3	
SCADA PLC Replacements	SCADA PLC Replacements	n/a	Future Financing Petition Future Financing Petition	\$ 75,0	00 Yes	\$ 75,000	s -	\$.	Nashua Yes	\$ 26.3	23 \$ - Deferred until 2021.
Replace 2 Hach Turbidimeters and associated control module Rebuild Merrimack River pump #2	Reolace 2 Hach Turbidimeters and associated control module Rebuild Merrimack River pump #2	n/a 2008305	Future Financing Petition	\$ 10.0 \$ -	Yes	\$ 10,000 \$ -	\$ 18,000 \$ -	\$ 93,10	0 Merrimack Yes		% \$ 2,687
			0.1 DSRR		No		4	\$ 69,00	0 Merrimack/Nashua No	\$ 27.	55 \$ - Engineering Design Work only
Supply Pond Dam Modifications per NHDES LOD Harris Dam Raise Earthen Embankment, Dike wall	Engineering, Permitting, Design Services Engineering, Permitting, Design Services	2008270	0.1 DSRR	\$	No No		\$	\$ 90,00		\$ 27.	

Pennichuck Water Works, Inc. DW 20-020 Board Approved 2020 QCPAC Capital Expenditures 2/9/2020 Revised 6/16/2020 per Staff Tech DR-1 9/30/2020 Update 11/30/2020 Update

					Board Appro	oved		Estimated Project	Estimated Pro	oiect Esti	imated Project					QCPAC EN	ioible
Project Name/Description	Project Description	Work Order#	Financing Docket No. NHPUC Order No.	Date of NHPUC Order	2020 Cape: Budget	x	Eligible?	Cost as of 6/30/2020	Cost as of 9/30/2020		Cost as of 11/30/2020	Final Project cost as of 12/31/2020	Community	Taxable	Tax Rate (Property 7	Tax
Misc Hardware	Misc Hardware	n/a	Future Financing Petition		\$ 20	0,000 Y	(es	\$ 6,945	s	. s	1.500		Merrimack	No	\$ 28.8	5 \$	
Misc Hardware	Laptop Purchase for Regulatory Department - JK	2001987	Future Financing Petition		5	- 1	res .	\$ 1,660	\$ 1,	660 \$	1,660		Merrimack	No	\$ 28.8	5 \$	Purchase to accommodate work from home created by COVID19.
Misc Hardware	Lanton Purchase for Regulatory Department - CAH	2002761	Future Financing Petition		s	-)	(es	\$ 1,400	\$ L	400 S	1,400		Merrimack	No	\$ 28.8	5 \$	Purchase to accommodate work from home created by COVID19.
Misc Hardware	Laptop Purchase for onboarding employees (5)	2002930	Future Financing Petition		\$	- 1	res .	\$ 9,995	\$ 9,	995 \$	9,995		Merrimack	No	\$ 28.8	5 \$	Purchase to accommodate work from home created by COVID19.
Misc Hardware	Laptop Purchase for New Employee C. Harding	2005120	Future Financing Petition		\$	- 1	řes	s -	\$ 2,	491 \$	2,491		Merrimack	No	\$ 28.8	5 \$	 Purchase to accommodate work from home created by COVID19.
Misc Hardware	Spare Laptop Purchase	2005238	Future Financing Petition		\$	- 1	řes	s -	\$ 1,	005 \$	1,005		Merrimack	No	\$ 28.8	5 \$	 Purchase to accommodate work from home created by COVID19.
Misc Hardware	New Laptop for Accounting new hire - Payroll Admin	2006388	Future Financing Petition		\$	- 1	čes	s .	\$ 1,	160 \$	1,160		Merrimack	No	\$ 28.8	5 \$	 Purchase to accommodate work from home created by COVID19.
Misc Software	Misc Software	n/a	Future Financing Petition		\$ 12	2,000 Y	íes .	\$ 2,880	\$	- \$	-		Merrimack	No	\$ 28.8	5 \$	
Misc Software	Macola Development Environment for testing upgrade	2002276	Future Financing Petition		ŝ	- 1	čes	\$ 5.280	S 5.	.280 S	5.280		Merrimack	No	\$ 28.8	5 S	
Misc Software	Tyler Notify	2003317	Future Financing Petition		\$	- 1	čes	\$ 3,840	\$ 32	840 \$	3,840		Merrimack	No	\$ 28.8	5 \$	
Misc Software	MSL Server License for Munis Upgrade	2005976	Future Financing Petition		\$	- 1	čes	s .	\$ 6,	350 \$	6,350		Merrimack	No	\$ 28.8	5 \$	
Website upgrades	Website upgrades	n/a	Future Financing Petition		\$ 8	3,000 Y	/es	\$ 8,000	S	- s	-		Merrimack	No	\$ 28.8	5 \$	
Salmon Replacement at WTP	The server at WTP is over 7 years old and should be replaced. I am recommending to replace the server with a VM host for ease of use and reliability.	2003704	Future Financing Petition		\$ 15	5,000 Y	íes -	\$ 15,000	\$ 15,	,000 \$	15,000		Merrimack	No	\$ 28.8	s	
Additional UPS for Distribution Data Center	We are starting to leverage this datacenter more with more equipment. The current UPS is over subscribed and we need to protect everything in there.	2003493	Future Financing Petition		\$ 1	1,600 Y	r'es	\$ 1,600	\$ 1,	,600 \$	1,600		Merrimack	No	\$ 28.8	5	
Meraki Wireless AP's for WTP	The current AP's at WTP are tied into the wireless at HQ. We will be changing to the Maraki solution for HQ so these will need to be replaced.	2003426	Future Financing Petition		\$ 3	3,000 Y	r'es	\$ 3,000	\$ 3/	,000 \$	3,000		Merrimack	No	\$ 28.8	s	
Storage Replacement for PS6110 Array	Nimble addon shelf – 33tb usable	2003425	Future Financing Petition		\$ 57	7,000	res .	\$ 30,000	\$ 30,	000 \$	30,000		Merrimack	No	\$ 28.8	5 \$	
Vecam Backup of O365	Backup documents stored in the cloud within Office 365.	n/a	Future Financing Petition		\$ 2	2,000	res .	s .	\$ 2,	000 \$	2,000		Merrimack	No	\$ 28.8	5 \$	
Client Remote Control Software	5 licenses	n/a	Future Financing Petition		\$ 1	1,300 Y	res .	s .	\$ 1,	300 \$	1,300		Merrimack	No	\$ 28.8	5 \$	
CMMS replacment project (Estimate)	Replace Synengen/WAM with newer more cost effective/improved functionality system	2000368	Future Financing Petition		\$ 600	0,000	í'es	\$ 600,000	\$ 600,	,000 \$	450,000		Nashua	Yes	\$ 26.2	3 \$ 1	11,804 Project implementation has been slowed due to COVID19. Project \$\$ not used in 2020 will carry over into 2021.
New Building - Cable Management in Server Room	Rack/Ladder/Patch Panels/Cable Management/KVM	2001988	0.1 DSRR		\$ 6	5,700	No	\$ 5,560	\$ 5,	,560 \$	5,560		Nashua	Yes	\$ 26.2	3 \$	146
New Building - Facility Secure Access/Surveillance	Doors and elevator security/Cameras	2001988	0.1 DSRR		\$ 78	3,300	No	\$ 140,000	\$ 1400	.000 \$	140,000		Nashua	Yes	\$ 26.2	3 S	3,672
New Building - Audio/Visual	Boardroom and Conference Rooms	2001988	0.1 DSRR		\$ 11	1,500	No	\$ 29,000	\$ 292	,000 \$	29,000		Nashua	Yes	\$ 26.2	3 \$	761
New Building - Server Room Networking	Routers/Switches/Racks/Patch Panels	2001988	0.1 DSRR		\$ 19	2,000	No	\$ 12,800	\$ 12,	800 \$	12,800		Nashua	Yes	\$ 26.2	3 \$	336
New Building - Wireless	Wireless Access Points for Main Office	2001988	0.1 DSRR		\$ 13	5,000	No	\$ 10,200	\$ 10,	200 \$	10,200		Nashua	Yes	\$ 26.2	3 \$	268
New Building - AMR Equipment Room	UPS/Rack/Patch Panel/Switch/Transceiver	2001988	0.1 DSRR		\$ 6	5,800	No	\$ 6,800	\$ 6,	800 \$	6,800		Nashua	Yes	\$ 26.2	3 \$	178
New Building - Phone System	Replacement of existing Phone sytem. New system will not work with existing hardware	TBD	0.1 DSRR		\$ 70),000	No	\$ 60,000	\$ 60,	,000 \$	60,000		Nashua	Yes	\$ 26.2	3 \$	1,574
New Building - Cubicles	Cubicles for new headquarters	2001988	0.1 DSRR		\$ 65	5,000	No	\$ 80,000		.000 S	80,000		Nashua	Yes	\$ 26.2		2,008 Increase in cost due to increasing height of cubicle walls from 65" to 84". Wall height changed to create social distance barrier.
New Building - Appliances	Appliances (Refridgerator, dishwasher, microwaves, etc)	2001988	0.1 DSRR		\$ 7	7,000	No	\$ 5,500	\$ 5,	500 \$	5,500		Nashua	Yes	\$ 26.2	3 \$	144
New Building - relocation of Genset to New Office location	New Building - relocation of Genset to New Office location	2001988	0.1 DSRR		\$ 60	0,000	No	\$ 140,000	\$ 1400	.000 \$	140,000		Nashua	Yes	\$ 26.2	3 S	3.672 Generator at existinio buildino not laroe enough to nower new buildino. New generator required.
			0.1 DSRR														
New Building - Office Furniture	New Building - Office Furniture	2001988	Future Financing Petition		\$ 10),000	No	\$ 18,000		000 \$	18,000		Nashua	Yes	\$ 26.2		472 Increase over budget created by a determination to purchase more "sit/stand" desks than in original budget.
JAMF - IOS mobile Management	Software configuration support for JAMF product.	2004171	Future Financing Petition		\$ 6	5,000 Y	řes .	\$ 6,000	\$ 6,	000 \$	6,000		Merrimack	No	\$ 28.8	5 \$	-
Document Management	Software to allow for document tracking and flow management (Accounting).	n/a	Future Financing Petition		\$ 8	3,000 Y	řes	\$ 5,400	\$ 5,	,400 \$	-		Merrimack	No	\$ 28.8	5 \$	•
Click Software move to MS sql	Move Click Database from Oracle to MS sql in order to retire Oracle after the WAM replacement project is complete.	2003421	Future Financing Petition		\$ 45		ľes	\$ 19,500		,500 \$	19,500		Merrimack	No	\$ 28.8		·
Lemon Street, Final Restoration	2020 Carryover Costs	2000693	Future Financing Petition		Ś		čes	\$ 1,500		.500 S	1.500		Nashua	Yes	\$ 26.2		39 Not included in annoved 2020 Budget.
Lowell Street, Final Restoration	2020 Carryover Costs	2000694	Future Financing Petition		\$		íes .	\$ 2,500		500 \$	2,500		Nashua	Yes	\$ 26.2		66 Not included in approved 2020 Budget.
West Pearl Street, Final Restoration	2020 Carryover Costs	2000695	Future Financing Petition		\$		řes .	\$ 12,750	\$ 12,	750 \$	12,750		Nashua	Yes	\$ 26.2		334 Not included in approved 2020 Budget.
Retainage	Paid out in 2020 on retainage held on 2019 projects	N/A	Future Financing Petition Future Financine Petition		S	- 1		\$ -	S	- \$	162,383		Nashua	Yes	\$ 26.2		4,259
Retainage	Held on various projects listed above. Will be paid out in 2021	N/A			5		čes	S -	\$	- \$	(54,805)		Nashua	Yes	\$ 26.2		(1,438)
FALOC interest	Intrest accrued on PWW FALOC from 5/1/2020 to 4/1/2021		Future Financing Petition		\$		řes	5 -	5	- \$	70,000		Various	No	\$ 27.00		Projected interest accrued on FALOC \$\$ for funding of 2020 Capex projects
Elm Street, Final Restoration	2020 Carryover Costs	2000696	Future Financing Petition		ŝ		íes .	\$ 21.750		.750 \$	21.750		Nashua	Yes	\$ 26.2		571 Not included in approved 2020 Budget.
Warren Street, Final Restoration	2020 Carryover Costs	2000697	Future Financing Petition		\$	- '	řes	\$ 1,500	\$ 1,	500 \$	1,500		Nashua	Yes	\$ 26.2	3 \$	39 Not included in approved 2020 Budget.

				0.1 DSRR Funded project Total -	s	409,300	\$ 569,860	8	639,860	s	629,860
			Total Pr	rojected PWW QCPAC Capex for 2020 -	\$	9,766,400	\$ 6,682,514	\$	6,157,562	\$	6,542,055
			Total Projected PWW QCP.	AC Capex for 2020 funded with Bonds -	\$	9,211,025	\$ 6,168,405	\$	5,643,453	\$	5,994,446
	Total Projected PWV	QCPAC Cap	pex for 2020 funded with Drinking	g Water and Groundwater Trust Fund -	\$	555,375	\$ 514,109	\$	514,109	\$	547,609
			Project Annual	P&I on 2020 QCPAC eligible Projects -	\$	628,935	\$ 428,798	\$	394,649	\$	419,276
Estimated Bond Terms (Be	onds to be sold in April 2021) -	30	Years @	5.0%	\$	599,190	\$ 401,264	\$	367,115	\$	389,947
	DWGTF Terms -	30	Years @	3.38%	\$	29,744	\$ 27,534	\$	27,534	s	29,328

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

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	2021 Approved Budgeted Amount, Revised to reflect 2020 QCPAC activity	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 2/9/2020
2021 New Services (10)	Single Family, Owner Build, New Homes		Fut	ire Financing Pet	tion	\$ 50,000	Yes	Various	Yes	\$ 27.02	\$ 1,351	
2021 Renewed Services (20)	Replacement of Failed Services		Fut	are Financing Peti	tion	\$ 110,000	Yes	Various	Yes	s 27.02	s 2.972	
2021 Hydrants (10)	Replacement of non-functional hydrants.		Fut	are Financing Pet	tion	\$ 60,000	Yes	Various	Yes	\$ 27.02		
2021 Gates (10)	Replacement of Failed Gate Valves.			ire Financing Pet		\$ 40,000	Yes	Various	Yes	\$ 27.02		
2021 Gaics (10) 2021 Radios (4000)	Begin 7 year replacement of all PWW radios (all initial radios installed in 2007).			ire Financing Pet		\$ 520,000	Yes	Various	Yes	\$ 27.02		
2021 Matters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (280). Replacement of failed meters (200).			are Financing Pet		\$ 50,000	Yes	Various	Yes	\$ 27.02		
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles			are Financing Pet		\$ 70,000	Yes	Merrimack	No	\$ 28.86		
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles			are Financing Pet		\$ 70,000	Yes	Merrimack	No	\$ 28.86	ę	
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles			ire Financing Pet		\$ 35,000	Yes	Merrimack	No	\$ 28.86	\$ -	
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles			ire Financing Pet		\$ 35,000	Yes	Merrimack	No	\$ 28.86	Ÿ	
Protectus Meter Upgrade	Protectus Meter Unwade		1 44	0.1 DSRR	uon	\$ 22,000	Yes	Merrimack	No	\$ 28.86		
Protectus victer Opgrade	- content of partner			0.1 D3KK		\$ 22,000	105	Metrinack	100	\$ 40.00		
Kessler Farm Tank Replacement	Replaced 4 MG painted steel water tank with 4 MG prestressed, precast water tank.	2000379		are Financing Pet		\$ 3,328,000	Yes	Nashua	Yes	\$ 26.23	\$ 87,293	Construction deferred from 2020 to 2021.
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch DIPCL			are Financing Pet		\$ 42,000	Yes	Nashua	Yes	\$ 26.63		
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL			are Financing Pet		\$ 7,000	Yes	Nashua	Yes	\$ 26.63		
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL			are Financing Pet		\$ 15,000	Yes	Nashua	Yes	\$ 26.63		
Burritt Street	Replace 125 LF of 4 inch CI with 4 inch DIPCL		Fut	are Financing Pet	tion	\$ 4,000	Yes	Nashua	Yes	\$ 26.63	\$ 107	
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL		Fut	are Financing Pet	tion	\$ 15,000	Yes	Nashua	Yes	\$ 26.63		
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL		Fut	are Financing Peti	tion	\$ 9,000	Yes	Nashua	Yes	\$ 26.63	\$ 240	
Linwood Street	Replace 960 LF of 6 inch CI with 8 inch DIPCL.		Fut	are Financing Pet	tion	\$ 284,000	Yes	Nashua	Yes	\$ 26.63	\$ 7,563	
Balcom Street	Replace 1240 LF 6 inch CI with 1240 LF 8 inch DIPCL.		Fut	are Financing Pet	tion	\$ 368,000	Yes	Nashua	Yes	\$ 26.63	\$ 9,800	
Euclid Avenue	Replace 425 LF 6 inch CI with 425 LF 8 inch DIPCL.		Fut	are Financing Pet	tion	\$ 126,000	Yes	Nashua	Yes	\$ 26.63	\$ 3,355	
Fairview Street	Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL.		Fut	are Financing Pet	tion	\$ 237,000	Yes	Nashua	Yes	\$ 26.63	\$ 6,311	
Temple St (south to gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL.		Fut	are Financing Pet	tion	\$ 329,000	Yes	Nashua	Yes	\$ 26.63	\$ 8,761	
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL.		Fut	are Financing Pet	tion	\$ 135,000	Yes	Nashua	Yes	\$ 26.63	\$ 3,595	
Replace Engineering Pickup	Replace Engineering Pickup with > 150,000 Miles.		Fut	are Financing Pet	tion	\$ 36,000	Yes	Nashua	No	\$ 26.63	S -	
Replace Engineering SUV	Replace Engineering SUV with > 150,000 Miles.		Fut	are Financing Pet	tion	\$ 30,000	Yes	Nashua	No	\$ 26.63	S -	
Milford Booster Station	Replace/Relocate/Upgrade the Milford Booster Station (>2MGD).		Fut	are Financing Pet	tion	\$ 660,000	Yes	Amherst	Yes	S 26.63	\$ 17.576	
Investment in developer installed services	1x annual revenue per tariff.		Fut	are Financing Pet	tion	\$ 60,000	Yes	Various	Yes	\$ 27.02	\$ 1,621	
2020 Nashua City Sewer Projects	To be detremined.		Fut	are Financing Peti	tion	\$ 1,100,000	Yes	Nashua	Yes	S 26.63	\$ 29,293	
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild.		Fut	are Financing Pet	tion	\$ 55,000	Yes	Various	Yes	s 27.02	\$ 1,486	
Well Pump replacements	Well Pump replacements		Fut	are Financing Pet	tion	\$ 18,750	Yes	Various	Yes	s 27.02	\$ 507	
Chemical Feed pump replacements	Chemical Feed pump replacements		Fut	are Financing Peti	tion	\$ 15,000	Yes	Various	Yes	s 27.02	\$ 405	
Supply Pond Spillway Improvements	Supply Pond Spillway Improvements		Fut	are Financing Pet	tion	\$ 750,000	Yes	Merrimack/Nashua	Yes	s 27.55	\$ 20,663	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS.		Fut	are Financing Pet	tion	\$ 18,750	Yes	Various	Yes	s 27.02	\$ 507	
Misc. Structural Improvements	Misc Structural Improvements		Fut	ire Financing Pet	tion	s 27 500	Yes	Various	Yes	S 27.02	\$ 743	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		Fut	are Financing Peti	tion	\$ 17,500	Yes	Various	Yes	s 27.02	\$ 473	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		Fut	are Financing Pet	tion	\$ 27,500	Yes	Various	Yes	s 27.02	\$ 743	
Well Rehabilitation	Well Rehabilitation		Fut	ire Financing Pet	tion	\$ 40,000	Yes	Various	Yes	s 27.02	\$ 1.081	
WTP Structural/HVAC	WTP Structural/HVAC		Fut	are Financing Pet	tion	\$ 7,500		Nashua	Yes	S 26.63		
Purchase new lab equipment	Purchase new lab equipment			are Financing Pet		\$ 15,000	Yes	Nashua	Yes	\$ 26.63		
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		Fut	are Financing Peti	tion	\$ 7,500	Yes	Various	Yes	\$ 27.02		
Replace Vehicle	Replace Vehicle			ire Financing Pet		\$ 65,000	Yes	Nashua	No	\$ 26.63		
Replace Vehicle	Replace Vehicle			are Financing Pet		\$ 65,000	Yes	Nashua	No	\$ 26.63		
Replace Vehicle	Replace Vehicle			ire Financing Pet		\$ 40,000	Yes	Various	No	\$ 28.85		
Replace Vehicle	Replace Vehicle			are Financing Pet		\$ 40,000	Yes	Nashua	No	\$ 26.63		
Bowers Spillway Reconstruction	NHDES Regulatory requirement			are Financing Pet		\$ 1,100,000	Yes	Merrimack/Nashua	Yes	\$ 27.55		
Various IT intiatives	Various IT intiatives		1	0.1 DSRR		\$ 400,000	Yes	Nashua	No	\$ 26.63		
Valious 11 inuauves		ck Water Works Pro					1 (2)	Projected Prope				

Total Projected PWW QCPAC Capex for 2021 (less 0.1 DSRR)- \$ 10,135,000

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