

**TOWN ADMINISTRATOR PROPOSED  
2020-2029 CAPITAL IMPROVEMENT PROGRAM**

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
95	<b>WATER FUND</b>										
96	Town/UNH Shared Water System Improvements	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
97	Dover Road 8" Water Main	400,000									
98	Water Extension - Dover Road to Bagdad/Canney Road	15,000		840,000							
99	Wiswall Dam Spillway			490,000							
100	Backhoe Replacement (Cost split w/Oper. & WW)			26,500							
101	One Ton Utility Truck Replacement			40,000							
102	Madbury Road Water Line Replacement				2,645,000						
	<b>WATER FUND TOTALS</b>	<b>\$485,000</b>	<b>\$70,000</b>	<b>\$1,466,500</b>	<b>\$2,715,000</b>	<b>\$70,000</b>	<b>\$70,000</b>	<b>\$70,000</b>	<b>\$70,000</b>	<b>\$70,000</b>	<b>\$70,000</b>

# **CAPITAL IMPROVEMENT PROGRAM**

<b>PROJECT YEAR</b>	2020 - 2029	<b>PROJECT COST</b>	\$70,000
<b>DESCRIPTION</b>	Town/UNH Shared Water System Improvements	<b>DEPARTMENT</b>	Public Works - Water
<b>IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)</b>			
Department Initiative			
<b>DESCRIPTION (TO INCLUDE JUSTIFICATION)</b>			
<u>2020</u> - New Watermain for South Road to connect loop to main feed from WTP - \$70,000 <u>2021</u> - Main St. from Leavitt to Mast Road, Increasing 10" to 12" - \$70,000 <u>2022</u> - Connecting 12" Mains from Strafford Ave to Woodsides from Edgewood - \$70,000 <u>2023</u> - Connecting 12" Mains on Main St in front of NH Hall - \$70,000			
*Estimated costs are Town's Share of 1/3 of the total cost estimated at \$210,000 per year			
<b>ESTIMATED COSTS:</b>	<b>PRELIMINARY STUDY, DESIGN AND ENGINEERING</b>	\$	-
	<b>FINAL DESIGN AND ENGINEERING</b>	\$	-
	<b>CONSTRUCTION ENGINEERING OVERSIGHT</b>	\$	-
	<b>CONSTRUCTION COSTS</b>	\$	70,000
	<b>CONTINGENCY</b>	\$	-
	<b>TOTAL PROJECT COST</b>	\$	70,000
<b>FINANCING</b>	<b>OPERATING BUDGET</b>	\$	70,000
	<b>UNH - CASH</b>	\$	-
	<b>BOND - TOWN PORTION</b>	\$	-
	<b>FEDERAL/STATE GRANT</b>	\$	-
	<b>CAPITAL RESERVE ACCOUNT</b>	\$	-
	<b>TOTAL FINANCING COSTS</b>	\$	70,000
<b>IF BONDED:</b>	<b>NUMBER OF YEARS</b>	N/A	
	<b>TOTAL PRINCIPAL</b>	\$	-
	<b>TOTAL INTEREST</b>	\$	-
	<b>TOTAL ESTIMATED COST</b>	\$	-



# **CAPITAL IMPROVEMENT PROGRAM**

<b>PROJECT YEAR</b>	2020	<b>PROJECT COST</b>	\$400,000
<b>DESCRIPTION</b>	<i>Dover Road 8" Water Main</i>	<b>DEPARTMENT</b>	<i>Public Works - Water</i>
<b>IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)</b>			
Department Initiative			
<b>DESCRIPTION (TO INCLUDE JUSTIFICATION)</b>			
<p>New 8" water main to be included with Dover Road Force Main Upgrade Project. Additional funding of \$400,000 is needed to complete Bid Alt A and Bid Alt B from Sargent Corportation Dover Road Force Main Bid dated 07/11/19 which would construct a new water main from Route 108 to the WWTP parallel to the newly constructed force main. Completing this project now would take advantage of current bid prices with a contractor already on site.</p>			
<b>ESTIMATED COSTS:</b>	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-
	FINAL DESIGN AND ENGINEERING	\$	-
	CONSTRUCTION ENGINEERING OVERSIGHT	\$	-
	CONSTRUCTION COSTS	\$	400,000
	CONTINGENCY	\$	-
	<b>TOTAL PROJECT COST</b>	\$	<b>400,000</b>
<b>FINANCING</b>	OPERATING BUDGET	\$	-
	UNH - CASH	\$	-
	BOND - TOWN PORTION	\$	400,000
	FEDERAL/STATE GRANT	\$	-
	CAPITAL RESERVE ACCOUNT	\$	-
	<b>TOTAL FINANCING COSTS</b>	\$	<b>400,000</b>
<b>IF BONDED:</b>	NUMBER OF YEARS		7
	TOTAL PRINCIPAL	\$	400,000
	TOTAL INTEREST	\$	44,000
	<b>TOTAL ESTIMATED COST</b>	\$	<b>444,000</b>



# **CAPITAL IMPROVEMENT PROGRAM**

<b>PROJECT YEAR</b>	2020	<b>PROJECT COST</b>	\$15,000
<b>DESCRIPTION</b>	Water Extension	<b>DEPARTMENT</b>	Public Works - Water
<b>IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)</b>			
Department Initiative			
<b>DESCRIPTION (TO INCLUDE JUSTIFICATION)</b>			
Initial Geotechnical Study for project to loop the existing water line on Dover Road at Stone Quarry Drive to the existing water line @ Bagdad Road/Canney Road.			
<b>ESTIMATED COSTS:</b>	<b>PRELIMINARY STUDY, DESIGN AND ENGINEERING</b>	\$	15,000
	<b>FINAL DESIGN AND ENGINEERING</b>	\$	-
	<b>CONSTRUCTION ENGINEERING OVERSIGHT</b>	\$	-
	<b>CONSTRUCTION COSTS</b>	\$	-
	<b>CONTINGENCY</b>	\$	-
	<b>TOTAL PROJECT COST</b>		
<b>FINANCING</b>	<b>OPERATING BUDGET</b>	\$	15,000
	<b>UNH - CASH</b>	\$	-
	<b>BOND - TOWN PORTION</b>	\$	-
	<b>UNH PORTION</b>	\$	-
	<b>FEDERAL/STATE GRANT</b>	\$	-
	<b>CAPITAL RESERVE ACCOUNT</b>	\$	-
	<b>TOTAL FINANCING COSTS</b>	\$	15,000
<b>IF BONDED:</b>	<b>NUMBER OF YEARS</b>		N/A
	<b>TOTAL PRINCIPAL</b>	\$	-
	<b>TOTAL INTEREST</b>	\$	-
	<b>TOTAL ESTIMATED COST</b>	\$	-



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR		2022	PROJECT COST		\$840,000
DESCRIPTION		Water Extension	DEPARTMENT Public Works- Water		
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)					
Department Initiative					
DESCRIPTION (TO INCLUDE JUSTIFICATION)					
This project loops the existing water line on Dover Road at Stone Quarry Drive to the existing water line @ Bagdad Road/Canney Road. This new loop enhances water pressure to this area. 2,000 linear feet @ \$323/FT Construction Cost					
ESTIMATED COSTS:					
		PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-	
		FINAL DESIGN AND ENGINEERING	\$	194,000	
		CONSTRUCTION ENGINEERING OVERSIGHT	\$	-	
		CONSTRUCTION COSTS	\$	646,000	
		CONTINGENCY	\$	-	
		TOTAL PROJECT COST	\$	840,000	
FINANCING					
		OPERATING BUDGET	\$	-	
		UNH - CASH	\$	-	
		BOND - TOWN PORTION	\$	840,000	
		UNH PORTION	\$	-	
		FEDERAL/STATE GRANT	\$	-	
		CAPITAL RESERVE ACCOUNT	\$	-	
		TOTAL FINANCING COSTS	\$	840,000	
IF BONDED:					
		NUMBER OF YEARS		20	
		TOTAL PRINCIPAL	\$	840,000	
		TOTAL INTEREST	\$	161,700	
		TOTAL ESTIMATED COST	\$	1,001,700	



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR		2022	PROJECT COST		\$490,000	
DESCRIPTION		Wiswall Dam Spillway	DEPARTMENT			Public Works - Water
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)						
NHDES Mandated						
DESCRIPTION (TO INCLUDE JUSTIFICATION)						
The Wiswall Dam was constructed in 1912 and although the abutments have been rehabilitated, including complete replacement of the left abutment in 2011, the spillway has not had any attention in all these years. Part of the 2011 Wiswall Dam Repair and Fishladder Project was to include repair of the dam's spillway and installation of rock anchors in the dam's spillway to improve the dam's stability and reduce the risk of failure. During the 2011 construction it was determined rock anchor installation could not be performed as designed due to the presence of large boulders cast into the spillway's concrete. A geotechnical investigation conducted in July 2012, which included the extraction of two core samples into the spillway confirmed the presence of the boulders and provided concrete strength values needed for the design of the stability solution. The 2014 CIP included \$70,000 for preliminary design and the 2015 CIP included \$90,000 for final design and permitting.						
**\$70,000 (bond) was approved in 2014 and \$90,000 (bond) approved in 2015 towards this project.**						
ESTIMATED COSTS:		PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-		
		FINAL DESIGN AND ENGINEERING	\$	-		
		CONSTRUCTION ENGINEERING OVERSIGHT	\$	-		
		CONSTRUCTION COSTS	\$	490,000		
		CONTINGENCY	\$	-		
		TOTAL PROJECT COST	\$	490,000		
FINANCING		OPERATING BUDGET	\$	-		
		UNH - CASH	\$	-		
		BOND - TOWN PORTION	\$	490,000		
		FEDERAL/STATE GRANT	\$	-		
		CAPITAL RESERVE ACCOUNT	\$	-		
		TOTAL FINANCING COSTS	\$	490,000		
IF BONDED:		NUMBER OF YEARS		10		
		TOTAL PRINCIPAL	\$	490,000		
		TOTAL INTEREST	\$	68,600		
		TOTAL ESTIMATED COST	\$	558,600		



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	2022	PROJECT COST	\$26,500
DESCRIPTION	Backhoe Replacement	DEPARTMENT	Public Works- Operations, Water, WW
DESCRIPTION (TO INCLUDE JUSTIFICATION):			
<p>Replace the 2006 JCB 4 Wheel Drive Backhoe. This piece of equipment is scheduled for replacement in 2022. The 2006 JCB was on a 12 year replacement schedule, however with the purchase of the rubber tired excavator in 2013, we were able to push this out further due to the excavator picking up a good percentage of the jobs. The machine is an essential piece of equipment for all Public Works Divisions and programs and is used year round. FUNDING: 50% Operations (\$53,000), 25% Water (\$26,500), 25% Wastewater (\$26,500 of which is 2/3 funded by UNH) will fund this purchase.</p>			
ESTIMATED COST	PURCHASE PRICE	\$	26,500 Water Fund Portion Only
	ACCESSORIES*	\$	-
	LESS TRADE-IN**	\$	-
	NET PURCHASE PRICE	\$	26,500
	*Accessories include lighting, radios, striping, misc. equipment.		
FINANCING	OPERATING BUDGET	\$	-
	UNH - CASH	\$	-
	BOND - TOWN PORTION	\$	26,500
	FEDERAL/STATE GRANT	\$	-
	CAPITAL RESERVE ACCOUNT	\$	-
	TOTAL FINANCING COSTS	\$	26,500
IF BONDED:	NUMBER OF YEARS		7
	TOTAL PRINCIPAL	\$	26,500
	TOTAL INTEREST (EST'D)	\$	3,180
	TOTAL PROJECT COST	\$	29,680



# CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	2022	VEHICLE COST	\$40,000																		
DESCRIPTION	1-Ton Utility Truck Replacement	DEPARTMENT	Public Works - Water																		
DESCRIPTION (TO INCLUDE JUSTIFICATION):																					
<p>Replace the Water Division's 2012 Ford 1-ton utility truck.</p> <p>The current vehicle is a 2012 and on a 10 -12 year replacement schedule. Current unit is the only service vehicle in the Water Division and will have approximately 145,000 miles in 2022. This vehicle is equipped with numerous tools and equipment, such as a generator and a 2 ton crane.</p> <p>According to the New England Water Works Association equipment replacement survey 2022 is the optimum time to replace this piece of equipment. We anticipate a \$4,500 trade in.</p>																					
Vehicle to be Replaced: 2012 Ford Utility Truck																					
ESTIMATED COST	<table><tr><td>PURCHASE PRICE</td><td>\$</td><td>43,500</td></tr><tr><td>ACCESSORIES*</td><td>\$</td><td>1,000</td></tr><tr><td>LESS TRADE-IN**</td><td>\$</td><td>(4,500)</td></tr><tr><td>NET PURCHASE PRICE</td><td>\$</td><td>40,000</td></tr></table> <p>*Accessories include lighting, radios, striping, misc. equipment.</p>			PURCHASE PRICE	\$	43,500	ACCESSORIES*	\$	1,000	LESS TRADE-IN**	\$	(4,500)	NET PURCHASE PRICE	\$	40,000						
PURCHASE PRICE	\$	43,500																			
ACCESSORIES*	\$	1,000																			
LESS TRADE-IN**	\$	(4,500)																			
NET PURCHASE PRICE	\$	40,000																			
FINANCING	<table><tr><td>OPERATING BUDGET</td><td>\$</td><td>-</td></tr><tr><td>UNH - CASH</td><td>\$</td><td>-</td></tr><tr><td>BOND - TOWN PORTION</td><td>\$</td><td>40,000</td></tr><tr><td>FEDERAL/STATE GRANT</td><td>\$</td><td>-</td></tr><tr><td>CAPITAL RESERVE ACCOUNT</td><td>\$</td><td>-</td></tr><tr><td>TOTAL FINANCING COSTS</td><td>\$</td><td>40,000</td></tr></table>			OPERATING BUDGET	\$	-	UNH - CASH	\$	-	BOND - TOWN PORTION	\$	40,000	FEDERAL/STATE GRANT	\$	-	CAPITAL RESERVE ACCOUNT	\$	-	TOTAL FINANCING COSTS	\$	40,000
OPERATING BUDGET	\$	-																			
UNH - CASH	\$	-																			
BOND - TOWN PORTION	\$	40,000																			
FEDERAL/STATE GRANT	\$	-																			
CAPITAL RESERVE ACCOUNT	\$	-																			
TOTAL FINANCING COSTS	\$	40,000																			
IF BONDED:	<table><tr><td>NUMBER OF YEARS</td><td>7</td></tr><tr><td>TOTAL PRINCIPAL</td><td>\$ 40,000</td></tr><tr><td>TOTAL INTEREST (EST'D)</td><td>\$ 3,200</td></tr><tr><td>TOTAL PROJECT COST</td><td>\$ 43,200</td></tr></table>			NUMBER OF YEARS	7	TOTAL PRINCIPAL	\$ 40,000	TOTAL INTEREST (EST'D)	\$ 3,200	TOTAL PROJECT COST	\$ 43,200										
NUMBER OF YEARS	7																				
TOTAL PRINCIPAL	\$ 40,000																				
TOTAL INTEREST (EST'D)	\$ 3,200																				
TOTAL PROJECT COST	\$ 43,200																				





# **CAPITAL IMPROVEMENT PROGRAM**

<b>PROJECT YEAR</b>	2023	<b>PROJECT COST</b>	\$2,645,000
<b>DESCRIPTION</b>	<i>Madbury Road Water Line (Garrison - Edgewood)</i>	<b>DEPARTMENT</b>	<i>Public Works - Water</i>
<b>IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)</b>			
Department Initiative			
<b>DESCRIPTION (TO INCLUDE JUSTIFICATION)</b>			
This project will be completed in two phases. Phase I will be Garrison Road to Edgewood Road and Phase II will be Edgewood Road to Route 4.			
<p>PHASE I - Garrison Road to Edgewood Road (approx. 2300 ft) is a combination of 6" and 8" old pit cast iron pipe. The Town has experienced 3 water main ruptures in the past 10 years along this stretch of pipe. This project entails replacing the old, undersized pipe with new 12" ductile iron pipe which has a life expectancy of 80-100 years. (2380 LF @ \$323/LF Construction Cost Only)</p> <p>PHASE II - Edgewood Road to Route 4 (approx. 3300 ft) is a combination of 6" old pit cast iron pipe. The Town has experienced 4 water main ruptures in the past 10 years along this stretch of pipe. This project entails replacing the old, undersized pipe with new 12" ductile iron pipe which has a life expectancy of 80-100 years. (3310 LF @ \$323/LF Construction Cost Only)</p>			
<b>ESTIMATED COSTS:</b>	<b>PRELIMINARY STUDY, DESIGN AND ENGINEERING</b>	\$	-
	<b>FINAL DESIGN AND ENGINEERING</b>	\$	440,000
	<b>CONSTRUCTION ENGINEERING OVERSIGHT</b>	\$	-
	<b>CONSTRUCTION COSTS</b>	\$	1,850,000
	<b>CONTINGENCY 20%</b>	\$	355,000
	<b>TOTAL PROJECT COST</b>	\$	2,645,000
<b>FINANCING</b>	<b>OPERATING BUDGET</b>	\$	-
	<b>UNH - CASH</b>	\$	-
	<b>BOND - TOWN PORTION</b>	\$	2,645,000
	<b>FEDERAL/STATE GRANT</b>	\$	-
	<b>CAPITAL RESERVE ACCOUNT</b>	\$	-
	<b>TOTAL FINANCING COSTS</b>	\$	2,645,000
<b>IF BONDED:</b>	<b>NUMBER OF YEARS</b>	20	
	<b>TOTAL PRINCIPAL</b>	\$	2,645,000
	<b>TOTAL INTEREST</b>	\$	972,000
	<b>TOTAL ESTIMATED COST</b>	\$	3,617,000

