# DEPARTMENT HEAD PROPOSED 2021-2030 CAPITAL IMPROVEMENT PROGRAM

63	Public Works - Operations Division	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
64	Road Resurfacing Program	435,000	435,000	435,000	435,000	435,000	435,000	435,000	435,000	435,000	435,00
66	Crack Seal Program	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,00
67	Sidewalk Improvement Program	36,000									
69	Culvert and Outfalls Program	80,000	85,000								
70	Drainage Program	30,000	30,000	20,000							
71	Oyster River Dam (Mill Pond)	5,000,000									
72	Madbury Roadway, Sidewalk, Drainage Design & Construction	640,000		2,485,000							
74	Chipper Replacement	73,000									
75	Hot Box Pavement Patch System	40,000									
76	Mill Road Culvert Over Oyster River	80,000	450,000					1		8	
78	Dump Truck Replacement (3-5 Ton)		179,700	179,700		185,900	193,200	200,100	206,100	212,100	
85	Roadway Sweeper Replacement		143,000								
86	Front End Loader Replacement		205,000								
87	Mobile Air Compressor Replacement		17,500								
88	Dame Road Paving			455,000							
89	Longmarsh Road Bridge Replacement			1,300,000							
90	Pickup Truck Replacement (3/4 Ton)			42,500							
91	Aerial Bucket Truck Replacement			130,000							
92	Sidewalk Plow Tractor Replacement			170,000				180,000			
94	Engineering Jeep Replacement						21,000				
95	Pickup Truck Replacement (Dodge Ram)							42,500			
96	Rubber Tired Excavator Replacement										310,00
	PW - OPERATIONS TOTALS	6,439,000	1,570,200	5,242,200	460,000	645,900	674,200	882,600	666,100	672,100	770,00

# 2020-2030 PROPOSED ROAD PROGRAM COST ESTIMATED AT \$435,000 PER YEAR

Public Works has recently adopted pavement management system software which will provide a baseline condition assessment for the over 60 miles of Town maintained roadways including sidewalks, curb ramps and related roadway infrastructure. This assessment will allow for the strategic planning of the annual Roads Program and begins with the comprehensive inspection of the entire roadway network. This assessment will inform decision making by developing a Pavement Condition Index or PCI. A roadway PCI is generated based on pavement distresses and their severity for each segment in the Town's roadway network. The Pavement Management software will then allow for various scenarios to be reviewed which will prioritize pavement rehabilitation and preventive maintenance repair projects. The software analyzes which type of rehabilitation treatment would be the most economical and appropriate for each road segment. The PCI, rehabilitation treatment cost, repair service life and traffic volume of the roadway are used to calculate the benefit value index (BVI) which prioritizes the Town's rehabilitation projects for a given year. Roads are then selected for rehabilitation based upon a combination of pavement management software output, engineering judgment, and coordination with other planned Town and 3rd party utility projects. Sound pavement management emphasizes adequate investment in road rehabilitation, drainage system improvements, as applicable combined with preventive and routine maintenance such as crack sealing and full depth patching. The fiscal year 2021 Road Program consists of roadway reclamation and paving of approximately 1.4 miles of roadway including Sullivan Falls, Mathes Cove, Kelsey Drive and Tall Pines Road. Also included in the fiscal year 2021 Program is a targeted mill and pave program consisting of approximately 2,000 square yards in the Woodridge neighborhood. This includes improvements on select areas of roadway exhibiting significant distress on Merserve Road, Moharinet Way, Fogg Lane, Fogg Drive and Bartlett Roads. This interim approach will extend the overall longevity of the roadway until such time the entire roadway becomes a candidate for reclamation and paving. Upon completion of the StreetScan roadway network evaluation, DPW will be positioned to develop a long-range comprehensive road program with a 5 year actionable road program plan.

PROJECT YEAR	2021	PROJECT COST	\$435,000
DESCRIPTION	Road Program	DEPARTMENT	Public Works

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

Dept. Initiative

# **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

The fiscal year 2021 Road Program consists of roadway reclamation and paving of approximately 1.4 miles of roadway including Sullivan Falls, Mathes Cove, Kelsey Drive and Tall Pines Road. Also included in the fiscal year 2021 Program is a targeted mill and pave program consisting of approximately 2,000 square yards in the Woodridge neighborhood. This includes improvements on select areas of roadway exhibiting significant distress on Merserve Road, Moharinet Way, Fogg Lane, Fogg Drive and Bartlett Roads. DPW proposes the addition of an engineer in the division and will be partially funding this position through the road program. For 2021 the proposed position will be funded \$15,000 through the road program.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ 1 <del>50</del> 0.	
	FINAL DESIGN AND ENGINEERING	\$ -	
	CONSTRUCTION ENGINEERING OVERSIGHT	\$ -	
	CONSTRUCTION COSTS	\$ 435,000	
	CONTINGENCY	\$ -	
	TOTAL PROJECT COST	\$ 435,000	
FINANCING	OPERATING BUDGET	\$ 435,000	
	UNH - CASH	\$ -	
	BOND - TOWN PORTION	\$ -	
	UNH PORTION	\$ -	
	FEDERAL/STATE GRANT	\$ ( <b>-</b> )	
	CAPITAL RESERVE ACCOUNT	\$ 	
	TOTAL FINANCING COSTS	\$ 435,000	
IF BONDED:	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$ je.	
	TOTAL INTEREST	\$ •	
	TOTAL ESTIMATED COST	\$ 2	

ROAD NAME	TREATMENT TYPE	RECLAIM MILEAGE	PARTIAL REPAIR- SQ YARDS	DISTANCE (FEET)	LAST TREATMENT		COST
BARLETT ROAD	Partial + 1"		550	1381	2004	s	5,000
FOGG DRIVE	Partial + 1"		550	2040	2004	\$	5,000
FOGG LANE	Partial + 1"		550	211	2004	\$	5,000
KELSEY DRIVE	Reclaim + 3.5"	0.30		1585	2006	\$	87,665
MATHES COVE	Reclaim + 3.5"	0.39		2100		\$	105,400
MESERVE ROAD	Partial + 1"		550	1761	2004	\$	5,000
MOHARINET WAY	Partial + 1"		550	525	2004	\$	5,000
SULLIVAN FALLS	Reclaim + 3.5"	0.26		1380		\$	98,300
TALL PINES ROAD	Reclaim + 3.5"	0.42		2218	2006	\$	113,540
WOODRIDGE ROAD	Partial + 1"		550	4700	2004	\$	5,000

PROJECT YEAR	2021	PROJECT COST	\$25,000
DESCRIPTION	Crackseal Program	DEPARTMENT	Public Works

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

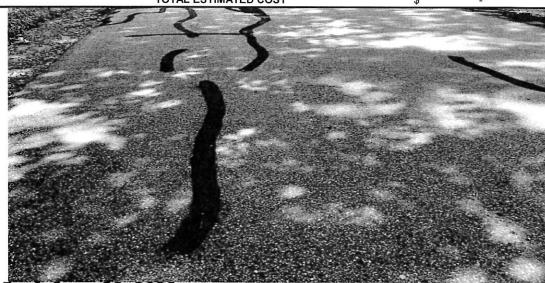
Dept. Initiative

# **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

A critical component of a successful road program is adequate investments in pavement preservation. Crack sealing is one pavement maintenance operation which will prevent water infiltration into the roadway base and sub-base materials which cause erosion and compromise the structural integrity of the aggregate materials beneath the roadway. This results in premature roadway failure, even more so when the roadway network experiences numerous freeze/thaw cycles. Studies have demonstrated that an effective crack sealing program can prolong pavement life from 3-8 years.

Durham Public Works proposes to incorporate this fundamental element into its pavement management strategy and recommends an annual investment of \$25,000 beginning in year one. Subsequent investments in future years may be adjusted downward following completion and recommendations from the town-wide pavement evaluation.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	-	
and the second and the second	FINAL DESIGN AND ENGINEERING	\$	_	
	CONSTRUCTION ENGINEERING OVERSIGHT	\$		
		88	-	
	CONSTRUCTION COSTS	\$	25,000	
	CONTINGENCY	\$	<u>u</u>	
	TOTAL PROJECT COST	\$	25,000	
FINANCING	OPERATING BUDGET			
	UNH - CASH	\$	-	
	BOND - TOWN PORTION	\$	-	
	UNH PORTION	\$	=	
	FEDERAL/STATE GRANT	\$	<del></del>	
9	CAPITAL RESERVE ACCOUNT	\$	<u> </u>	
	TOTAL FINANCING COSTS	\$	2	
IF BONDED:	NUMBER OF YEARS		N/A	
	TOTAL PRINCIPAL	\$	=	
	TOTAL INTEREST	\$	•	
	TOTAL ESTIMATED COST	\$	<b>:</b>	
		7.00000000	-	



PB Draft Sept. 23, 2020

# 2021-2024 PROPOSED SIDEWALK PROGRAM

# 2021 \$36,000

Dover Road (intersection of Route 108 to Dover Road Pump Station)

The rehabilitation and replacement of existing sidewalks including curb ramps is a critical component of the Town's transportation program. The Town's sidewalk inventory consists of approximately 10 miles of sidewalks and curb ramps. Sidewalks are inspected and rated in conjunction with the pavement condition assessment as detailed within the Road Program section funding explanation. This includes a Town-wide inventory of curb ramps planned for 2020 to assess compliance with current ADA standards. Public Works staff develops repair strategies and project scopes based on the sidewalk and curb ramp condition assessments, and observations and recommendations of other Town staff including Planning, Police, Town Administrator, Economic Development and Recreation who assist in evaluating safety hazards and need. Preference is given to repairs involving areas within walking distance to schools, ADA compliance, and areas with high volumes of pedestrian traffic. Final selections are incorporated in the annual Roads Program project or bid as stand-alone projects. The StreetScan town-wide sidewalk and curb ramp assessment scheduled for September/October 2021 will provide condition and compliance data which will allow Durham Public Works to make informed decisions around appropriate investments in this critical infrastructure. The 2021 Sidewalk plan consists of construction and improvements to the sidewalk located on Dover Road (intersection of Route 108 to Dover Road Pump Station). Upon completion of the Town-wide assessment, a 5 year action plan will be developed.

PROJECT YEAR	2021	PROJECT COST	\$36,000
DESCRIPTION	Sidewalk Improvements	DEPARTMENT	Public Works - Operations

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

The rehabilitation and replacement of existing sidewalks including curb ramps is a critical component of the Town's transportation program. The Town's sidewalk inventory consists of approximately 10 miles of sidewalks and curb ramps. Sidewalks are inspected and rated in conjunction with the pavement condition assessment as detailed within the Road Program section funding explanation. This includes a Townwide inventory of curb ramps planned for 2020 to assess compliance with current ADA standards. Public Works staff develops repair strategies and project scopes based on the sidewalk and curb ramp condition assessments, and observations and recommendations of other Town staff including Planning, Police, Town Administrator, Economic Development and Recreation who assist in evaluating safety hazards and need. Preference is given to repairs involving areas within walking distance to schools, ADA compliance, and areas with high volumes of pedestrian traffic. Final selections are incorporated in the annual Roads Program project or bid as stand-alone projects. The StreetScan town-wide sidewalk and curb ramp assessment scheduled for September/October 2021 will provide condition and compliance data which will allow Durham Public Works to make informed decisions around appropriate investments in this critical infrastructure. The 2021 Sidewalk plan consists of construction and improvements to the sidewalk located on Dover Road (intersection of Route 108 to Dover Road Pump Station). Upon completion of the Town-wide assessment, a 5 year action plan will be developed. Additionally, DPW proposes to partially fund the addition of a Public Works Engineer with \$5,000 from the Sidewalks CIP account.

#### **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

#### Dover Road - Intersection of Route 108 to Dover Road Pump Station

* Demolition	2011 ft	\$6,500
* Crushed Gravel/Loam/Seed		\$6,480
* Asphalt Sidewalk	170 tons @ \$135/ton	\$22,950
*Funding towards engineering position		\$5,000

Total: \$36,000

	Total: \$36,000		
ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ -	
	FINAL DESIGN AND ENGINEERING	\$ -	
	CONSTRUCTION ENGINEERING OVERSIGHT	\$ -	
	CONSTRUCTION COSTS	\$ 36,000	
	CONTINGENCY	\$ 	
	TOTAL PROJECT COST	\$ 36,000	
FINANCING	OPERATING BUDGET	\$ 36,000	
_	UNH - CASH	\$ =	
* :	BOND - TOWN PORTION	\$ ä	
	FEDERAL/STATE GRANT	\$ -	
	CAPITAL RESERVE ACCOUNT	\$ =	
	TOTAL FINANCING COSTS	\$ 36,000	
IF BONDED:	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$ -	
	TOTAL INTEREST	\$ 	
	TOTAL ESTIMATED COST	\$ -	



		T		-	
PROJECT YEAR	2021-2022	PROJECT COST			2021 - \$80,000
DESCRIPTION	Culvert & Outfalls Program	DEPARTMENT			Public Works
IMPETUS FOR PROJECT	Γ (IE. MANDATED, COUNCIL GO.	AL, DEPT INITIATIVE	, E	TC.)	
Department Initiative, MS-4 Permit					
DESCRIPTION (TO INCL	UDE JUSTIFICATION)				
2021 - Bennett Road Culvert a	t Beaudette Brook- \$80,000				
2022 - Mill Road @ College Br	ook (headwall and outlet) - \$85,000				
3555					
*					
ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING			-	
	FINAL DESIGN AND ENGINEERING	ì	\$	10,000	
	CONSTRUCTION ENGINEERING OVERSIGHT			-	
	CONSTRUCTION COSTS		\$	70,000	
	CONTINGENCY			14	
	TOTAL PROJECT COST		\$	80,000	
FINANCING	OPERATING BUDGET		\$	80,000	
	UNH - CASH		\$		
	<b>BOND - TOWN PORTION</b>		\$	-	
	UNH PORTION		\$	-	
	FEDERAL/STATE GRANT		\$	-	
	CAPITAL RESERVE ACCOUNT		\$	-	
	TOTAL FINANCING COSTS	( <del>-</del>	\$	80,000	
IF BONDED:	NUMBER OF YEARS			N/A	
	TOTAL PRINCIPAL		\$	_	
	TOTAL INTEREST		\$	-	
	TOTAL ESTIMATED COST		\$		

**INSERT PICTURE** 



PROJECT YEAR	2021-2023	PROJECT COST	\$30,000			
DESCRIPTION	Drainage Program	DEPARTMENT	Public Works			
MPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)						

# Department Initiative, MS-4 Permit

#### **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

The Drainage Program funds rehabilitation, replacement, additions, and major repairs to the Town's stormwater drainage system consisting of approximately 70 culverts and outfalls, 30 drainage manholes, 525 catch basins, 10 miles of drain lines and 4 bioretention areas and 5 rain gardens. The drainage program also funds compliance with EPA's National Pollution Discharge Elimination System Municipal Separate Storm Sewer System Phase II General Permit (NPDES MS4 Permit). The revised final permit, recently re-issued in 2018, requires towns to meet "Minimal Control Measures" to improve water quality within jurisdictional areas. These minimum control measures include: 1. Public education and outreach 2. Public involvement and participation 3. Illicit discharge detection and elimination 4. Construction-site stormwater runoff control 5. Post-construction stormwater management in new development and redevelopment 6. Pollution prevention and good housekeeping in municipal operations. The FY2021 request includes design and construction improvements the following culverts, Bennett Road at . In addition Durham Public Works is proposing to develop a drainage master plan utilizing 3<sup>rd</sup> party engineering services which will include an inventory, evaluation and condition assessment of all drainage infrastructure which will allow for the development of a drainage GIS layer and prioritization of drainage system rehabilitation. We expect this component to be funded over a period of three consecutive years beginning in fiscal year 2021 in an amount of \$30,000.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ -	
	FINAL DESIGN AND ENGINEERING	\$ 10,000	
	CONSTRUCTION ENGINEERING OVERSIGHT	\$ -	
	CONSTRUCTION COSTS	\$ 20,000	
	CONTINGENCY	\$ -	
	TOTAL PROJECT COST	\$ 30,000	
FINANCING	OPERATING BUDGET	\$ 30,000	
	UNH - CASH	\$ -	
	BOND - TOWN PORTION	\$ -	
	UNH PORTION	\$ - 1 m	
	FEDERAL/STATE GRANT	\$ -	
	CAPITAL RESERVE ACCOUNT	\$ -	
	TOTAL FINANCING COSTS	\$ 30,000	
IF BONDED:	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$ -	
	TOTAL INTEREST	\$ -8	
	TOTAL ESTIMATED COST	\$ -	



PROJECT YEAR	2021	PROJECT COST	\$3,000,000-\$5,000,000
DESCRIPTION	Oyster River Dam (Mill Pond)	DEPARTMENT	Public Works - Operations
IMPETUS FOR PROJE	CT (IE. MANDATED, COUNCI	L GOAL, DEPT INITIATIVE, ETC.)	
Department Initiative			

# DESCRIPTION (TO INCLUDE JUSTIFICATION)

Following receipt and review of the Feasibility Study to be performed in 2019 the Town of Durham will need to decide how it wishes to proceed with the Oyster River Dam. Possibilities include repairing the dam or removing the dam in its entirety.

THIS IS INCLUDED AS A "PLACEHOLDER" AND WILL BE UPDATED ONCE THE FEASIBILITY STUDY HAS BEEN RECEIVED AND REVIEWED.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ -	
	FINAL DESIGN AND ENGINEERING	\$ -	
(3)	CONSTRUCTION ENGINEERING OVERSIGHT	\$	
	CONSTRUCTION COSTS	\$ 5,000,000	
	CONTINGENCY	\$ -	
	TOTAL PROJECT COST	\$ 5,000,000	
FINANCING	OPERATING BUDGET	\$ -	
	UNH - CASH	\$ -	
	BOND - TOWN PORTION	\$ 5,000,000	
	FEDERAL/STATE GRANT	\$ 	
	CAPITAL RESERVE ACCOUNT	\$ 	
	TOTAL FINANCING COSTS	\$ 5,000,000	
IF BONDED:	NUMBER OF YEARS	20	
	TOTAL PRINCIPAL	\$ 5,000,000	
	TOTAL INTEREST	\$ 2,100,000	8
	TOTAL ESTIMATED COST	\$ 7,100,000	



PROJECT YEAR	2021	PROJECT COST	\$640,000
DESCRIPTION	Madbury Roadway, Sidewalk and Drainage Construction Improvements -Design	DEPARTMENT	Public Works
IMPETIIS FOR PROJE	CT (IE MANDATED COUNCIL COA	L DEDT INITIATIVE ETO	\

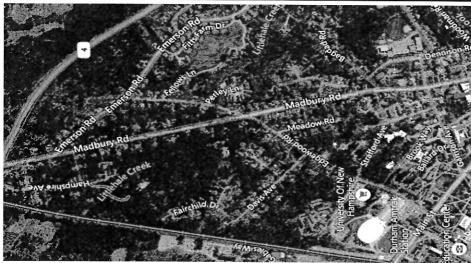
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.

Department Initiative

#### **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

Madbury Road - Roadway, Sidewalk and Drainage Construction Improvements - Madbury Road is approximately 6,500 feet in length and serves as a major arterial roadway in Durham with Average Daily Traffic exceeding 4,500 vehicles. The roadway was transferred to Town ownership from the State of New Hampshire when Route 4 was upgraded many years ago. The roadway was last paved in 2009 at which time it received an overlay treatment. Currently the roadway is in poor condition with significant pavement raveling, delamination, longitudinal and alligator cracking, rutting, settlement, and base failure. The sidewalks and curb ramps are ADA non-compliant and curb reveal is minimal or non-existent in some areas. The drainage system is undersized with drainage structures and drainage pipeline in a deteriorated condition. The current capital plan includes water main replacement along Madbury Road from Garrison Road to Route 4 scheduled for construction in Fiscal Year 2023. Due to the current condition of the roadway along with impacts from the water main replacement project it is recommended that \$621,000 in funding for survey, design and permitting be budgeted within the capital budget for fiscal year 2021 followed by roadway, sidewalk and construction funding in an amount of \$2,485,000 in 2023. The design is proposed to take a complete streets approach evaluating multimodal transportation improvements where possible including traffic calming and pedestrian and bicycle accommodations.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ 640,000	
	FINAL DESIGN AND ENGINEERING		
	CONSTRUCTION ENGINEERING OVERSIGHT	\$ -	
	CONSTRUCTION COSTS		
	CONTINGENCY	\$ -	
	TOTAL PROJECT COST	\$ 640,000	
FINANCING	OPERATING BUDGET		
	UNH - CASH	\$ -	
	BOND - TOWN PORTION	\$ -	
	UNH PORTION	\$ -	
	FEDERAL/STATE GRANT	\$ -	
	CAPITAL RESERVE ACCOUNT	\$ -	
	TOTAL FINANCING COSTS	\$	
IF BONDED:	NUMBER OF YEARS	N/A	
	TOTAL PRINCIPAL	\$ -	
	TOTAL INTEREST	\$ •	
	TOTAL ESTIMATED COST	\$ -	



PROJECT YEAR	2023	PROJECT COST	\$2,485,000
DESCRIPTION	Madbury Roadway, Sidewalk and Drainage Construction Improvements- Construction	DEPARTMENT	Public Works

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

Department Initiative

#### DESCRIPTION (TO INCLUDE JUSTIFICATION)

Madbury Road - Roadway, Sidewalk and Drainage Construction Improvements - Madbury Road is approximately 6,500 feet in length and serves as a major arterial roadway in Durham with Average Daily Traffic exceeding 4,500 vehicles. The roadway was transferred to Town ownership from the State of New Hampshire when Route 4 was upgraded many years ago. The roadway was last paved in 2009 at which time it received an overlay treatment. Currently the roadway is in poor condition with significant pavement raveling, delamination, longitudinal and alligator cracking, rutting, settlement, and base failure. The sidewalks and curb ramps are ADA non-compliant and curb reveal is minimal or non-existent in some areas. The drainage system is undersized with drainage structures and drainage pipeline in a deteriorated condition. The current capital plan includes water main replacement along Madbury Road from Garrison Road to Route 4 scheduled for construction in Fiscal Year 2023. Due to the current condition of the roadway along with impacts from the water main replacement project it is recommended that \$621,000 in funding for survey, design and permitting be budgeted within the capital budget for fiscal year 2021 followed by roadway, sidewalk and construction funding in an amount of \$2,485,000 in 2023. The design is proposed to take a complete streets approach evaluating multimodal transportation improvements where possible including traffic calming and pedestrian and bicycle accommodations.

PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	2,485,000
FINAL DESIGN AND ENGINEERING	\$	·
CONSTRUCTION ENGINEERING OVERSIGHT	\$	Œ
CONSTRUCTION COSTS	\$	-
CONTINGENCY	\$	-
TOTAL PROJECT COST	\$	2,485,000
OPERATING BUDGET	\$	•
UNH - CASH	\$	
BOND - TOWN PORTION	\$	2,485,000
UNH PORTION	\$	=
FEDERAL/STATE GRANT	\$	-
CAPITAL RESERVE ACCOUNT	\$	
TOTAL FINANCING COSTS	\$	2,485,000
NUMBER OF YEARS		N/A
TOTAL PRINCIPAL	\$	
TOTAL INTEREST	\$	<u>-</u>
TOTAL ESTIMATED COST	\$	•
	FINAL DESIGN AND ENGINEERING CONSTRUCTION ENGINEERING OVERSIGHT CONSTRUCTION COSTS CONTINGENCY TOTAL PROJECT COST  OPERATING BUDGET UNH - CASH BOND - TOWN PORTION UNH PORTION FEDERAL/STATE GRANT CAPITAL RESERVE ACCOUNT TOTAL FINANCING COSTS  NUMBER OF YEARS TOTAL PRINCIPAL TOTAL INTEREST	FINAL DESIGN AND ENGINEERING  CONSTRUCTION ENGINEERING OVERSIGHT  CONSTRUCTION COSTS  CONTINGENCY  TOTAL PROJECT COST  OPERATING BUDGET  UNH - CASH  BOND - TOWN PORTION  UNH PORTION  FEDERAL/STATE GRANT  CAPITAL RESERVE ACCOUNT  TOTAL FINANCING COSTS  NUMBER OF YEARS  TOTAL PRINCIPAL  TOTAL INTEREST  \$



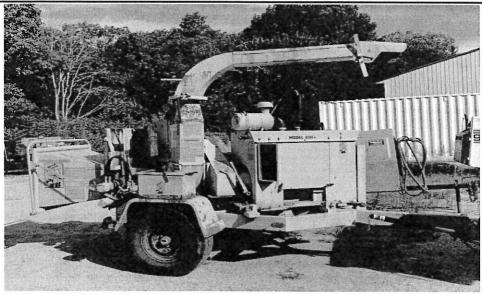
PROJECT YEAR	2021	EQUIPMENT COST	\$73,000
DESCRIPTION	Replacement of Chipper	DEPARTMENT	Public Works- Operations

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

DPW will be purchasing a new chipper this year. This request replaces the existing 1992 model 200 Performance First Brush Bandit Chipper with a new bandit 19XPC, towable drum/disc chipper capable of transporting with a standard license. The current chipper logged 1510 hours however the Hr meter was inoperative for a period of time in 2010. This front line piece of equipment is capable of chipping trees up to 19 inches in diameter and replaces the existing 28-year old chipper which is well beyond its expected useful life. This equipment will allow Durham Public Works to continue with its routine tree maintenance and removal program while also ensuring we are well prepared for any storm damage response.

Equipment to be Replaced: 1992 model 200 Performance First Brush Bandit Chipper

ESTIMATED COST	PURCHASE PRICE	\$	73,000		
ж	ACCESSORIES*	\$	-);		
	LESS TRADE-IN**	\$	-		
	<b>NET PURCHASE PRICE</b>	\$	73,000		
	*Accessories include lighting, rad	ios, strip	ing, misc. eq	uipment.	
FINANCING	OPERATING BUDGET	\$	-		
	UNH - CASH	\$	-		
	<b>BOND - TOWN PORTION</b>				
	FEDERAL/STATE GRANT	\$	<b>-</b> (i)		
	CAPITAL RESERVE ACCOUNT	\$	-		
	TOTAL FINANCING COSTS	\$			
IF BONDED	NUMBER OF YEARS				
	TOTAL PRINCIPAL		(g. 11)		
	TOTAL INTEREST (EST'D)		<u> </u>		
	TOTAL PROJECT COST	\$	-		
ENTSLETM	A STATE OF THE PARTY OF THE PAR	AND DESCRIPTION OF THE PROPERTY OF	The state of the s		

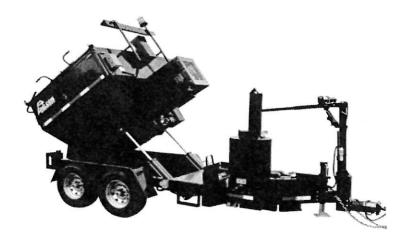


PROJECT YEAR	2022	VEHICLE COST	\$40,000
DESCRIPTION	Falcon Hot Box Pavement Patch System	DEPARTMENT	Public Works - Operations

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Part of a comprehensive pavement management program includes pavement preservation techniques such as full depth and ongoing patching. During cold weather winter conditions, the options for patching are limited and public works operations resort to using a "cold patch" mixture. Cold patch is a mixture of asphalt, aggregate and liquid asphalt and serves as a temporary measure typically used in emergency situations requiring multiple visits to maintain. A hot box pavement patch system allows for the use of heated bituminous asphalt year-round allowing for cold weather pavement work. A hot box trailer is a cost-effective way to transport asphalt and keep it hot all day. The unit will hold hot mix overnight and heat or re-heat throughout the day. The hot box trailer improves sustainable public works practices as it can also recycle leftover asphalt chunks and millings for use in the patching program.

The second secon				
ESTIMATED COST	PURCHASE PRICE	\$	40,000	
	ACCESSORIES*			
	LESS TRADE-IN**	_		
	NET PURCHASE PRICE	\$	40,000	
	*Accessories include lighting, radio	s, striping, ı	nisc. equip	ment.
FINANCING	OPERATING BUDGET	\$	-	
	BOND - TOWN			
V	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	\$	•	
	TOTAL FINANCING COSTS	\$	-	
IF BONDED:	NUMBER OF YEARS		7	
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)			
	TOTAL PROJECT COST	\$	-	



PROJECT YEAR	2021	PROJECT COST	\$80,000
	Mill Road Culvert Over Oyster River		
DESCRIPTION	Design	DEPARTMENT	Public Works
IMPETUS FOR PROJE	CT /IE MANDATED COUNCIL COA	I DEDTINITIATIVE ETC	· · · · · · · · · · · · · · · · · · ·

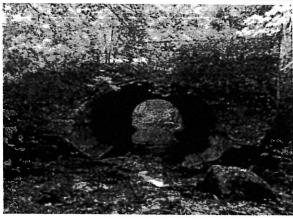
IMPETUS FOR PROJECT (IE. MANDATED, COUNCIL GOAL, DEPT INITIATIVE, ETC.)

Dept Initiative

# DESCRIPTION (TO INCLUDE JUSTIFICATION)

Mill Road Culvert over the Oyster River has recently been identified as a Red Listed Structure (rated poor) per the NHDOT Municipally-Owned Bridge Red List. The culvert is a 23ft span metal pipe culvert that was constructed in 1971. Inspection report shows moderate rusting, pitting and scaling on invert, bolts are heavily rusted and outlet end shows 8 foot long cracked area. Structure is at the end of its useful life. There is not gravity sewer through this section of Mill Road however there is a critical 12" water main crossing coming from the Foss Farm Tank. Project challenges that will be explored during design include traffic and pedestrian considerations, construction duration/timeline, and environmental permitting. Construction techniques that would not impact traffic, such as lining the culvert, will be explored. DPW will begin the Request for Qualifications (RFQ) Process to select a design engineering firm. Construction estimate will be refined during the design phase.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$	40,000	
2	FINAL DESIGN AND ENGINEERING	\$	40,000	
	CONSTRUCTION ENGINEERING OVERSIGHT			
4	CONSTRUCTION COSTS			
	CONTINGENCY			
	TOTAL PROJECT COST	\$	80,000	
FINANCING	OPERATING BUDGET	\$	-	
	UNH - CASH	\$	-	
	BOND - TOWN PORTION			
	UNH PORTION	\$	-	
	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	\$	-	
	TOTAL FINANCING COSTS	\$		
IF BONDED:	NUMBER OF YEARS		***************************************	
	TOTAL PRINCIPAL			
(3)	TOTAL INTEREST	<u> </u>		
	TOTAL ESTIMATED COST	\$	-	



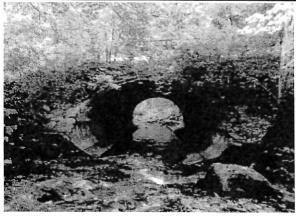
PROJECT YEAR	2022	PROJECT COST	\$450,000
DESCRIPTION	Mill Road Culvert Over Oyster River Construction	DEPARTMENT	Public Works
IMPETUS FOR PROJE	CT (IE. MANDATED, COUNCIL GOA	L, DEPT INITIATIVE, ETC.)	

Dept Initiative

### **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

Mill Road Culvert over the Oyster River has recently been identified as a Red Listed Structure (rated poor) per the NHDOT Municipally-Owned Bridge Red List. The culvert is a 23ft span metal pipe culvert that was constructed in 1971. Inspection report shows moderate rusting, pitting and scaling on invert, bolts are heavily rusted and outlet end shows 8 foot long cracked area. Structure is at the end of its useful life. There is not gravity sewer through this section of Mill Road however there is a critical 12" water main crossing coming from the Foss Farm Tank. Project challenges that will be explored during design include traffic and pedestrian considerations (likely a 10-12 min detour from road closure), construction duration/timeline, and environmental permitting. Construction techniques that would not impact traffic, such as lining the culvert, will be explored.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ -	
18	FINAL DESIGN AND ENGINEERING	\$ 8 <b>-</b> 1	
	CONSTRUCTION ENGINEERING OVERSIGHT		
	CONSTRUCTION COSTS	\$ 450,000	
	CONTINGENCY	\$ V <del>-</del>	
	TOTAL PROJECT COST		
FINANCING	OPERATING BUDGET	\$ -	
	UNH - CASH	\$ e <del>-</del>	
	BOND - TOWN PORTION		
	UNH PORTION	\$ -	
	FEDERAL/STATE GRANT	\$ -	
	CAPITAL RESERVE ACCOUNT	\$ 0=	
	TOTAL FINANCING COSTS	\$ -	
IF BONDED:	NUMBER OF YEARS		
	TOTAL PRINCIPAL		
	TOTAL INTEREST		
	TOTAL ESTIMATED COST	\$ -	



PROJECT YEAR	2022	VEHICLE COST	\$179,700
DESCRIPTION	Dump Truck 35,000 GVW	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4-5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced:

N/A- This year we will not trade in the truck to be replaced in order to have an extra truck for breakdowns during snow storms. This truck will be the trade in for the following year CIP

truck purchase.

TOTAL INTEREST (EST'D)
TOTAL PROJECT COST

ESTIMATED COST	PURCHASE PRICE	\$	178,600	
	ACCESSORIES*	\$	1,100	
	LESS TRADE-IN**			
	NET PURCHASE PRICE	\$	179,700	
	*Accessories include lighting, radios	, striping	g, misc. equipm	ent.
FINANCING	OPERATING BUDGET	\$	t. <del></del>	
	UNH - CASH	\$	-	
	BOND - TOWN PORTION			-
	UNH PORTION	\$	-	
	FEDERAL/STATE GRANT	\$	74	
	CAPITAL RESERVE ACCOUNT	\$	=	
	TOTAL FINANCING COSTS	\$	_	
IF BONDED:	NUMBER OF YEARS			
	TOTAL PRINCIPAL			



PROJECT YEAR	2023	VEHICLE COST	\$179,700
DESCRIPTION	Dump Truck 35,000 GVW	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4-5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced:

Truck # 18, 2013 Peterbilt which has been in service since September of 2012.

ESTIMATED COST	PURCHASE PRICE	\$	178,600	-	
	ACCESSORIES*	\$	1,100		
	LESS TRADE-IN**				
	NET PURCHASE PRICE	\$	179,700		
	*Accessories include lighting, radios	, striping	g, misc. equipment	t.	
FINANCING	OPERATING BUDGET	\$ .			
	UNH - CASH	\$	=		
	<b>BOND - TOWN PORTION</b>				
4	UNH PORTION	\$	-		
	FEDERAL/STATE GRANT	\$	-		
	CAPITAL RESERVE ACCOUNT	_\$	<u> </u>		
	TOTAL FINANCING COSTS	\$	ž		
IF BONDED:	NUMBER OF YEARS				
	TOTAL PRINCIPAL				
	TOTAL INTEREST (EST'D)		-		
	TOTAL PROJECT COST	\$	-		



PROJECT YEAR	2025	VEHICLE COST	\$185,900
	Dump Truck 35,000 GVW		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4-5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced:

Truck #7, 2014 Peterbilt which has been in service since August 2013.

ESTIMATED COST	PURCHASE PRICE	\$	189,800		
	ACCESSORIES*	\$	1,100		
	LESS TRADE-IN**	\$	(5,000)		
	<b>NET PURCHASE PRICE</b>	\$	185,900		
	*Accessories include lighting, ra	dios, str	riping, misc.	equipment.	
FINANCING	OPERATING BUDGET	\$			
	UNH - CASH	\$	•		
	<b>BOND - TOWN PORTION</b>				
	FEDERAL/STATE GRANT	\$	-		
	CAPITAL RESERVE ACCOUNT	\$	-		
	TOTAL FINANCING COSTS	\$	=		
IF BONDED:	NUMBER OF YEARS				
	TOTAL PRINCIPAL				
	TOTAL INTEREST (EST'D)				
	TOTAL PROJECT COST	\$	-		



PROJECT YEAR	2026	VEHICLE COST	\$193,200
	Dump Truck 35,000 GVW		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

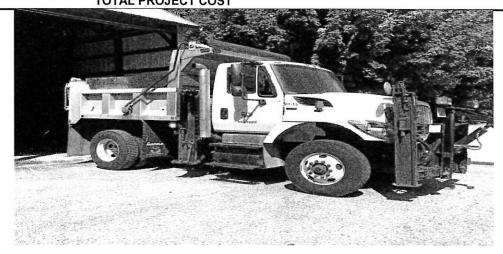
Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4- 5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced:

Truck # 1, 2015 International/Navistar which has been in service since June of 2014.

ESTIMATED COST	PURCHASE PRICE	\$	197,100	
	ACCESSORIES*	\$	1,100	
	LESS TRADE-IN**	\$	(5,000)	
	NET PURCHASE PRICE	\$	193,200	
	*Accessories include lighting, ra	dios, s	triping, misc. e	quipmer
FINANCING	OPERATING BUDGET	\$	<b>=</b>	
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>			
	FEDERAL/STATE GRANT	\$		
	CAPITAL RESERVE ACCOUNT	\$	: <b></b>	
	TOTAL FINANCING COSTS	\$		
IF BONDED:	NUMBER OF YEARS			
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)		······································	
9	TOTAL PROJECT COST			



PROJECT YEAR	2027	VEHICLE COST	\$200,100
	Dump Truck 35,000 GVW		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4- 5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced:

Truck # 14, 2015 International/Navistar

ESTIMATED COST	PURCHASE PRICE	\$	204,000		
	ACCESSORIES*	\$	1,100		
	LESS TRADE-IN**	\$	(5,000)		
	<b>NET PURCHASE PRICE</b>	\$	200,100		
	*Accessories include lighting, ra	adios, st	triping, misc	. equipment.	
FINANCING	OPERATING BUDGET	\$	-		
	UNH - CASH	\$	-		
	<b>BOND - TOWN PORTION</b>	\$	200,100		
	FEDERAL/STATE GRANT	\$	-		
	CAPITAL RESERVE ACCOUNT	\$			
	TOTAL FINANCING COSTS	\$	200,100		
IF BONDED:	NUMBER OF YEARS		7		
	TOTAL PRINCIPAL				
	TOTAL INTEREST (EST'D)	<u> </u>			
	TOTAL PROJECT COST	\$			



PROJECT YEAR	2028	VEHICLE COST	\$206,100
	Dump Truck 35,000 GVW		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4- 5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced: Truck # 31, 2016 International/Navistar

ESTIMATED COST	PURCHASE PRICE	\$	210,000	
	ACCESSORIES*	\$	1,100	
	LESS TRADE-IN**	_\$	(5,000)	
	<b>NET PURCHASE PRICE</b>	\$	206,100	
	*Accessories include lighting, rac	lios, strip	oing, misc. eq	quipment.
FINANCING	OPERATING BUDGET	\$		
	UNH - CASH	\$	-	
	BOND - TOWN PORTION	\$	206,100	
	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	\$		
	<b>TOTAL FINANCING COSTS</b>	\$	206,100	
IF BONDED:	NUMBER OF YEARS		7	
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)			
	TOTAL PROJECT COST	\$	-	



PROJECT YEAR	2029	VEHICLE COST	\$212,100
	Dump Truck 35,000 GVW		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Purchase of a 35,000 LB GVW (Gross Vehicle Weight) dump truck with sand/salt spreader, side wing and front plow.

Public Works has six 35,000 LB GVW dump trucks that are replaced on a 10 year replacement schedule. Sandblasting, priming and painting of frame is completed at the 5 year interval. These dump trucks operate up to 8 hours per day 4- 5 days a week for various hauling and construction projects and comprise the front line snow removal equipment for all Town roads during the winter months. The Town completes all of its snow removal operations in house with this equipment and supplements with contractors as needed.

Vehicle to be Replaced: Truck # 2, 2018 International/Navistar

ESTIMATED COST	PURCHASE PRICE	\$	216,000	
-	ACCESSORIES*	\$	1,100	
	LESS TRADE-IN**	_\$	(5,000)	
	NET PURCHASE PRICE	\$	212,100	
	*Accessories include lighting, rad	ios, strip	ing, misc. equipment.	
FINANCING	OPERATING BUDGET	\$	•	
*	UNH - CASH	\$		
	<b>BOND - TOWN PORTION</b>	\$	212,100	
	FEDERAL/STATE GRANT	\$	•	
	CAPITAL RESERVE ACCOUNT	\$	w)	
	TOTAL FINANCING COSTS	\$	212,100	
IF BONDED:	NUMBER OF YEARS		7	
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)	_		
	TOTAL PROJECT COST	\$		



ROJECT YEAR 2022 EQUIPI		EQUIPMENT COST	\$143,000
DESCRIPTION	Roadway Sweeper Replacement	DEPARTMENT	Public Works - Operations
DECODIDATION (TO IN	IOLUDE ILICTICIOATION		THE RESERVE OF THE PARTY OF THE

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

In 2022 the current Elgin Roadway Sweeper will be ten (10) years old and showing signs of deterioration. The DPW sweeps roadways two (2) times per week and for the entire month of March due to winter sanding operations. Broom replacement will run \$600/year.

Equipment to be replaced: 2012 Elgin 2000 Series Sweeper

ESTIMATED COST	PURCHASE PRICE	\$	147,000	
	ACCESSORIES*	\$	-	
	LESS TRADE-IN**	\$	(5,000)	
	<b>NET PURCHASE PRICE</b>	\$	142,000	
	*Accessories include lighting, rad	lios, strip	ing, misc. equipment.	
FINANCING	OPERATING BUDGET	\$	-	
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>			
	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	_\$		
	TOTAL FINANCING COSTS	\$	-	
IF BONDED:	NUMBER OF YEARS		7	
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)			
	TOTAL PROJECT COST	\$		



PROJECT YEAR	2022	EQUIPMENT COST	\$205,000
DESCRIPTION	Front End Loader Replacement	DEPARTMENT	Public Works - Operations

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

The Town's 1990 John Deere 544E front end loader will need to be replaced in 2022 when it will be 32 years old. Due to it's age and condition it's reliability and repair history have become a concern to DPW for this for this front line piece of equipment.

Equipment to Replace:

1990 John Deere 544E

ESTIMATED COST	PURCHASE PRICE	\$	210,000	
	ACCESSORIES*	\$	•	*
	LESS TRADE-IN**	\$	5,000	
	NET PURCHASE PRICE	\$	205,000	
	*Accessories include lighting, rad	ios, strip	oing, misc.	equipment.
FINANCING	OPERATING BUDGET	\$	•	
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>	\$	205,000	
	FEDERAL/STATE GRANT	\$	•	
	CAPITAL RESERVE ACCOUNT	_\$	-	
	TOTAL FINANCING COSTS	\$	205,000	
IF BONDED	NUMBER OF YEARS		7	
	TOTAL PRINCIPAL	\$	205,000	
	TOTAL INTEREST (EST'D)	\$	24,600	
	TOTAL PROJECT COST	\$	229,600	



PROJECT YEAR	YEAR 2022 EQUIPMENT C		\$17,500
	Mobile Air Compressor		
DESCRIPTION	Replacement	DEPARTMENT	Public Works - Operations
DECCRIPTION /TO INC	LUDE HIGHERATION		

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Current 2006 Air Compressor is scheduled for replacement in 2022.

This equipment operates all of our pneumatic (air driven) tools, i.e. pavement cutter/drills, outside of the DPW shop.

Equipment to be replaced:

2006 Sullivan/Palatek D210

ESTIMATED COST	PURCHASE PRICE	\$	17,500	
	ACCESSORIES*	\$	-	
	LESS TRADE-IN**	\$		
	NET PURCHASE PRICE	\$	17,500	
	*Accessories include lighting, ra	adios, s	striping, misc	. equipment.
FINANCING	OPERATING BUDGET	\$	17,500	
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>	\$	-	
	FEDERAL/STATE GRANT	\$	=	
	CAPITAL RESERVE ACCOUNT	\$	-	
	TOTAL FINANCING COSTS	\$	17,500	
IF BONDED:	NUMBER OF YEARS		N/A	GH
	TOTAL PRINCIPAL	\$		
	TOTAL INTEREST (EST'D)	\$	-	
	TOTAL PROJECT COST	\$	-	v



PROJECT YEAR	2023	PROJECT COST	\$455,000
DESCRIPTION	Dame Road Paving	DEPARTMENT	Public Works- Operations

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

Department Initiative following several conversations with residents.

# **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

DPW has two options to present for the paving of Dame Road.

#### **OPTION 1**

Roadside ditching and 20 foot wide pavement over 10,560 feet on both the Durham Point Road end and Newmarket Road end of Dame Road.

Durham Point Road end:

• Grading, Pavement-• Drainage-• Tree Removal-Total: \$137,500

Newmarket Road end:

• Grading, Pavement- \$ 82,000 • Drainage- \$ 18,000 • Tree Removal- \$ 11,500

Total: \$111,500

PROJECT TOTAL \$249,000 + contingency

#### **OPTION 2**

Pave the entire 14,560 ft. length of Dame Road:

Pavement-Drainage-

\$343,000 \$ 36,000 \$ 34,500

 Tree Removal-PROJECT TOTAL

\$ 34,500 \$413,500 + contingency

ESTIMATED COSTS			<b>OPTION 1</b>	OPTION 2
	FINAL DESIGN AND ENGINEERING	\$		\$ -
	CONSTRUCTION ENGINEERING OVERSIGHT	\$	-	\$ -
	CONSTRUCTION COSTS	\$	249,000	\$ 413,500
	CONTINGENCY	\$	13,000	\$ 41,500
	TOTAL PROJECT COST	\$	262,000	\$ 455,000
FINANCING	OPERATING BUDGET	\$	262,000	\$ ~
	UNH - CASH	\$	-	\$
1	BOND - TOWN PORTION	\$	-	\$ 455,000
	FEDERAL/STATE GRANT	\$		\$ -
	CAPITAL RESERVE ACCOUNT	\$	-	\$ -
	TOTAL FINANCING COSTS	\$	262,000	\$ 455,000
IF BONDED	NUMBER OF YEARS		N/A	10
	TOTAL PRINCIPAL	\$		\$ 455,000
	TOTAL INTEREST	\$		\$ 87,588
	TOTAL ESTIMATED COST	\$		\$ 542,588
	(1) 1 (1) (1) (1) (1) (1) (1) (1) (1) (1	2736	AT	



Longmarsh Road Bridge	DEPARTMENT	Public Works
2023	PROJECT COST	\$1,300,000
	2023	PROJECT COST

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

Dept Initiative

# **DESCRIPTION (TO INCLUDE JUSTIFICATION)**

This project includes the replacement of the existing culverts at the Longmarsh Road crossing of Longmarsh Brook with a 59 foot clear span bridge. The Longmarsh Road crossing over Longmarsh Brook is a causeway like structure consisting of two 60-inch diameter corrugated metal pipes (CMP) with dry- laid stone headwalls. The existing structure was constructed in the 1980's and has been reconstructed after being washed out during storm events in 2006, 2007, and 2010. The combination of a low roadway profile elevation over Longmarsh Brook and the inadequate hydraulic capacity of the existing culverts results in frequent overtopping of the roadway. The proposed improvements involve both replacement of the existing structure for one with a greater hydraulic capacity and increasing the roadway profile elevation at the low point of the crossing. The Town previously had a FEMA Hazard Mitigation grant but due to the costs of the construction, the Town could not justify that the project was cost effective under FEMA's benefit-to-cost analysis. Other sources of funding including State Bridge Aid will be explored.

ESTIMATED COSTS:	PRELIMINARY STUDY, DESIGN AND ENGINEERING	\$ 9 <b>=</b> 1	
	FINAL DESIGN AND ENGINEERING	\$ :E	
	CONSTRUCTION ENGINEERING OVERSIGHT	\$ 150,000	
_	CONSTRUCTION COSTS	\$ 1,150,000	
	CONTINGENCY	\$ 	
	TOTAL PROJECT COST	\$ 1,300,000	
FINANCING	OPERATING BUDGET	\$ -	
	UNH - CASH	\$ ·	
	BOND - TOWN PORTION	\$ 1,300,000	
	UNH PORTION	\$ ( <del>-</del> )	
	FEDERAL/STATE GRANT	\$ -	
	CAPITAL RESERVE ACCOUNT	\$ 	
	TOTAL FINANCING COSTS	\$ 1,300,000	
IF BONDED:	NUMBER OF YEARS	20	
	TOTAL PRINCIPAL	\$ 1,300,000	
	TOTAL INTEREST	\$ 478,000	
	TOTAL ESTIMATED COST	\$ 1,778,000	



PROJECT YEAR	2023	VEHICLE COST	\$42,500
DESCRIPTION	3/4 Ton Pick-Up Replacement	DEPARTMENT	Public Works - Operations

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

Replace Assistant Director of Operations 2013 F-150 pick-up truck. The truck fleet is currently on a 10 -12 year replacement program. This vehicle is the Assistant Operations Director's daily means of transportation during all work hours. This employee supervises the Operations Division, Building & Grounds Division, Sanitation Division, and Water Division. This vehicle is currently a 2013 F-150 1/2 Ton Pick-up which averages 15,000 miles per year and is scheduled for replacement in 2023. It will be replaced with a 3/4 4WD Ton Pick-Up with plow package to utilize more effectively during winter storms as well.

The current vehicle will be handed down to the Sanitation Division.

Vehicle to be Replaced:

2013 Ford F-150

ESTIMATED COST	PURCHASE PRICE	\$	41,500		
	ACCESSORIES*	\$	1,000		
	LESS TRADE-IN**	\$			
	<b>NET PURCHASE PRICE</b>	\$	42,500		
	*Accessories include lighting, rac	lios, stri	ping, misc.	equipment.	
FINANCING	OPERATING BUDGET	\$	-		
	UNH - CASH	\$	-		
	<b>BOND - TOWN PORTION</b>			#0	
	FEDERAL/STATE GRANT	\$	3 <del>=</del>		
	CAPITAL RESERVE ACCOUNT	\$	-		
	TOTAL FINANCING COSTS	\$	-		
IF BONDED:	NUMBER OF YEARS				
	TOTAL PRINCIPAL				
	TOTAL INTEREST (EST'D)				
	TOTAL PROJECT COST	\$			
			. 104		



PROJECT YEAR	2023	VEHICLE COST	\$130,000
DESCRIPTION	Aerial Bucket Truck	DEPARTMENT	Public Works - Operations
DECCRIPTION (TO IN	CLUDE HICTICICATIONS.		

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

The 2011 Aerial Bucket Truck is scheduled for replacement in 2023.

This vehicle is utilized for traffic control devices, repairs and installation, vegetation, facility maintenance and any projects which require a height above twelve (12) feet. DPW proposes to purchase a bucket truck with increased working height to 40' in order to work on street lighting efficiently, which DPW became responsible for following the upgrade to LED lights. The truck would be increased to a F-550 in order to accommodate the new higher lift. This truck will also have new utility compartments.

Vehicle to be Replaced:

2011 Ford F-450

PURCHASE PRICE	\$	150,000			
ACCESSORIES*	\$	-			
ESS TRADE-IN**	\$	(20,000)			
NET PURCHASE PRICE	\$	130,000			
Accessories include lighting, radi	ios, s	triping, misc. e	equipment.		
PERATING BUDGET	\$	-			
JNH - CASH	\$				
BOND - TOWN PORTION					
EDERAL/STATE GRANT	\$	( <b>=</b> )			
CAPITAL RESERVE ACCOUNT	\$	5.■.			
TOTAL FINANCING COSTS	\$	S <del>T</del> .			
IUMBER OF YEARS					
OTAL PRINCIPAL					
OTAL INTEREST (EST'D)					
TOTAL PROJECT COST	\$	-			
	ACCESSORIES* LESS TRADE-IN** NET PURCHASE PRICE Accessories include lighting, radio DPERATING BUDGET INH - CASH BOND - TOWN PORTION EDERAL/STATE GRANT CAPITAL RESERVE ACCOUNT TOTAL FINANCING COSTS IUMBER OF YEARS COTAL PRINCIPAL	ACCESSORIES*  ESS TRADE-IN**  NET PURCHASE PRICE  Accessories include lighting, radios, s DPERATING BUDGET  INH - CASH  COND - TOWN PORTION EDERAL/STATE GRANT  CAPITAL RESERVE ACCOUNT  TOTAL FINANCING COSTS  IUMBER OF YEARS COTAL PRINCIPAL COTAL INTEREST (EST'D)  TOTAL PROJECT COST  **  **  **  **  **  **  **  **  **	ACCESSORIES*  ESS TRADE-IN**  NET PURCHASE PRICE  ACCESSORIES include lighting, radios, striping, misc. of perating budget  NH - CASH  COND - TOWN PORTION  EDERAL/STATE GRANT  CAPITAL RESERVE ACCOUNT  TOTAL FINANCING COSTS  COTAL PRINCIPAL  COTAL INTEREST (EST'D)  TOTAL PROJECT COST  S - (20,000)  130,000  1	ACCESSORIES*  ESS TRADE-IN**  NET PURCHASE PRICE  ACCESSORIES include lighting, radios, striping, misc. equipment.  PERATING BUDGET  INH - CASH  COND - TOWN PORTION  EDERAL/STATE GRANT  APITAL RESERVE ACCOUNT  TOTAL FINANCING COSTS  TOTAL PRINCIPAL  OTAL INTEREST (EST'D)  TOTAL PROJECT COST  *  100,000  130,	ACCESSORIES*  ESS TRADE-IN**  NET PURCHASE PRICE  ACCESSORIES include lighting, radios, striping, misc. equipment.  PERATING BUDGET  NH - CASH  COND - TOWN PORTION  EDERAL/STATE GRANT  APITAL RESERVE ACCOUNT  TOTAL FINANCING COSTS  COTAL PRINCIPAL  COTAL INTEREST (EST'D)  TOTAL PROJECT COST  \$ -



PROJECT YEAR	2023	EQUIPMENT COST	\$170,000
DESCRIPTION	Sidewalk Plow Tractor Replacement	DEPARTMENT	Public Works - Operations

#### DESCRIPTION (TO INCLUDE JUSTIFICATION):

Replacement of the current 1998 Landini Sidewalk Snow tractor is needed. Durham has over 14 miles of sidewalks and has always been a walking community. DPW would like to purchase Prinoth SW4S which is a municipal snow removal vehicle engineered and designed for snow removal and clearing of sidewalks in compact municipal settings. A quick-mount attachment system allows the sidewalk machine to be equipped with a wide variety of standard skid-steer implements, such as a snow blower, power angle front blade and V-plow. This powerful tracked vehicle can accomplish the most demanding snow and ice clearing jobs in tight areas even in the worse of storms and also serves as a high efficiency blower to quickly load trucks during snow removal and haul out operations of Durham's business district and parking lots.

Vehicle to be Replaced:

1998 Landini Sidewalk Tractor Plow

ESTIMATED COST	PURCHASE PRICE	\$	170,000	
	ACCESSORIES*	\$	-	
	LESS TRADE-IN**	\$	-	
	NET PURCHASE PRICE	\$	170,000	
	*Accessories include lighting, ra	dios, st	riping, misc	. equipment.
FINANCING	OPERATING BUDGET	\$	-	
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>			
	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	\$	-	
	TOTAL FINANCING COSTS	\$	-	
IF BONDED:	NUMBER OF YEARS		7	
,	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)			
	TOTAL PROJECT COST	\$	-	
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DESCRIPTION	Sidewalk Plow Tractor Replacement	DEPARTMENT	Public Works - Operations
PROJECT YEAR	2027	EQUIPMENT COST	\$180,000

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Replacement of the current 2012 McClean Sidewalk Snow tractor is needed. This sidewalk tractor is on a 15 year replacement schedule. Durham has over 14 miles of sidewalks and has always been a walking community. The new sidewalk snow tractor would meet all snow removal, maintenance and de-icing needs. This tractor will also be used during the summer months for misc. projects such as sidewalk sweeping and roadside mowing. This new tractor will require less maintenance time/dollars due to initial 3 year warranty.

Vehicle to be Replaced:

2012 Mcclean Sidewalk Tractor

ESTIMATED COST	PURCHASE PRICE	\$	180,000	
	ACCESSORIES*	\$	-	
	LESS TRADE-IN**	\$	-	
	NET PURCHASE PRICE	\$	180,000	
	*Accessories include lighting, ra	dios, st	riping, misc	. equipment.
FINANCING	OPERATING BUDGET	\$		
	UNH - CASH	\$	-	
	<b>BOND - TOWN PORTION</b>	\$	106,500	
Ŷ	FEDERAL/STATE GRANT	\$	-	
	CAPITAL RESERVE ACCOUNT	\$		
	TOTAL FINANCING COSTS	\$	106,500	
IF BONDED:	NUMBER OF YEARS		7	*
	TOTAL PRINCIPAL	\$	106,500	
	TOTAL INTEREST (EST'D)	\$	12,780	
	TOTAL PROJECT COST	\$	119,280	
5 THE REAL PROPERTY AND A 1 THE			-/-	T-05-00



PROJECT YEAR	2026	EQUIPMENT COST	\$21,000
DESCRIPTION	Engineering Jeep Replacement	DEPARTMENT	Engineering

# **DESCRIPTION (TO INCLUDE JUSTIFICATION):**

We will be replacing the 2014 Jeep Patriot utilized for engineering in 2026. This vehicle is used to go from one job site to another for the engineering division, at times traveling across rough terrain. A small or midsized SUV, potentially a hybrid or fully electric vehicle will be investigated to replace the current Jeep in 2026.

Vehicle to be Replaced: 2014 Jeep Patriot

ESTIMATED COST	PURCHASE PRICE	\$	25,000	
	ACCESSORIES*	\$		
	LESS TRADE-IN**	\$	(4,000)	
	<b>NET PURCHASE PRICE</b>	\$	21,000	
	*Accessories include lighting, rad	lios, stripi	ng, misc. equipment.	
FINANCING	OPERATING BUDGET	\$		
	UNH - CASH	\$	-1	
	<b>BOND - TOWN PORTION</b>			
	FEDERAL/STATE GRANT	\$		
	CAPITAL RESERVE ACCOUNT	\$		
	TOTAL FINANCING COSTS	\$	•	
IF BONDED	NUMBER OF YEARS			
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)			
	TOTAL PROJECT COST	\$	-	



PROJECT YEAR	2027	EQUIPMENT COST	\$42,500
	Replacement of Highway Foreman's		
DESCRIPTION	Truck	DEPARTMENT	DPW- Operations

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Replace Highway Foreman's 2017 Dodge Ram 2500 Pick-up truck. The truck fleet is currently on a 10-12 year replacement program. This vehicle is used by the Highway Foreman for daily transportation of equipment for his job of maintaining/ supervising roads, bridges and dams, traffic control, stormwater, snow plowing and annual cleanups. Due to the needs of various different projects and responsibilities, this truck must have adequate utility body or tool storage for things such as chain saws, etc. DPW proposes to replace with a one-ton to include a utility body and plow package on this vehicle.

Vehicle to be Replaced:

2017 Dodge Ram 2500

ESTIMATED COST	PURCHASE PRICE	\$	47,500	
	ACCESSORIES*	\$	=	
	LESS TRADE-IN**	\$	(5,000)	
	NET PURCHASE PRICE	\$	42,500	
	*Accessories include lighting, radi	ios, strip	ing, misc. equipı	ment.
FINANCING	OPERATING BUDGET	\$	-	
	UNH - CASH	\$		
	<b>BOND - TOWN PORTION</b>			
	FEDERAL/STATE GRANT	\$		
	CAPITAL RESERVE ACCOUNT	\$		
	TOTAL FINANCING COSTS	\$	-	
IF BONDED	NUMBER OF YEARS	9		
	TOTAL PRINCIPAL			
	TOTAL INTEREST (EST'D)	W		
	TOTAL PROJECT COST	\$	-	



PROJECT YEAR	2030	EQUIPMENT COST	\$310,000
	Replacement of Rubber Tired		Public Works Operations/
DESCRIPTION	Excavator	DEPARTMENT	Water

# DESCRIPTION (TO INCLUDE JUSTIFICATION):

Public Works will be replacing the 2013 Volvo rubber tired excavator in 2030. This is the most important piece of front line equipment. The excavator is utilized in many facets such as water breaks, road side mowing, excavation work, both large and small drainage work, culverts and road side ditching as well as many other miscellaneaous projects. This piece of equipment will be funded 25% from the water department.

Vehicle to be Replaced:

2013 Volvo Rubber tired Excavator

ESTIMATED COST	PURCHASE PRICE	\$	310,000		
	ACCESSORIES*	\$	•		
	LESS TRADE-IN**	/ <del>****</del>			
	NET PURCHASE PRICE				
	*Accessories include lighting, rad	ios, stri	ping, misc. (	equipment.	
FINANCING	OPERATING BUDGET	\$			
	UNH - CASH	\$	•		
	<b>BOND - TOWN PORTION</b>				
	FEDERAL/STATE GRANT	\$	-		
	CAPITAL RESERVE ACCOUNT	_\$	-		
	TOTAL FINANCING COSTS	\$	<b>1</b>		
IF BONDED	NUMBER OF YEARS				
	TOTAL PRINCIPAL				
	TOTAL INTEREST (EST'D)	×			
MARKON COLUMN	TOTAL PROJECT COST	\$	-		

