CAPITAL IMPROVEMENT PROGRAM

101	*WASTEWATER FUND*	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
102	Wastewater Facilities Plan	425,000	425,000	425,000	425,000	425,000	425,000	425,000	425,000	425,000	425,000
103	Collection System Repair/Upgrade (Town/UNH)	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
104	Collection System Repair/Upgrade (Town Only)	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
105	WWTP Major Components Contingency	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
106-107	Pickup Truck Replacement (One Ton)				76,000	76,000					
	WASTEWATER FUND TOTALS	570,000	570,000	570,000	646,000	646,000	570,000	570,000	570,000	570,000	570,000

PROJECT YEAR	2026-2031	PROJECT COST	$425,000
DESCRIPTION	Wastewater Facilities Plan	DEPARTMENT	Public Works - Wastewater

IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)

Dept Initiative

DESCRIPTION (TO INCLUDE JUSTIFICATION)

The Town of Durham owns, operates, and maintains its Wastewater Treatment Facility (WWTF), which is located on Piscataqua Road (Rte 4) in Durham, NH. Capital expenditures are planned within the Wastewater Facilities plan and are funded at a 2/3 (UNH) and 1/3 (Town of Durham) cost sharing allocation. The WWTF serves a large portion of the Town, including the University of New Hampshire (UNH). The WWTF was expanded to a secondary treatment facility in 1977 and has since undergone several capital upgrades, including the replacement of its dewatering equipment in 2015.

A Wastewater Treatment Plant Facility Plan is a comprehensive document that is used to assess current facility needs, future needs, and includes a review of all existing equipment and treatment systems in order to outline funding needs for future years capital improvement programs. The existing plan was completed in 2012 with some sections updated in 2020. The proposed update, funded through the FY2026 request, will provide a condition assessments of critical wastewater components and their respective replacement/rehabilitation costs.

Existing funding will support stormwater BMP's on the wastewater treatment site along with pavement rehabilitation and plant water distribution system upgrades. Funding for FY 2026 is requested to complete PLC Upgrades, replacing outdoor yard lighting, and completing a new Facilities Plan. For background, a Programmable Logic Controller (PLC) automates and controls various processes - including pumps valves and sensors to ensure reliable control of treatment systems, eliminating the need for manual control. Three of the five systems are nearing the end of their useful life and have been discontinued meaning new parts are no longer available and the equipment supplier will no longer provide service for them. Outdoor solar powered yard lighting that surrounds the facility is needed to enhance security at the facility and also to provide adequate lighting during winter storms events or emergencies. The outdoor lighting that exists today is original to the facility and the majority of it is not operational.

A draft New Hampshire Medium Wastewater Treatment Facility General Permit was issued by the EPA in 2024 and detailed comments were provided by the Town. This permit includes regulatory standards and maintenance requirements for all pollutants within the plant's effluent, not inclusive of Nitrogen which is regulated within the Town's Nitrogen General Permit. EPA's proposed copper effluent limit within the draft permit may require compliance measures, including future capital upgrades or plant process modifications at the WWTF, however with the change in administration EPA has indicated that this permit will likely not become final in the near term.

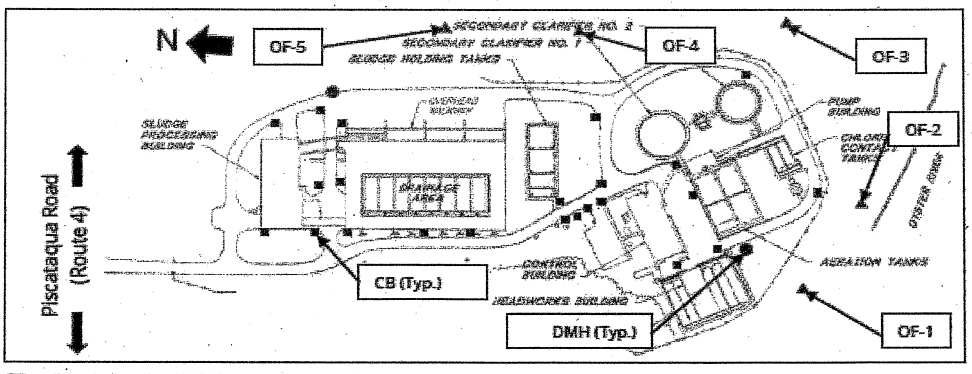
2026 - $425,000 - Yard Lighting ($120,000), Facilities Plan Update ($100,000), PLC Upgrades ($205,000)

2027 - 2031 - TBD with completion of updated Wastewater Facilities Plan in 2026.

Per current Agreement, these projects would be funded 2/3 UNH and 1/3 Town.

ESTIMATED COSTS:	CONSTRUCTION COSTSD	$ 425,000
	TOTAL PROJECT COST	$ 425,000
FINANCING	OPERATING BUDGET	$ -
	UNH - CASH	$ -
	BOND - TOWN PORTION	$ 141,667
	BOND - UNH PORTION	$ 283,333
	FEDERAL/STATE GRANT	$ -
	CAPITAL RESERVE ACCOUNT	$ -
	TOTAL FINANCING COSTS	$ 425,000
IF BONDED:	NUMBER OF YEARS	10
	TOTAL PRINCIPAL	$ 425,000
	TOTAL INTEREST	$ 90,000
	TOTAL ESTIMATED COST	$ 515,000

WWTF Existing Drainage Structures



CB = Catch Basin; DMH = Drain Manhole; OF = Outfall

CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	*2026-2035*	**PROJECT COST**	*$30,000*
DESCRIPTION	*Collection System Repair/ Upgrade (Town/UNH)*	**DEPARTMENT**	*Public Works - Wastewater*

IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)

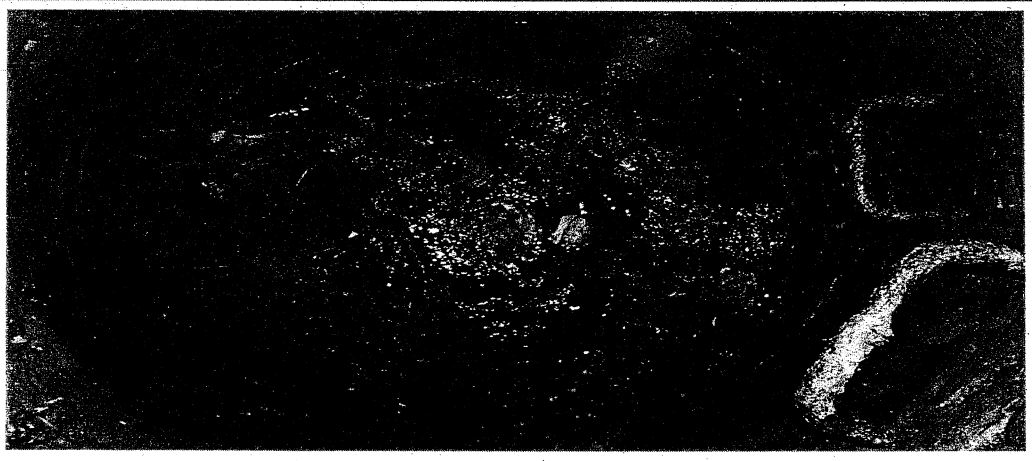
Dept Initiative

DESCRIPTION (TO INCLUDE JUSTIFICATION)

Repairs will be made to the Town/UNH shared wastewater collection system including line replacement and line repairs, engineering investigation, sewer manhole rehabilitation or replacement. This project also includes an updated I/I Study (inflow and infiltration), to locate needed repairs within the wastewater collection system. Inflow is the illegal connection of plumbing such as a sump pump into the Wastewater Collection System and infiltration is the seepage of groundwater or stormwater into the Wastewater Collection System. The amount of staff time spent on collection system maintenance will decrease as these problem areas are corrected.
The Town received a $100,000 ARPA grant in FY22 to complete a West End Sewer Study and recently awarded a contract to Wright-Pierce Engineers to undertake this work. Findings will allow appropriate planning and upgrades to take place as required for new development and capacity demands on the Western side of the collection system.

Per current Agreement, these projects would be funded 2/3 UNH and 1/3 Town.

ESTIMATED COSTS:	**CONSTRUCTION COSTS**	**$**	**30,000**
	TOTAL PROJECT COST	**$**	**30,000**
FINANCING	**OPERATING BUDGET**	**$**	**-**
	UNH - CASH	**$**	**-**
	BOND - TOWN PORTION	**$**	**-**
	BOND - UNH PORTION	**$**	**-**
	FEDERAL/STATE GRANT	**$**	**-**
	CAPITAL RESERVE ACCOUNT	**$**	**30,000**
	TOTAL FINANCING COSTS	**$**	**30,000**
IF BONDED:	**NUMBER OF YEARS**		**N/A**
	TOTAL PRINCIPAL	**$**	**-**
	TOTAL INTEREST	**$**	**-**
	TOTAL ESTIMATED COST	**$**	**-**



CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	*2026-2035*	**PROJECT COST**	*$65,000*
DESCRIPTION	*Collection System Repair/ Upgrade (Town)*	**DEPARTMENT**	*Public Works - Wastewater*

IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)

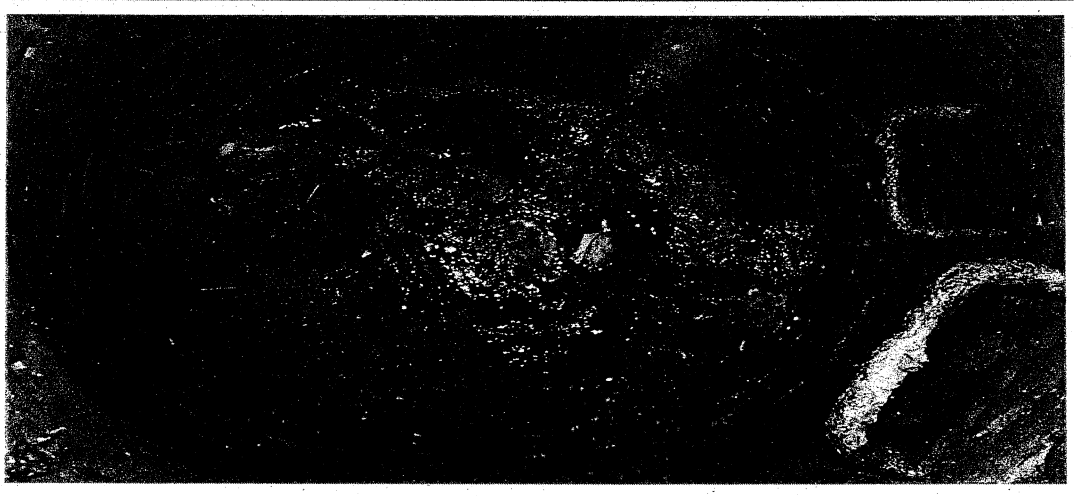
Dept Initiative

DESCRIPTION (TO INCLUDE JUSTIFICATION)

Repairs will be made to the Town's wastewater collection system including line replacement and line repairs, engineering investigation, sewer manhole rehabilitation or replacement. This project also includes inflow and infiltration within the wastewater collection system. Inflow is the illegal connection of plumbing such as a sump pump into the Wastewater Collection System and infiltration is the seepage of groundwater or stormwater into the Wastewater Collection System. The amount of staff time spent on collection system maintenance will decrease as these problem areas are corrected. The last inflow/infiltration study was completed in 2013 to prioritize future areas of repairs/improvements in the sewer collection system. The Town was fortunate to receive a $100,000 ARPA grant in FY22 to undertake additional studies including inflow/infiltration on the Western side of the collection system. Further inflow/infiltration studies and improvements are planned over the next several years including collection system rehabilitation on roadways such as Pettee Brook Lane and Woodman Road. Additionally, this capital request will fund collection system piping rehabilitation on Dennison Road funded in FY24 as part of the FY24 Road Program and expected to be constructed in 2027/2028 following completion of the Madbury Road Complete Streets Project.

Per current Agreement, this project will be funded 100% by the Town.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	$	65,000
	TOTAL PROJECT COST	$	65,000
FINANCING	OPERATING BUDGET	$	-
	UNH - CASH	$	-
	BOND - TOWN PORTION	$	65,000
	BOND - UNH PORTION	$	-
	FEDERAL/STATE GRANT	$	-
	CAPITAL RESERVE ACCOUNT	$	-
	TOTAL FINANCING COSTS	$	65,000
IF BONDED:	NUMBER OF YEARS		3
	TOTAL PRINCIPAL	$	65,000
	TOTAL INTEREST	$	5,000
	TOTAL ESTIMATED COST	$	70,000



CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	*2026-2035*	**PROJECT COST**	*$50,000*
DESCRIPTION	*WWTP Major Components Contingency*	**DEPARTMENT**	*Public Works - Wastewater*

IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)

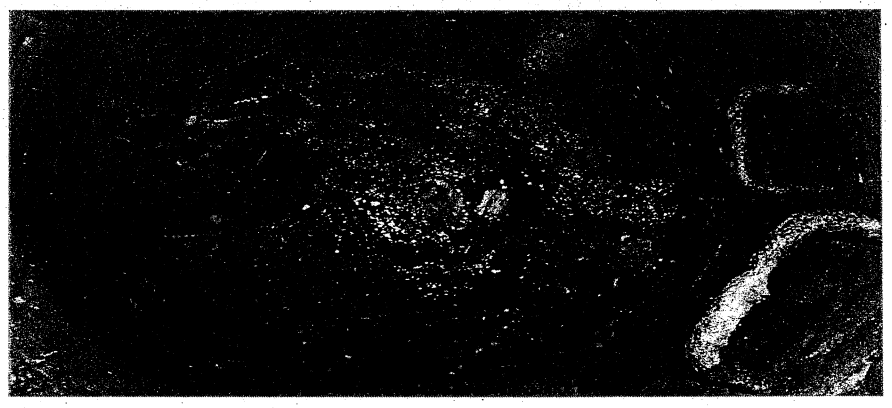
Dept Initiative

DESCRIPTION (TO INCLUDE JUSTIFICATION)

It is a sound management practice to build a major components contingency fund for the Durham Wastewater Treatment Plant which operates on a continuous basis, 24 hours a day, 7 days per week. This fund allocates funding for unplanned, extraordinary equipment failures to maintain uninterrupted operations, and to prudently manage unforeseen challenges, while complying with the facilities federal and state discharge permits and upholding the facility's vital role in environmental protection and public health. Given the non-stop nature of operations at the Treatment Plant, the contingency fund becomes even more essential.

Per current Agreement, these projects would be funded 2/3 UNH and 1/3 Town.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	$	-
	FINAL DESIGN AND ENGINEERING	$	-
	CONSTRUCTION ENGINEERING OVERSIGHT	$	-
	CONSTRUCTION COSTS	$	50,000
	CONTINGENCY	$	-
	TOTAL PROJECT COST	$	50,000
FINANCING	OPERATING BUDGET	$	16,667
	UNH - CASH	$	33,333
	BOND - TOWN PORTION	$	-
	BOND - UNH PORTION	$	-
	FEDERAL/STATE GRANT	$	-
	CAPITAL RESERVE ACCOUNT	$	-
	TOTAL FINANCING COSTS	$	50,000
IF BONDED:	NUMBER OF YEARS		N/A
	TOTAL PRINCIPAL	$	-
	TOTAL INTEREST	$	-
	TOTAL ESTIMATED COST	$	-



CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	*2029*	**VEHICLE COST**	*$76,000*
DESCRIPTION	*One Ton Pick-Up Replacement*	**DEPARTMENT**	*Public Works - Wastewater*

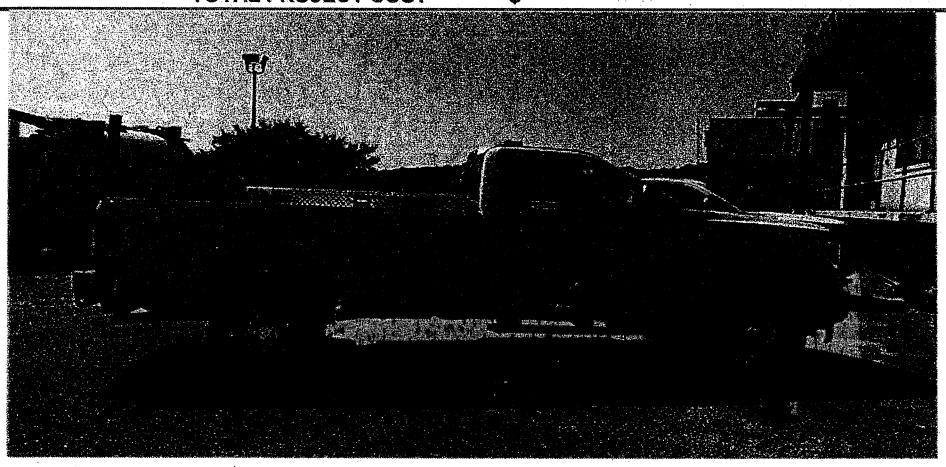
DESCRIPTION (TO INCLUDE JUSTIFICATION):

Durham Public Works will be replacing the Wastewater Division's 2019 Ford F-350 One Ton Pick-Up Truck in 2029. The Wastewater Division's motor pool currently includes two one-ton pick-up trucks, which are used by the five plant employees. These trucks play a crucial role in transporting personnel, equipment, and materials for both routine and emergency maintenance tasks across the Wastewater Treatment Plant Campus and the Town's network of 14 miles of wastewater collection and conveyance system piping, around 350 sewer manholes, and five pump stations. Furthermore, the pick-up truck is also instrumental in handling snow and ice control operations at the Wastewater Treatment Plant Campus and the pump station facilities. To satisfactorily address these requirements, this vehicle will come equipped with a plow package. The Department continues to explorie alternative fuel options for this upcoming acquisition, including battery electric. However due to the operational demands of these vehicles, sometimes exceeding 30 continuous hours during winter emergency response events, the battery technology to satisfy this demand has proven to be unavailable at this time. As part of its maintenance plan, this vehicle is scheduled for replacement every 10-12 years.

Vehicle to be Replaced: Truck # WW-1- 2019 Ford F-350

Per current Agreement, these projects would be funded 2/3 UNH and 1/3 Town.

ESTIMATED COST	**PURCHASE PRICE**	**$**	**73,000**
	ACCESSORIES*	**$**	**8,000**
	LESS TRADE-IN**	**$**	**(5,000)**
	NET PURCHASE PRICE	**$**	**76,000**
	*Accessories include lighting, radios, striping, misc. equipment.		
FINANCING	**OPERATING BUDGET**	**$**	**-**
	UNH - CASH	**$**	**-**
	BOND - TOWN PORTION	**$**	**-**
	BOND - UNH PORTION	**$**	**-**
	FEDERAL/STATE GRANT	**$**	**-**
	CAPITAL RESERVE ACCOUNT	**$**	**76,000**
	TOTAL FINANCING COSTS	**$**	**76,000**
IF BONDED:	**NUMBER OF YEARS**		**N/A**
	TOTAL PRINCIPAL	**$**	**-**
	TOTAL INTEREST (EST'D)	**$**	**-**
	TOTAL PROJECT COST	**$**	**-**



CAPITAL IMPROVEMENT PROGRAM

PROJECT YEAR	*2030*	**VEHICLE COST**	*$76,000*
DESCRIPTION	*One Ton Pick-Up Replacement*	**DEPARTMENT**	*Public Works - Wastewater*

DESCRIPTION (TO INCLUDE JUSTIFICATION):

Durham Public Works will be replacing the Wastewater Division's 2019 Ford F-350 One Ton Pick-Up Truck in 2030. The Wastewater Division's motor pool currently includes two one-ton pick-up trucks, which are used by the five plant employees. These trucks play a crucial role in transporting personnel, equipment, and materials for both routine and emergency maintenance tasks across the Wastewater Treatment Plant Campus and the Town's network of 14 miles of wastewater collection and conveyance system piping, ~350 sewer manholes, and five pump stations. Furthermore, the pick-up truck is instrumental in handling snow and ice control operations at the Wastewater Treatment Plant Campus and the pump station facilities. To facilitate these operational requirements, this vehicle will come equipped with a plow package. The Department continues to explorie alternative fuel options for this upcoming acquisition, including battery electric. However due to the operational demands of these vehicles, sometimes exceeding 30 continuous hours during winter emergency response events, the battery technology to satisfy this demand has proven to be unavailable at this time. As part of its maintenance plan, this vehicle is scheduled for replacement every 10-12 years and is jointly funded 2/3 (UNH) and 1/3 (Town of Durham).

Vehicle to be Replaced: Truck # WW-2- 2019 Ford F-350

Per current Agreement, these projects would be funded 2/3 UNH and 1/3 Town.

ESTIMATED COST	**PURCHASE PRICE**	$	72,000
	ACCESSORIES*	$	8,000
	LESS TRADE-IN**	$	(4,000)
	NET PURCHASE PRICE	$	76,000
	*Accessories include lighting, radios, striping, misc. equipment.		
FINANCING	**OPERATING BUDGET**	$	-
	UNH - CASH	$	-
	BOND - TOWN PORTION	$	-
	BOND - UNH PORTION	$	-
	FEDERAL/STATE GRANT	$	-
	CAPITAL RESERVE ACCOUNT	$	76,000
	TOTAL FINANCING COSTS	$	76,000
IF BONDED:	**NUMBER OF YEARS**		N/A
	TOTAL PRINCIPAL	$	-
	TOTAL INTEREST (EST'D)	$	-
	TOTAL PROJECT COST	$	-