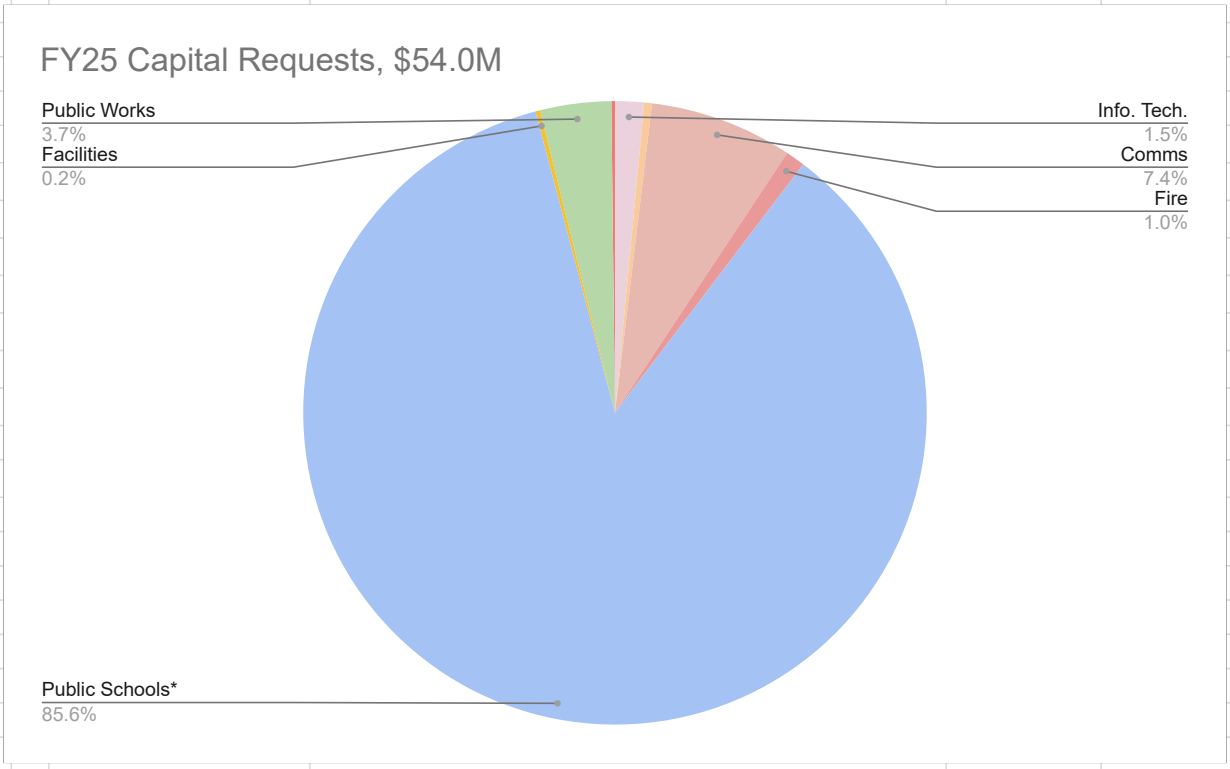
Town of Hopkinton FY 2025 Capital Budget Requests

Town of Hopkinton FY25 General Fund - Capital Projects (Pre-Decisional Draft), Rev 11/30/23					
		Hopkinton Department	**General Fund Project**	**FY25 Amount Requested**	**In FY24 5 Yr Plan**
123	1	Town Manager	Community Requests	$100,000	$0
155	1	Information Technology	End User Computer Hardware Renewal	$76,183	$54,600
155	2	Information Technology	Network Switches	$40,500	$40,500
155	3	Info. Technology	Paper Record Digitization - All Town Records	$667,500	$0
155	4	Information Technology	Cyclical Replacement of Multi-Function Printers	$24,000	$24,000
210	1	Police	3 Cruisers	$217,300	$217,300
214	1	Communications	Public Safety Radio System Upgrade	$4,000,000	$3,000,000
220	1	Fire	Lucas CPR Machine	$23,383	$0
220	2	Fire	Ambulance 2 Replacement	$520,000	$500,000
300	1	Public Schools	HVAC, Three Large Air Handling Units	$700,000	$950,000
300	2	Public Schools	Replace Utility Vehicle (FY25 from Parking Revolving)	$80,000	$70,000
300	3	Public Schools	Hopkins School Addition & Renovation	$43,940,000	$33,000,000
300	4	Public Schools	Marathon School Playground (Proposed CPC Funding)	$1,000,000	$1,000,000
300	5	Public Schools	High School Track-Field 3 (Proposed CPC Funding)	$350,000	$350,000
300	6	Public Schools	Systemwide Technology Upgrades	$100,000	$100,000
410	1	Facilities	Fruit St. Garage Repairs	$30,000	$100,000
410	2	Facilities	Center School Re-Use Schematic Design	$100,000	$265,000
420	1	Public Works	Replace Street Sweeper (S-22)	$325,000	$305,000
420	2	Public Works	Superduty Pickup (M-1) F350 Replacement	$131,000	$95,000
420	3	Public Works	Drainage Improvement - Ash Street	$500,000	$0
420	4	Public Works	Sidewalks - DiCarlo, Barbara, Peppercorn	$780,000	$0
420	5	Public Works	Culvert Replacement - Granite St, Chestnut St	$250,000	$0
			FY25 General Government Fund Total:	$53,954,866	
			Enterprise Fund Project	**FY25 Amount Requested**	**In FY24 5 Yr Plan**
6100	1	Water Enterprise	Vehicle Ford utility pickup W3	$70,000	$65,000
6100	2	Water Enterprise	Town-wide Flushing Program (discolored water)	$100,000	$0
6100	3	Water Enterprise	Howe Treament Plant - replace ozone treatment w/Ashland	$958,000	$0
6100	4	Water Enterprise	Grove St Tank (design)	$250,000	$0
6100	5	Water Enterprise	Water Main Replacement - East Main St	$1,700,000	$0
6100	6	Water Enterprise	Vehicle Ford utility pickup W1	$70,000	$63,000
6100	7	Water Enterprise	Vehicle Ford utility pickup W2	$125,000	$110,000
			FY25 Water Enterprise Total:	$3,273,000	
6100	1	Sewer Enterprise	WWTF membrane (Req'd. by DEP)	$345,000	$0
6100	2	Sewer Enterprise	Vehicle pickup truck replacement (E2)	$63,000	$63,000
6100	3	Sewer Enterprise	Sewer Sys. Eval. Survey (SSES) - Hayden Rowe Pump Station tribut	$221,500	$0
			FY25 Sewer Enterprise Total:	$629,500	

Town of Hopkinton FY25 General Fund - Capital Projects (Pre-Decisional Draft), Rev 11/30/23

		Hopkinton Department	General Fund Project	FY25 Amount Requested	In FY24 5 Yr Plan
123	1	Town Manager	Community Requests	$100,000	$0
155	1	Information Technology	End User Computer Hardware Renewal	$76,183	$54,600
155	2	Information Technology	Network Switches	$40,500	$40,500
155	3	Info. Technology	Paper Record Digitization - All Town Records	$667,500	$0
155	4	Information Technology	Cyclical Replacement of Multi-Function Printers	$24,000	$24,000
210	1	Police	3 Cruisers	$217,300	$217,300
214	1	Communications	Public Safety Radio System Upgrade	$4,000,000	$3,000,000
220	1	Fire	Lucas CPR Machine	$23,383	$0
220	2	Fire	Ambulance 2 Replacement	$520,000	$500,000
300	1	Public Schools	HVAC, Three Large Air Handling Units	$700,000	$950,000
300	2	Public Schools	Replace Utility Vehicle (FY25 from Parking Revolving)	$80,000	$70,000
300	3	Public Schools	Hopkins School Addition & Renovation	$43,940,000	$33,000,000
300	4	Public Schools	Marathon School Playground (Proposed CPC Funding)	$1,000,000	$1,000,000
300	5	Public Schools	High School Track-Field 3 (Proposed CPC Funding)	$350,000	$350,000
300	6	Public Schools	Systemwide Technology Upgrades	$100,000	$100,000
410	1	Facilities	Fruit St. Garage Repairs	$30,000	$100,000
410	2	Facilities	Center School Re-Use Schematic Design	$100,000	$265,000
420	1	Public Works	Replace Street Sweeper (S-22)	$325,000	$305,000
420	2	Public Works	Superduty Pickup (M-1) F350 Replacement	$131,000	$95,000
420	3	Public Works	Drainage Improvement - Ash Street	$500,000	$0
420	4	Public Works	Sidewalks - DiCarlo, Barbara, Peppercorn	$780,000	$0
420	5	Public Works	Culvert Replacement - Granite St, Chestnut St	$250,000	$0
			FY25 General Government Fund Total:	$53,954,866	$40,071,400



Town of Hopkinton Five Year Capital Plan FY 2025-2029, Draft, November 30, 2023										
		Department	**General Fund Project**	**FY2025 Ideas (Not Approved)**	**FY2026 Ideas (Not Approved)**	**FY2027 Ideas (Not Approved)**	**FY2028 Ideas (Not Approved)**	**FY2029 Ideas (Not Approved)**	**FY25 - FY29**
123	1	Town Manager	Community Requests	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
155	1	Info. Technology	End User Computer Hardware Refresh	$76,183	$56,800	$59,640	$62,622	$65,753	$320,998
155	2	Info. Technology	Network Switching & WiFi Upgrades	$40,500					$40,500
155	3	Info. Technology	Paper Record Digitization - All Town Records	$667,500					$667,500
155	4	Info. Technology	Multi Function Printer Cyclical Replacement (2)	$24,000			$26,460		$50,460
155	5	Info. Technology	Core Server & Data Center Upgrades		$55,000				$55,000
210	1	Police	Patrol Cruiser Replacment (3)	$217,300	$230,338	$244,158	$258,808	$258,808	$1,209,412
214	1	Communications	Public Safety Radio System Upgrade	$4,000,000					$4,000,000
214	2	Communications	Public Safety Portable Radios		$55,000	$55,000	$55,000	$55,000	$220,000
220	1	Fire	Lucas CPR Machine	$23,383					$23,383
220	2	Fire	Ambulance (A-3) Purchase	$520,000					$520,000
220	3	Fire	Ambulance (A-2) Replacement					$600,000	$600,000
220	4	Fire	Vehicle (C-2 & C-4) Replacement, 2 Ford Explorer			$150,000			$150,000
220	5	Fire	Vehicle (B-6) Replacement				$100,000		$100,000
300	1	Public Schools	HVAC, Three Large Air Handling Units	$700,000	$850,000	$850,000	$425,000	$2,025,000	$4,850,000
300	2	Public Schools	Replace Utility Vehicle (FY25 from Parking Revolving)	$80,000		$42,000	$80,000	$80,000	$282,000
300	3	Public Schools	Hopkins School Addition & Renovation	$43,940,000					$43,940,000
300	4	Public Schools	Marathon School Playground (Proposed CPC Funding)	$1,000,000					$1,000,000
300	5	Public Schools	High School Track-Field 3 (Proposed CPC Funding)	$350,000	$5,500,000				$5,850,000
300	6	Public Schools	Systemwide Technology Upgrades	$100,000	$100,000	$100,000	$75,000	$75,000	$450,000
300	7	Public Schools	Loop Road Sidewalk, Parking Lot Paving			$1,500,000	$600,000		$2,100,000
300	8	Public Schools	Generators				$30,000	$150,000	$180,000
300	9	Public Schools	Roof Replacement					$3,737,500	$3,737,500
300	10	Public Schools	Marathon Feasibility Study, Design, Addition		$150,000				$150,000
300	11	Public Schools	Kitchen Equipment			$50,000			$50,000
410	1	Facilities	EMC Park Drainage Remediation						$0
410	2	Facilities	Town Hall Boiler Replacement		$100,000				$100,000
410	3	Facilities	Senior Center Kitchen Equipment & Ventilation		$100,000				$100,000
410	4	Facilities	Senior Center Dining Facility Expansion		$265,000				$265,000
410	5	Facilities	Police Station Condensing Unit		$200,000				$200,000
410	6	Facilities	Fruit St. Garage Repairs	$30,000	$250,000				$280,000
410	7	Facilities	Senior Center Condensing Units			$300,000			$300,000
410	8	Facilities	Fire Main - Envelope Repairs				$150,000		$150,000
410	9	Facilities	Fruit St. Oil to Gas Conversion						$0
410	10	Facilities	Center School Re-Use Schematic Design	$100,000					$100,000
410	11	Facilities	Center School Re-Use Construction FY29 $20M		$20,000,000				$20,000,000
420	1	Public Works	Replace Street Sweeper (S-22)	$325,000					$325,000
420	2	Public Works	Superduty Pickup (M-1) F350 Replacement	$131,000					$131,000
420	3	Public Works	Drainage Improvement - Ash Street	$500,000					$500,000
420	4	Public Works	Sidewalks - DiCarlo, Barbara, Peppercorn	$780,000					$780,000
420	5	Public Works	Culvert Replacement - Granite St, Chestnut St	$250,000					$250,000
420	6	Public Works	Superduty Dump (S-4) INT 7600 Replacement		$250,000				$250,000
420	7	Public Works	Superduty Dump (S-6) INT 7600 Replacement		$240,000				$240,000
420	8	Public Works	Superduty Dump (S-24) INT 7600 Replacement		$240,000				$240,000
420	9	Public Works	Replace Hot Box w/ Tow Behind Hot Box		$100,000				$100,000
420	10	Public Works	Culvert & Drainage - Granite St		$732,000				$732,000
420	11	Public Works	Roadway/Stormwater - E Main, Curtis Rd		$1,750,000				$1,750,000
420	12	Public Works	Drainage Improvement - Wood St (near 360)		$250,000				$250,000
420	13	Public Works	Drainage Improvement - BMPs Lake Whitehall		$250,000				$250,000
420	14	Public Works	Pavement Management Plan Update		$50,000				$50,000

Town of Hopkinton Five Year Capital Plan FY 2025-2029, Draft, November 30, 2023										
		Department	**General Fund Project**	**FY2025 Ideas (Not Approved)**	**FY2026 Ideas (Not Approved)**	**FY2027 Ideas (Not Approved)**	**FY2028 Ideas (Not Approved)**	**FY2029 Ideas (Not Approved)**	**FY25 - FY29**
420	15	Public Works	Town-Wide Traffic Study		$150,000				$150,000
420	16	Public Works	Replace Explorer (Car 1)			$70,000			$70,000
420	17	Public Works	Replace Loader (L-11)			$270,000			$270,000
420	18	Public Works	Replace Dump Truck (S-8)			$255,000			$255,000
420	19	Public Works	Culvert & drainage improvements - Chestnut St			$750,000			$750,000
420	20	Public Works	Stormwater improvement - Cedar St			$475,000			$475,000
420	21	Public Works	Road/SW-Briarcliff, Wild, Thayer Hts, Hemlock			$885,000			$885,000
420	22	Public Works	Grist Mill Dam (North Mill St) rehabilitation			$450,000			$450,000
420	23	Public Works	Replace Trackless Tractor (S-18)				$200,000		$200,000
420	24	Public Works	Replace Trackless Tractor (S-19)				$200,000		$200,000
420	25	Public Works	Replace Bomag Roller				$35,000		$35,000
420	26	Public Works	Paving - Fruit & Wood St				$2,000,000		$2,000,000
420	27	Public Works	Stormwater - W Main, Lake Maspenock Area					$250,000	$250,000
420	28	Public Works	Paving - Pond St, Valleywood Area					$900,000	$900,000
420	29	Public Works	Bloods Pond Dam (South Mill St) rehabilitation					$761,000	$761,000
				$53,954,866	$32,024,138	$6,605,798	$4,397,890	$9,058,061	$106,040,753
Water Enterprise Fund 6100									
6100	1	Water Enterprise	Vehicle Ford utility pickup W3	$70,000					$70,000
6100	2	Water Enterprise	Town-wide Flushing Program (discolored water)	$100,000					$100,000
6100	3	Water Enterprise	Howe Treament Plant - replace ozone treatment w/Ashland	$958,000					$958,000
6100	4	Water Enterprise	Grove St Tank (design)	$250,000					$250,000
6100	5	Water Enterprise	Water Main Replacement - East Main St	$1,700,000					$1,700,000
6100	6	Water Enterprise	Vehicle Ford utility pickup W1	$70,000					$70,000
6100	7	Water Enterprise	Vehicle Ford utility pickup W2	$125,000					$125,000
6100	8	Water Enterprise	Year 1 of Construction (for MWRA build-out)		$12,475,000				$12,475,000
6100	9	Water Enterprise	Grove St Tank (construction)		$2,400,000				$2,400,000
6100	10	Water Enterprise	Water Main Replacement - Fruit St & Wood St (engineering)		$400,000				$400,000
6100	11	Water Enterprise	Year 2 of Construction (for MWRA build-out)			$12,475,000			$12,475,000
6100	12	Water Enterprise	Water Main Replacement - Wood St (construction)			$1,900,000			$1,900,000
6100	13	Water Enterprise	Vehicle Dump Triuck Replacement (W6)				$90,000		$90,000
6100	14	Water Enterprise	Ingersoll Rand Compressor (1/2 water 1/2 sewer)				$6,000		$6,000
6100	15	Water Enterprise	Water Main Replacement - Fruit St (construction)				$1,200,000		$1,200,000
6100	16	Water Enterprise	Water Main Replacement - West Main St (engineering)					$250,000	$250,000
6100	17	Water Enterprise	Water Service updates - Pleasant St					$800,000	$800,000
				$3,273,000	$15,275,000	$14,375,000	$1,296,000	$1,050,000	$35,269,000
Sewer Enterprise Fund 6000									
6100	1	Sewer Enterprise	WWTF membrane (Req'd. by DEP)	$345,000					$345,000
6100	2	Sewer Enterprise	Vehicle pickup truck replacement (E2)	$63,000					$63,000
6100	3	Sewer Enterprise	Sewer Sys. Eval. Survey (SSES) - Hayden Rowe Pump Sta.	$221,500					$221,500
6100	4	Sewer Enterprise	WWTF screen system replacement (Required by DEP)		$465,000				$465,000
6100	5	Sewer Enterprise	Main Replacement - Wood St (Oliver Ln to Walker St)		$1,100,000				$1,100,000
6100	6	Sewer Enterprise	Main Replacement - easement (Cedar : Wood, design)		$200,000				$200,000
6100	7	Sewer Enterprise	WWTF safety and control upgrades (Req'd. by DEP)			$70,000			$70,000
6100	8	Sewer Enterprise	SSES - West Main St Pump Station tributary			$200,000			$200,000
6100	9	Sewer Enterprise	Sewer Main Replacement - easement (Cedar : Wood)			$1,200,000			$1,200,000

Town of Hopkinton Five Year Capital Plan FY 2025-2029, Draft, November 30, 2023									
		Department	**General Fund Project**	**FY2025 Ideas (Not Approved)**	**FY2026 Ideas (Not Approved)**	**FY2027 Ideas (Not Approved)**	**FY2028 Ideas (Not Approved)**	**FY2029 Ideas (Not Approved)**	**FY25 - FY29**
6100	10	Sewer Enterprise	Sewer Main Replacement - Saddle Hill Rd (engineering)			$330,000			$330,000
6100	11	Sewer Enterprise	Ingersoll Rand Compressor (1/2 water 1/2 sewer)				$6,000		$6,000
6100	12	Sewer Enterprise	Main Replacement - Saddle Hill Rd (may need phasing)				$2,900,000		$2,900,000
				$629,500	$1,765,000	$1,800,000	$2,906,000	$0	$7,100,500

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Information Technology**
Requesting Official: Josh Grossetti
Item Description: **End user computer hardware refresh**
Capability to be replaced or new risk/opportunity to be addressed:**This is for the ongoing, systematic and planned refresh of end user computing hardware.**

FY 2024 capital amount requested; note contingency amount:	$76,183 of which $4,984 is contingency
Amount/duration of future FY follow-on costs:	Costs fluctuate as age of fleet is not a perfect distribution, though a normalized yearly value is $58,188.
Available grants, subsidies, trade-in, or other cost reductions:	

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	This is a planned and systematic hardware refresh of end-use computing hardware.
(Why) Describe link to Town Vision or Goals:	The cost of replacing a laptop includes the cost of the associated docking station and any required cables/connectors and peripherals. It is forecast that monitors will be replaced every-other refresh cycle, so between every 7-10 years. Inclusive of the docking station costs for the laptops, and including that half of the replacements each year will also receive a new monitor, we are using replacement costs of $1,637 for laptops and $1,350 for desktops. We have continued to adjust upward the life expectancy of devices; and are now using 4.25 years for laptops, and 5.25 years for desktops; which continues to keep costs lower than if Hopkinton replaced devices more frequently. In FY24, we moved from 3.5 years for laptops to 4 years, and 5 years on desktops to 5.25 years (compared to FY23). Under this model, with a perfect distribution, we would be replacing 24 laptops per year and 14 desktops per year, at costs of $39,288 and $18,900 for a total of $58,188 per year.

	If funded at the proposed level, FY25 would be the last year of "catch up" from a budget cycle during the covid-19 pandemic when no funding was appropriated for this ongoing initiative. FY26's projected proposal would be $56,800 returning near the normalized expected funding value. Without this funding, at the end of FY25 we would be forecast to have 27 laptops beyond 4.25 years old, and 20 desktops beyond 5.25 years old.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Town employees, and thus residents, benefit from this initiative as proactive replacement of these devices is an important component to continue to provide employees a reliable technology platform from which to perform core functions of local government.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	
(How Long) Describe the expected service life:	Life expectancy: 4.25 to 5+ years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **1 of 4** Town Manager Priority: _____ of _____

Department: **Information Technology**
Requesting Official: Josh Grossetti
Item Description: **Network switching & Wifi upgrades (phase 2 of 2)**
Capability to be replaced or new risk/opportunity to be addressed:**To upgrade legacy network switches and wireless access points throughout town buildings, to next-gen wifi standards (wifi 6E)**

FY 2024 capital amount requested; note contingency amount:	$40,500 of which $6,250 is contingency
Amount/duration of future FY follow-on costs:	
Available grants, subsidies, trade-in, or other cost reductions:	

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	To replace/upgrade 36 existing wireless access points, and expand coverage in identified needed areas, and keep up with next-gen wifi standards (wifi 6E).
(Why) Describe link to Town Vision or Goals:	To provide reliable and resilient wifi within all town buildings; for the public, volunteers, and employees.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	This investment directly benefits residents as the town provides free wifi access from all town buildings; including the Public Library.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	
(How Long) Describe the expected service life:	Life expectancy: 5 - 7+ years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)
Departmental Priority: **2 of 4** Town Manager Priority: _____ of _____

Department: **Information Technology**
Requesting Official: Josh Grossetti
Item Description: **Paper record digitization - all town records**
Capability to be replaced or new risk/opportunity to be addressed: **Digitize paper records for resilience, risk mitigation, ease of access for staff and residents, as well as increased transparency and public facing self-service.**

FY 2024 capital amount requested; note contingency amount:	$667,500 of which $43,750 is contingency
Amount/duration of future FY follow-on costs:	There are no anticipated additional future-year costs directly associated with digitizing paper records beyond the operating budget allocated for ongoing support of the already implemented document management system.
Available grants, subsidies, trade-in, or other cost reductions:	

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Digitize paper records for resilience, ease of access for staff and residents, as well as increased transparency and public facing self-service.
(Why) Describe link to Town Vision or Goals:	This initiative supports efficient local government and well maintained systems. This initiative also enhances transparency by providing more files and documents directly to the public, thereby fostering increased public engagement in local governance.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	This investment benefits residents and town staff as these records will be significantly easier to access, from any location.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	This investment yields both tangible and intangible benefits. Currently, the town incurs an annual cost of almost $20,000 for leasing space in non-town-owned buildings to store active paper records. Digitizing these records would eliminate the need for external storage and the associated costs. Town staff spend time and resources commuting daily to off-site locations to access these files. Digitization would enable direct public access via a self-service portal, reducing staff involvement or providing for increased customer service with no delay. Moreover, there's a crucial archive and risk mitigation aspect. Many paper documents lack duplicates and serve as the sole copy, posing risks in case of environmental incidents like flood or fire. Digitization ensures protection from such impacts, preserving records for future reference.
(How Long) Describe the expected service life:	Life expectancy: 20+ years. Files will be digitized using an open standard, which best ensures flexibility for the future.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)
Departmental Priority: **3 of 4** Town Manager Priority: _____ of _____

Department: **Information Technology**
Requesting Official: Josh Grossetti
Item Description: **Cyclical Replacement of multifunction printers**
Capability to be replaced or new risk/opportunity to be addressed:**To upgrade aging multi-function printers (print, copy, scan, etc.)**

FY 2024 capital amount requested; note contingency	$24,000 of which $4,000 is contingency

amount:	
Amount/duration of future FY follow-on costs:	
Available grants, subsidies, trade-in, or other cost reductions:	

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	To replace aging office equipment.
(Why) Describe link to Town Vision or Goals:	To provide reliable printing, copy, and scanning capabilities within all town buildings.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	This investment benefits residents as town staff use these devices to print documentation or other document copies to residents, and town staff use these devices daily as part of their operational workflows to make copies or scan/digitize paper documents. .
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	
(How Long) Describe the expected service life:	Life expectancy: 5 - 7 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **4 of 4** Town Manager Priority: _____ of _____

Town of Hopkinton Fiscal Year 2024 5-Year Capital Need Projection

Department: Information Technology_____
Requesting Official: Josh Grossetti_____

Required for projected needs of $25,000 or more, FY 2025 - FY 2029
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
26	End User Computer Hardware Refresh	$56,800	
27	End User Computer Hardware Refresh	$59,640	
28	End User Computer Hardware Refresh	$62,622	
29	End User Computer Hardware Refresh	$65,753	
28	Cyclical Replacement of multifunction printers	$26,460	
26	Core server & datacenter upgrades	$55,000	

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: ___POLICE_____
Requesting Official: _____Chief Joseph Bennett_____

Department: Police Department
Requesting Official: Chief Joseph E. Bennett III
Potentially COVID-19 Related: N Item Description: Cruiser Replacement
Capability to be replaced or new risk/opportunity to be addressed:

FY 2025 capital amount requested; note contingency amount:	$217,300
Amount/duration of future FY follow-on costs:	The Police Department needs to replace three cruisers per year just to keep level services
Available grants, subsidies, trade-in, or other cost reductions:	3 Vehicle's to be sold at auction or refurbished for other town departments, at a cost savings of approximately $15,000 ($5,000 per trade-in)

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	The Police Vehicles are essential in the daily operation and service orientated response to the citizens of the Town of Hopkinton and visiting citizens. It is essential that the Department vehicles are equipped and in good working order to meet these expectations and services.
(Why) Describe link to Town Vision or Goals:	The Hopkinton Police Department has been able to purchase police vehicles over the past several years by utilizing pay as you go capital funds that have been available. Cost is based on last year's prices, cost increase is estimated at approximately 10% per year for new car
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	All of the community benefits from having a fleet that is running optimal and efficiently. The Police department is working toward switching all of its vehicles to "green" hybrid front line police cruisers that are good for the environment and cost-efficient fuel wise.

(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit: Maintaining an updated fleet reduces the potential cost of repairs of an ageing fleet. Latest data from Ford 2023 model. **(See Enclosure: 2)**
(How Long) Describe the expected service life:	Describe the expected service life: According to data released by Ford Motor company there will be a cost savings of 585 gallons of fuel (driving) plus 965 gallons of fuel (idle) for an estimated total of 1,550 gallons of fuel per year saved. This calculates to an estimated $6,976 dollars a year per car in fuel savings. By switching to Hybrid vehicles also will add a potential of 27,421 pounds of Co2 output per year, per car. Once a vehicle exceeds the manufactures warranty there is potential of exposure to unknown costs of repair. (How Long) 3 years or 100,000 miles

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: __1__ of ___1__ Town Manager Priority: _____ of _____ **Enclosure: (1)**

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: ___POLICE_____
Requesting Official: _____Chief Joseph Bennett_____

Required for projected needs of $25,000 or more, FY 2025 - FY 2029
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description Estimated	Amount	General Fund, Enterprise Fund, or CPA
2025	3 replacement cruisers	$217,300	General Fund
2026	3 replacement cruisers	$230,338	General Fund
2027	3 replacement cruisers	$244,158	General Fund
2028	3 replacement cruisers	$258,808	General Fund
2029	3 replacement cruisers	$274,336	General Fund
	(Price escalation based on 6% increase annually)		

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: ___POLICE_____
Requesting Official: _____Chief Joseph Bennett_____

Enclosure: 2

As responsive to your budget as it is to your right foot.

The standard Police Interceptor Utility hybrid electric vehicle (HEV) with all-wheel drive (AWD) offers significant potential fuel savings. Its lithium-ion hybrid battery can provide added benefits when considering the unique idling demands of day-to-day police use.

Fuel economy for the standard Police Interceptor Utility HEV AWD compares favorably against the Police Interceptor Utility with optional 3.3L gas engine and AWD. Internal Ford data shows that the 3.3L HEV powertrain consumes an average of 0.75 gallons of fuel per hour of vehicle use, while the 3.3L gas powertrain consumes an average of 1.23 gallons of fuel per hour of vehicle use.[1]

Even when not in motion, police vehicles must constantly keep their engines running to power electrical equipment. The standard Police Interceptor Utility HEV AWD reduces engine idle time by shutting off the engine and powering the high electrical loads of a police vehicle with its lithium-ion battery, thereby reducing fuel consumption.

The standard 2023 Police Interceptor Utility HEV AWD potentially saves an estimated **2,800** gallons of fuel per year, per vehicle.

That's **$7,700** in potential savings per year, per vehicle. (Assuming an example gas price of $2.75 per gallon.)

Projecting to a 6-year ownership term, savings could grow as high as **$67,200**. (Assuming a gas price of $4.00 per gallon.)

Additionally, there's a potential **50,000 lbs.** of CO_2 output[2] reduced per year, per vehicle.

Visit **fordpoliceinterceptor.com** to calculate your own agency's potential savings.

2023 Police Interceptor Utility HEV AWD
Potential Total Savings at Varying Gas Prices and Terms

	4 Years	5 Years	6 Years
$2.75/gallon	$30,800	$38,500	$46,200
$3.00/gallon	$33,600	$42,000	$50,400
$3.25/gallon	$36,400	$45,500	$54,600
$3.50/gallon	$39,200	$49,000	$58,800
$4.00/gallon	$44,800	$56,000	$67,200

1

1

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.vdm.ford.com/content/dam/brand_ford/en_us/brand/resources/general/pdf/brochures/23_FordPro_Police_guide_4.14.2023.pdf

ENCL: (1)

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Safety Communications**
Requesting Official: **Director Meaghan DeRaad**
Item Description: **Public Safety Radio System Infrastructure Upgrade**
Capability to be replaced or new risk/opportunity to be addressed: **The current infrastructure of the public safety radio system is in dire need of upgrade. Many components are many years old and well beyond their life span. Several components have failed and have had to be replaced quickly to keep the system running.**

Cost:

FY 2025 capital amount requested	$4 million
Amount/duration of future FY follow-on costs:	Up to $25,000 for preventative maintenance and support plan. First year included in the requested amount above.
Available grants, subsidies, trade-in, or other cost reductions:	State 911 Department Support and Incentive Grant funding possible. Up to $51,409.00, most likely only for console equipment in the Communications Center.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Radio communications is a vital piece of the Public Safety System. It continues to be the primary means of communication between the Communications Department and the emergency personnel / responders in the field. It is imperative that all equipment be in excellent working condition in order to maintain uninterrupted communications between all departments, thus allowing our first responders to arrive at emergencies as quickly as possible.
(Why) Describe link to Town Vision or Strategic Goals:	In an effort to maintain Hopkinton as a safe community we must begin to engage in updating / replacement of our Public Safety Radio Infrastructure. In order to actively prepare for our future we need to begin upgrading / replacing as soon as possible.
(Who) Describe the Town organizational element or community stakeholders (number and identity) who will benefit:	Updating equipment will provide many benefits to the community. Most importantly it will improve communications between all Public Safety personnel, allowing the dispatchers to get vital information to the responding units and vice versa. This may mean giving a police officer a warning of a known weapon on the scene they are responding to, thus possibly saving their life or the life of another involved person. Similarly updating the responding paramedics to a call may signify to them they need a specific piece of equipment that if they had not known they may need to make a second trip to the ambulance to get, thus saving

	valuable seconds. This mission critical communication will allow for emergency personnel on scene to get assistance faster when the Communications Center can clearly receive their request for assistance. There are many areas of Town where we struggle with receiving clear audio from our responders. There are many reasons for this, however the three major factors include our terrain, the required change from a broadband to a narrowband radio system, and the age of our current equipment. Additionally, with newer up to date equipment we can introduce remote monitoring. Remote monitoring will allow us to receive alerts in the event of a failure or the ability to log into the equipment in an attempt to diagnose the issue, perhaps saving the department from a service call.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	There should be a noticeable change in reception in our radio coverage. Additionally, our radio vendor will be able to take measurements of the equipment to confirm it is operating within appropriate ranges. A plan will be put into place for a preventative maintenance program. Scheduled check-up of all radio equipment will allow us to find failure sooner and replace items that may be reaching their end of life.
(How Long) Describe the expected service life:	This will be an ongoing service. Once the infrastructure has been updated, preventative maintenance and replacement of parts should be able to be covered under the operations budget with a future replacement schedule to be determined, possible with the need of Capital funding.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **1** of **1** Town Manager Priority: _____ of _____
ENCL: (2)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: _Public_Safety Communications_____
Requesting Official: ____Meaghan DeRaad_____

Required for projected needs of $25,000 or more, FY 2025 - FY 2029
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
26	Portable Radios	55,000.00	
27	Portable Radios	55,000.00	
28	Portable Radios	55,000.00	
29	Portable Radios	55,000.00	
30	Portable Radios	55,000.00	

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Fire Department**
Requesting Official: **Interim Chief Daugherty**
Item Description: **LUCAS 3 CPR Machine**
Capability to be replaced or new risk/opportunity to be addressed: **Replace one of our CPR machine's that is beyond repair and has developed an intermittent issue with its motherboard.**

Cost:

FY 2025 capital amount requested	$23,382.96
Amount/duration of future FY follow-on costs:	None
Available grants, subsidies, trade-in, or other cost reductions:	$4,000 (Trade-in of current LUCAS 2)

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	This device will replace a CPR machine purchased in 2013 that has developed intermittent mechanical problems.
(Why) Describe link to Town Vision or Strategic Goals:	To establish a vibrant and inclusive fire department committed to the well-being and safety of our community and its employees regarding mental, physical, and environmental health
(Who) Describe the Town organizational element or community stakeholders (number and identity) who will benefit:	Presently, the Hopkinton Fire Department owns two Lucas CPR machines. These devices were initially purchased in 2013. Earlier this year, one of our devices failed and needed to be replaced. Over the past few months, our 2nd Lucas CPR machine has begun developing the same mechanical issues before the 1st device failed altogether. CPR machines are beneficial for the residents of Hopkinton for the following reasons: **Consistent and Effective CPR:** A CPR machine will deliver consistent chest compressions at the recommended rate and depth. This consistency helps maintain blood circulation to vital organs, improving the chances of survival for individuals experiencing cardiac arrest. **Reduction in Fatigue and Human Error:** During manual CPR, fatigue can set in quickly, leading to inconsistent compressions and reduced efficacy over time. The Lucas 3 machine eliminates this issue by providing uninterrupted and consistent compressions.

	Enhanced Patient Care: When using a CPR machine, emergency responders can focus on other critical tasks, such as administering medications, securing airways, or communicating with medical control. This enhances overall patient care and increases the chances of a positiveoutcome for the patient. Upgrading this aging machine demonstrates the town's dedication to delivering top-tier emergency medical services to its residents. This enhancement significantly boosts our capability by ensuring consistent and efficient chest compressions, minimizing human error, and streamlining on-scene times, thus ultimately increasing positive outcomes.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	**Increased Survival Rates:** Studies have shown that consistent, high-quality chest compressions significantly improve survival rates following cardiac arrest. By ensuring the delivery of consistent compressions, a CPR machine contributes to better outcomes for patients.
(How Long) Describe the expected service life	8 plus years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: __1__ of __2___

Town Manager Priority: _____ of _____

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Fire Department**
Requesting Official: **Interim Chief Daugherty**
Item Description: **New Ambulance**
Capability to be replaced or new risk/opportunity to be addressed: **Replace Ambulance 2.**

Cost:

FY 2025 capital amount requested	$520,000
Amount/duration of future FY follow-on costs:	None
Available grants, subsidies, trade-in, or other cost reductions:	Ambulance receipts have been used in the past for these capital expenditures.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	This ambulance (A-2) is a 2019 Ford F550 with 77,857 miles. The current lead time for a new Ambulance is approximately 24 months without chassis and supply chain delays. Therefore, I request that we order an ambulance now with a tentative delivery date in 2026. In 2026, this ambulance will be seven years old, with approximately 136,249 miles. A-2 will then be evaluated mechanically and possibly placed into reserve status.
(Why) Describe link to Town Vision or Strategic Goals:	The purchase will support a safe and effective work environment while providing reliable equipment during critical emergencies. Additionally, this will allow the Fire Department to stay on schedule with its current capital replacement program.
(Who) Describe the Town organizational element or community stakeholders (number and identity) who will benefit:	Anyone who requests an ambulance can be transported in this truck. Presently, the HFD does not have a reserve ambulance. It is the goal of the HFD to make this truck into a reserve ambulance. A reserve ambulance will decrease our reliance on surrounding communities when one of our ambulances is out for repairs. It will also give us the capacity to provide EMS standby at road races, community events, and varsity football games.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	The residents of Hopkinton, along with the members of HFD, will benefit by having reliable ambulances.

(How Long) Describe the expected service life:	7 years front line and 2 years reserve

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: __2__ of __2___

Town Manager Priority: _____ of _____

stryker

LUCAS 3.1 with Trade - July 2024

Quote Number: 10803718
Version: 1
Prepared For: HOPKINTON FIRE DEPT
Attn:

Rep: Shane Donnelly
Email: shane.donnelly1@stryker.com
Phone Number: (774) 502-9462

Service Rep: Michael Mclaughlin
Email: michael.mclaughlin2@stryker.com

Quote Date: 10/19/2023
Expiration Date: 11/18/2023
Contract Start: 10/19/2023
Contract End: 10/18/2024

Equipment Products:

#	Product	Description	U/M	Qty	Sell Price	Total
1.0	99576-000063	LUCAS 3, v3.1 Chest Compression System, Includes Hard Shell Case, Slim Back Plate, (2) Patient Straps, (1) Stabilization Strap, (2) Suction Cups, (1) Rechargeable Battery and Instructions for use With Each Device	PCE	1	$18,013.50	$18,013.50
2.0	11576-000060	LUCAS Desk-Top Battery Charger	PCE	1	$1,399.50	$1,399.50
3.0	11576-000071	LUCAS External Power Supply	PCE	1	$442.80	$442.80
4.0	11576-000080	LUCAS 3 Battery - Dark Grey - Rechargeable LiPo	PCE	1	$832.50	$832.50
5.0	11576-000046	LUCAS Disposable Suction Cup (3 pack)	PK	1	$167.40	$167.40
					Equipment Total:	$20,855.70

Trade In Credit:

Product	Description	Qty	Credit Ea.	Total Credit
TIM-LUC2-LUC3	TRADE-IN-STRYKER LUCAS 2 TOWARDS PURCHASE OF LUCAS 3.1	1	-$4,000.00	-$4,000.00

ProCare Products:

#	Product	Description	Qty	Sell Price	Total
7.1	LUCAS-FLD-PROCARE	LUCAS 3, 3.1 for LUCAS 3, v3.1 Chest Compression System, Includes Hard Shell Case, Slim Back Plate, (2) Patient Straps, (1) Stabilization Strap, (2) Suction Cups, (1) Rechargeable Battery and Instructions for use With Each Device *10/20/2023 - 10/19/2027* √ Parts, Labor, Travel √ Preventative Maintenance √ Batteries Service	1	$6,188.40	$6,188.40
				ProCare Total:	$6,188.40

Stryker Medical - Accounts Receivable - accountsreceivable@stryker.com - PO BOX 93308 - Chicago, IL 60673-3308

stryker

LUCAS 3.1 with Trade - July 2024

Quote Number:	10803718		
Version:	1		
Prepared For:	HOPKINTON FIRE DEPT	Rep:	Shane Donnelly
	Attn:	Email:	shane.donnelly1@stryker.com
		Phone Number:	(774) 502-9462
		Service Rep:	Michael Mclaughlin
Quote Date:	10/19/2023	Email:	michael.mclaughlin2@stryker.com
Expiration Date:	11/18/2023		
Contract Start:	10/19/2023		
Contract End:	10/18/2024		

Price Totals:

Estimated Sales Tax (0.000%):	$0.00
Freight/Shipping:	$338.86
Grand Total:	$23,382.96

Prices: In effect for 30 days

Terms: Net 30 Days

Terms and Conditions:
Deal Consummation: This is a quote and not a commitment. This quote is subject to final credit, pricing, and documentation approval. Legal documentation must be signed before your equipment can be delivered. Documentation will be provided upon completion of our review process and your selection of a payment schedule. Confidentiality Notice: Recipient will not disclose to any third party the terms of this quote or any other information, including any pricing or discounts, offered to be provided by Stryker to Recipient in connection with this quote, without Stryker's prior written approval, except as may be requested by law or by lawful order of any applicable government agency. A copy of Stryker Medical's terms and conditions can be found at www.stryker.com/stnc.

Stryker Medical - Accounts Receivable - accountsreceivable@stryker.com - PO BOX 93308 - Chicago, IL 60673-3308

18 Commerce Boulevard
Plainville, MA 02762
Tel: 508.699.0616
Fax: 508.699.0977
Toll Free: 888.699.0616
www.svine.com

Specialty Vehicles, Inc.

LIFE LINE EMERGENCY VEHICLES

SUBMITTED TO:	BIDDER:	MANUFACTURER:
Chief Gary Daugherty	Specialty Vehicles, Inc.	Life Line Emergency Vehicles
Hopkinton Fire Department	18 Commerce Blvd.	1 Life Line Drive
73 Main Street	Plainville MA 02762	Sumner IA 50674
Hopkinton MA 01748	Sales Rep: Mark Hooper	

DESCRIPTION OF VEHICLE ***BUDGET QUOTE*** ***DATE: October 16, 2023***

One (1) new / unused 2025 Ford F550 4x4 custom-built Life Line "Superliner" Type 1-AD, Class I Emergency Medical Vehicle. Proposed vehicle to be constructed per #5190.

PRICING:

Price of Proposed Vehicle (Excluding Chassis):	**$ 332,053.00**
2024 Ford F550 4x4 Chassis Allowance:	**$ 73,363.00**
2025 Ford F550 Estimated Price Increase:	**$ 5,000.00**
Stryker Power-LOAD Allowance:	**$ 30,321.00**
Stryker Power-LOAD 7 Year Warranty:	**$ 9,000.00**
Stryker Power PRO #6506 Ambulance Cot Allowance:	**$ 29,000.00**
Life Line Conversion Potential Material Fee / Contingency:	**$ 20,000.00**
TOTAL DELIVERED PRICE OF VEHICLE:	**$ 498,737.00**

DELIVERY:

Current delivery lead-time is 24 months. A signed Sales Contract is required.

DISCLOSURES:

Specialty Vehicles, Inc. reserves the right to withdraw this proposal if not accepted by November 30, 2023.

In no event shall Specialty be liable for damages, third-party vendor/supplier surcharges, increases in final price, or other expenses arising from delays in final delivery because of supplier delays or any other circumstances or other causes beyond Specialty's control.

Terms: Net cash due upon delivery and acceptance. Federal, State or Local Taxes are not included.

Any / all Federal, State or Local Taxes are NOT included.

Thank you for the opportunity to submit our proposal. If you have any questions please feel free to contact me at (888) 699-0616.

Respectfully Submitted,

Mark C. Hooper

Mark C. Hooper
President

MOTOROLA SOLUTIONS

HOPKINTON FIRE DEPT

APX 8500 AMB front radio

10/03/2023

10/03/2023

HOPKINTON FIRE DEPT
73 MAIN ST
HOPKINTON, MA 01748

RE: Motorola Quote for APX 8500 AMB front radio
Dear Gary Daugherty,

Motorola Solutions is pleased to present HOPKINTON FIRE DEPT with this quote for quality communications equipment and services. The development of this quote provided us the opportunity to evaluate your requirements and propose a solution to best fulfill your communications needs.

This information is provided to assist you in your evaluation process. Our goal is to provide HOPKINTON FIRE DEPT with the best products and services available in the communications industry. Please direct any questions to George Voorhees at gvoorhees@cybercomminc.com.

We thank you for the opportunity to provide you with premier communications and look forward to your review and feedback regarding this quote.

Sincerely,

George Voorhees
Account Executive

Motorola Solutions Manufacturer's Representative

Billing Address:
HOPKINTON FIRE DEPT
73 MAIN ST
HOPKINTON, MA 01748
US

Quote Date:10/03/2023
Expiration Date:01/01/2024
Quote Created By:
George Voorhees
Account Executive
gvoorhees@cybercomminc.com
508 561 1515

End Customer:
HOPKINTON FIRE DEPT
Gary Daugherty
gdaugherty@hopkintonfd.org

Contract: 22564 - PSE01 MA STATE

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
	APX™ 8500					
1	M37TSS9PW1AN	APX8500 ALL BAND MP MOBILE	1	$5,893.68	$4,420.26	$4,420.26
1a	G48BB	ENH: CONVENTIONAL OPERATION APX	1	$880.00	$660.00	$660.00
1b	GA01606AA	ADD: NO BLUETOOTH/ WIFI/GPS ANTENNA NEEDED	1	$0.00	$0.00	$0.00
1c	GA05100AA	ADD: STD WARRANTY - NO ESSENTIAL	1	$0.00	$0.00	$0.00
1d	B18CR	ADD: AUXILIARY SPKR 7.5 WATT APX	1	$66.00	$49.50	$49.50
1e	G89AC	ADD: NO RF ANTENNA NEEDED	1	$0.00	$0.00	$0.00
1f	G444AH	ADD: APX CONTROL HEAD SOFTWARE	1	$0.00	$0.00	$0.00
1g	G67EH	ADD: REMOTE MOUNT E5 MP	1	$327.00	$245.25	$245.25
1h	GA01517AA	DEL: NO J600 ADAPTER CABLE NEEDED	1	$0.00	$0.00	$0.00
1i	QA05751AA	ADD: NO ENCRYPTION, CLEAR RADIO (NO ADP) (US ONLY)	1	$0.00	$0.00	$0.00

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
1j	G806BL	ENH: ASTRO DIGITAL CAI OP APX	1	$567.00	$425.25	$425.25
1k	GA01670AA	ADD: APX E5 CONTROL HEAD	1	$717.00	$537.75	$537.75
1l	W22BA	ADD: STD PALM MICROPHONE APX	1	$79.00	$59.25	$59.25
1m	QA09113AB	ADD: BASELINE RELEASE SW	1	$0.00	$0.00	$0.00
	Product Services					
2	LSV00Q00202A	DEVICE PROGRAMMING	1	$178.57	$178.57	$178.57
3	EQ000103A02	MULTIPLEXER,_ALL BAND, APX8500, VEHICLE	1	$214.92	$148.29	$148.29
4	HAE6016A	ANT LOW PROFILE 450-512 MHZ	1	$129.60	$89.42	$89.42
5	HAF4016A	UNITY GAIN ANTENNA QUARTERWAVE 762-870MHZ - ROOF MOUNT	1	$24.84	$17.14	$17.14
6	RAD4004ARB	ANT VHF 1/4 WAVE	1	$108.00	$74.52	$74.52
7	CB000091A03	CABLE, COAXIAL,QMA PLUG TO MINI-UHF JACK CONNETOR	3	$62.78	$47.09	$141.27
8	CB000091A02	CABLE, COAXIAL,CABLE, COAXIAL,QMA PLUG TO QMA PLUG CONNECTOR	1	$44.16	$33.12	$33.12

Grand Total $7,079.59(USD)

Notes:

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.

MOTOROLA SOLUTIONS

Purchase Order Checklist
Marked as PO/ Contract/ Notice to Proceed on Company Letterhead **(PO will not be processed without this)**
PO Number/ Contract Number
PO Date
Vendor = Motorola Solutions, Inc.
Payment (Billing) Terms/ State Contract Number
Bill-To Name on PO must be equal to the *Legal* Bill-To Name
Bill-To Address
Ship-To Address (If we are shipping to a MR location, it must be documented on PO)
Ultimate Address (If the Ship-To address is the MR location then the Ultimate Destination address must be documented on PO)
PO Amount must be equal to or greater than Order Total
Non-Editable Format (Word/ Excel templates cannot be accepted)
Bill To Contact Name & Phone # and EMAIL for customer accounts payable dept
Ship To Contact Name & Phone #
Tax Exemption Status
Signatures (As required)

HVAC- Hopkins
Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Buildings and Grounds
Requesting Official: Tim Persson
Item Description: HVAC UNIT 2, HVAC UNIT 3 & RTU UNIT 3
Capability to be replaced or new risk/opportunity to be addressed:
Equipment is 27 years old in operable but not good condition, original to the building and at end of life.
This request is for 3 of 9 interior/exterior large air handling units.
Cost:

FY 2025 capital amount requested; note contingency amount:	$700,000
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	There may be Mass Save and or IRA grant opportunities depending on full electrification

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	This request will replace end of life units and are a necessity for the building air quality and control
(Why) Describe link to Town Vision or Goals:	Follows the district improvement plan
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Hopkinton Public Schools students and staff, and all community members
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	The benefit is to accommodate the air quality and control of the current and future students and staff at the Hopkins Elementary School
(How Long) Describe the expected service life:	25 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: Hopkinton Public Schools Buildings and Grounds
Requesting Official: Tim Persson

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25			

Enclosure: (2)

Building and Grounds Equipment/Vehicles
Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Buildings and Grounds
Requesting Official: Tim Persson
Item Description: Building and Grounds Equipment/Vehicles
Capability to be replaced or new risk/opportunity to be addressed:
This vehicle is used for transporting equipment, supplies and tools for various projects throughout the district. It's also required for snow and ice removal. This is an end of life replacement.
Cost:

FY 2025 capital amount requested; note contingency amount:	$80,000
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	To be paid using Parking Revolving

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	This is a replacement Buildings and Grounds vehicle that is at end of life.
(Why) Describe link to Town Vision or Goals:	Follows the district improvement plan.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	For Hopkinton Public Schools students and staff.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	End of life replacement.
(How Long) Describe the expected service life:	10 years.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: Hopkinton Public Schools Buildings and Grounds
Requesting Official: Tim Persson

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25	Buildings and Grounds Equipment/Vehicles	$80,000.00	Parking Revolving
28	Buildings and Grounds Equipment/Vehicles	$80,000.00	General Fund
29	Buildings and Grounds Equipment/Vehicles	$80,000.00	General Fund

Enclosure: (2)

Hopkins Addition/Renovation
Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Buildings and Grounds
Requesting Official: Tim Persson
Item Description: Hopkins Addition/Renovation
Capability to be replaced or new risk/opportunity to be addressed:
The Hopkins school is currently unable to fit two grades. The current building was designated to hold 628 students and is projected to reach 802 students.
Cost:

FY 2025 capital amount requested; note contingency amount:	$43,940,000
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	N/A

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	The current square footage is unable to support a two grade configuration. The additional square feet will provide for the needs of the students going forward and follows the District Wide Study.
(Why) Describe link to Town Vision or Goals:	Follows the district improvement plan.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Hopkinton Public Schools students and staff.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	The post spend benefit will be to provide enough square footage to support a two grade configuration.
(How Long) Describe the expected service life:	50 years.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: Hopkinton Public Schools Buildings and Grounds
Requesting Official: Tim Persson

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25	Hopkins Addition/Renovation	$43,940,000	

Enclosure: (2)

Playground - Marathon
Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Buildings and Grounds
Requesting Official: Tim Persson
Item Description: Playground - Marathon (CPC Grant application).
Capability to be replaced or new risk/opportunity to be addressed:
Original playground was built for a student enrollment of 395 students and the current enrollment is over 578 students. With 42 recess periods a day the existing playground structure will not accommodate this increased enrollment.
Cost:

FY 2025 capital amount requested; note contingency amount:	$1,000,000
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	CPC funding is also being requested for this project.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	The additional playground area will provide equal opportunity for all Marathon students to access the play structures. Playgrounds are also accessed by the entire community.
(Why) Describe link to Town Vision or Goals:	Follows the district improvement plan.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Hopkinton Public Schools students and staff, and all community members
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	The benefit is to accommodate the current enrollment of the Marathon Elementary School and the growing population in the community.
(How Long) Describe the expected service life:	20 years.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: Hopkinton Public Schools Buildings and Grounds
Requesting Official: Tim Persson

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25	Playground - Marathon (CPC Grant application)	$1,000,000	CPA / General Fund

Enclosure: (2)

Track & Field 3 Project
Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Buildings and Grounds
Requesting Official: Tim Persson
Item Description: Track & Field 3 project -Design & Engineering
Capability to be replaced or new risk/opportunity to be addressed:
Track and field 3 with an amenities building was identified as the priority to increase access for students and the community. The track is at the end of life. The expansion will accommodate the increased student population.
Cost:

FY 2025 capital amount requested; note contingency amount:	$350,000 for Design and Engineering
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	N/A

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	With over 30 outdoor sports teams, the turf field and track will give the schools the ability to increase overall use from a limited use from two sports teams, varsity football and track, to 25 different sports teams including varsity and jv soccer, lacrosse, field hockey, etc.
(Why) Describe link to Town Vision or Goals:	Follows the district improvement plan for end of life replacements and planning for enrollment growth.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Hopkinton Public Schools students and staff and the community
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Track and field 3 with an amenities building was identified as the priority to increase access for students and the community.
(How Long) Describe the expected service life:	Track - 20 years Amenities building/grandstands - 30 years Turf Carpet - 15 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department: Hopkinton Public Schools Buildings and Grounds
Requesting Official: Tim Persson

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
26	Track and field 3 project	$5,500,000	

Enclosure: (2)

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: Technology
Requesting Official: Ashoke Ghosh
Item Description: District Wifi Access Point replacement cycle
Capability to be replaced or new risk/opportunity to be addressed:
Our current wireless access points are at the end of life and need to be replaced district wide. This is year two of a two year process to replace all 400 plus access points in the district.
Cost: $75,000

FY 2025 capital amount requested; note contingency amount:	$100,000
Amount/duration of future FY follow-on costs:	
Available grants, subsidies, trade-in, or other cost reductions:	ERATE covers 40% of this expense

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	We will have a faster connection to the Internet and the internal hardware managing these connections will be more secure.
(Why) Describe link to Town Vision or Goals:	The current technology goal focuses on creating a more secure network to ensure the district is protected against a variety of threats. In addition, we need to ensure access to all digital learning resources.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	4200 students and 700 staff members will benefit from a faster more secure network that will reduce time on specific internet based tasks
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	New wireless access points will allow students to connect at faster speeds, allowing them to access digital content and conduct digital assessments. In addition, the upgrades completed in FY23 have increased our switching capacity as it moved from 2gb uplink from IDF to MDF to a 20gb uplink. New access points will allow us to maximize this new capacity.
(How Long) Describe the expected service life:	These access points should last 5 years which depends on the vendor's ability to continue to support the software and hardware on the purchased device after 5 years.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)
Departmental Priority: ____ of _____ Town Manager Priority: _____ of _____
Enclosure: (1)

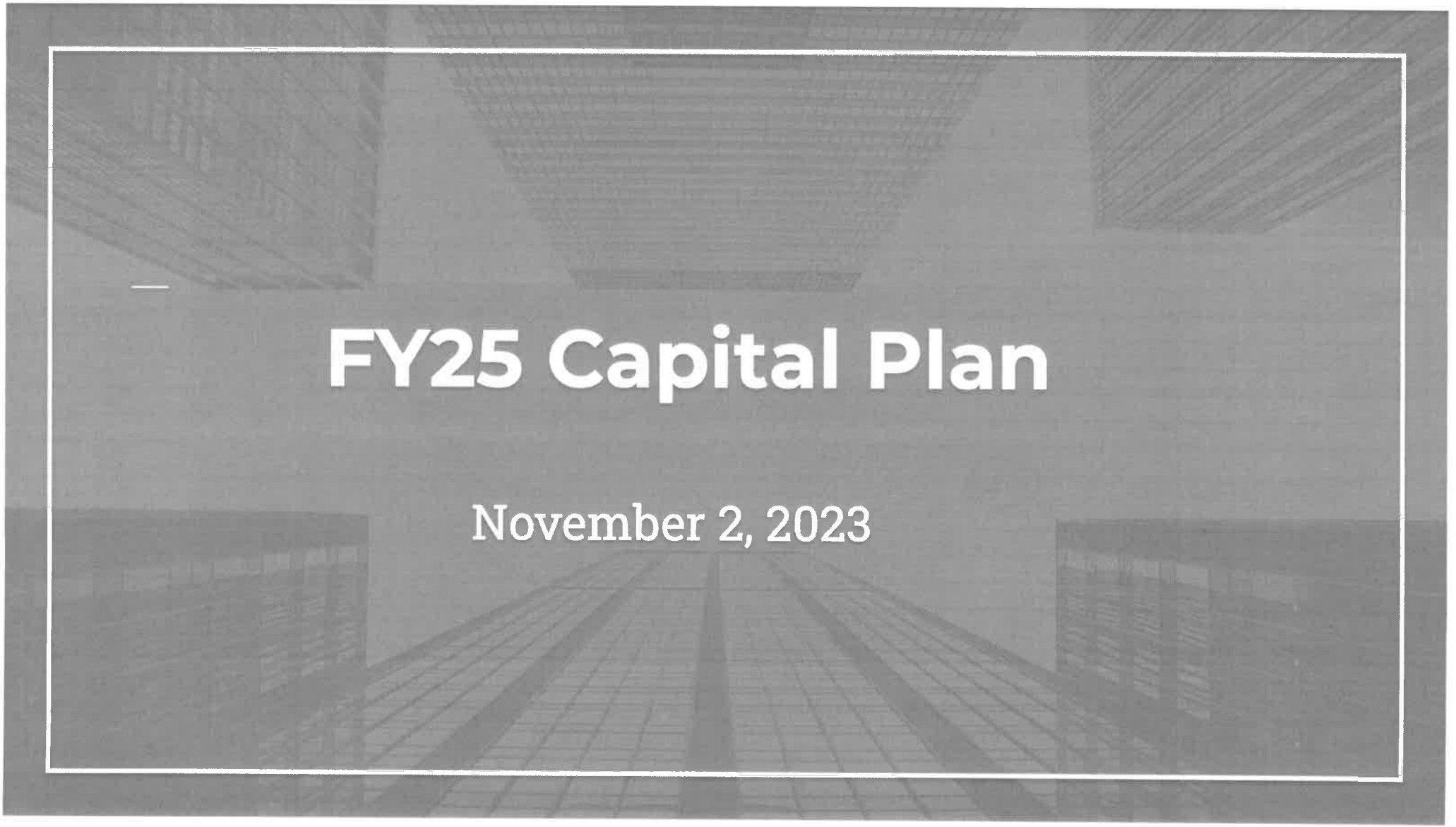
Town of Hopkinton Fiscal Year 2025 5-Year Capital Need Projection

Department:Technology
Requesting Official: Ashoke Ghosh

Required for projected needs of $25,000 or more, FY 2025 - FY 2028
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25	250 Wireless Access Points	$100,000	
26	Firewall replacement/Camera Maintenance	$100,000	

Enclosure: (2)


FY25 Capital Plan
November 2, 2023

Hopkinton Public Schools Ten Year Capital Plan	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
	Capital Budget (Over $25,000 Individually)						
FF & E	HVAC DISTRICTWIDE (ALL BUILDINGS)	$700,000	$850,000	$850,000	$425,000	$2,025,000	$1,300,000
FF & E	HVAC POINT TO POINT TESTING - HS						
FF & E	HVAC VAV REPLACEMENTS AND CONTROLS - HS						
FF & E	GENERATORS				$30,000	$150,000	
FF & E	ROOF REPLACEMENTS (design & construction)					$3,737,500	
FF & E	KITCHEN EQUIPMENT			$50,000			$50,000
FF & E	BUILDING AND GROUNDS EQUIPMENT / VEHICLES	$80,000		$42,000	$80,000	$80,000	
FF & E	SPECIAL EDUCATION VAN						
Building	ELMWOOD REPLACEMENT. (BEFORE MSBA Reimbursement) *						
Building	MARATHON (FEASIBILITY STUDY / DESIGN / ADDITION)		$150,000				$1,900,000
Building	HOPKINS ADDITION / RENOVATION (use Stabilzation for Feasibility)	$43,940,000					
Building	MIDDLE SCHOOL / HS (STUDY / DESIGN ADDITION / RENOVATION)						
Building	FIRE PROTECTION						$40,000
Campus	LOOP ROAD / SIDEWALK / PARKING LOT CAMPUS PAVING			$1,500,000	$600,000		
Campus	MASTER PLAN TRAFFIC PATTERN - MS/HS (If Elmwood moves forward)						
Campus	PLAYGROUND- MARATHON	$1,000,000					
Campus	SECURITY						
Campus	TRACK & FIELD 3 PROJECT -Design / Eng	$350,000	$5,500,000				
Technology	SYSTEMWIDE TECHNOLOGY UPGRADES	$100,000	$100,000	$100,000	$75,000	$75,000	$75,000
	Total - Capital Replacements	$46,170,000	$6,600,000	$2,542,000	$1,210,000	$6,067,500	$3,365,000

End of Life Replacement Cycle

• Vehicle	$ 80,000
• Technology Districtwide	$ 100,000
• HVAC Districtwide	$ 700,000
• High School Track & Field 3	$ 350,000

Enrollment Growth

• Marathon Playground	$ 1,000,000
• Hopkins School Addition	$ 43,940,000
Total	$ 46,170,000

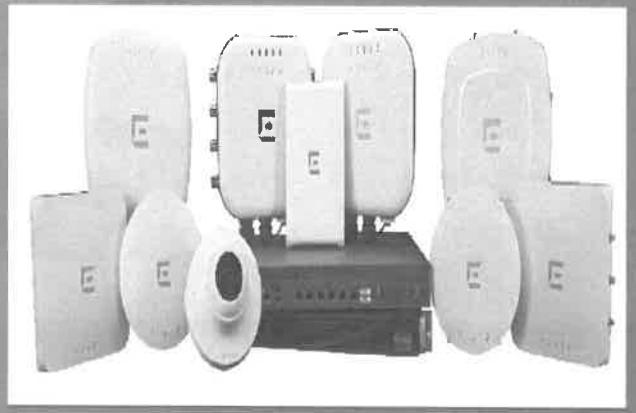
VEHICLE $80,000

This vehicle represents a replacement of one of five vehicles for the eight maintenance staff. The vehicles are used for maintenance, towing equipment, plowing, sanding etc. throughout the district. The vehicles are incurring costly repairs. This continues a replacement plan and improves efficiency and effectiveness.

The Parking Revolving Account will be used for this purchase.

TECHNOLOGY DISTRICTWIDE $100,000

All district wireless networks are designed to support high density classroom environments and large venue events in all of the schools' common spaces. These wireless networks are composed of over 400 wireless access points districtwide. The school system is currently on a 5 year replacement cycle and is looking to replace all of these access points over two years. This represents year two of the replacements.

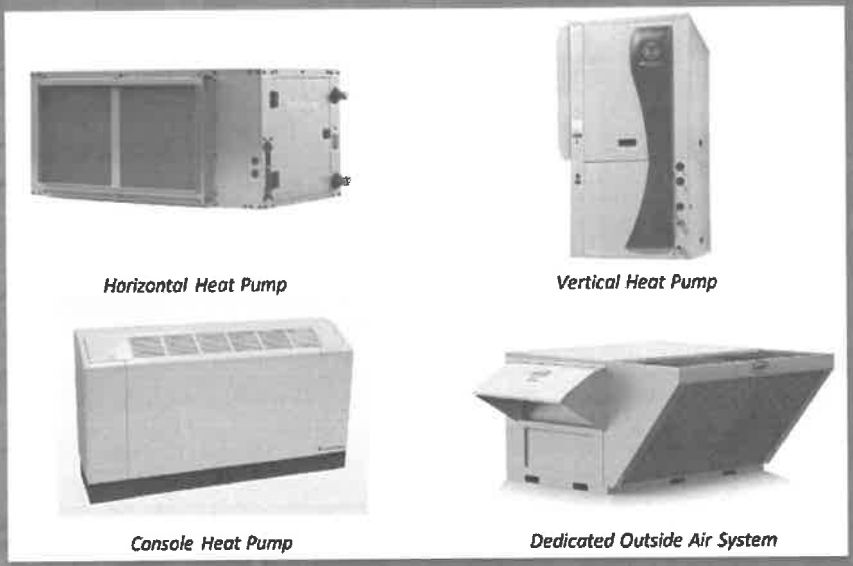


In addition to the capital funding, the district receives ERATE reimbursement for a percentage of the cost.

HVAC DISTRICTWIDE (Hopkins School) $700,000

The HVAC replacements represent the large air handling units and roof top units. In FY25 the proposal is to replace 3 of 9 units at the Hopkins School. These units are in poor condition and are end of life replacements.

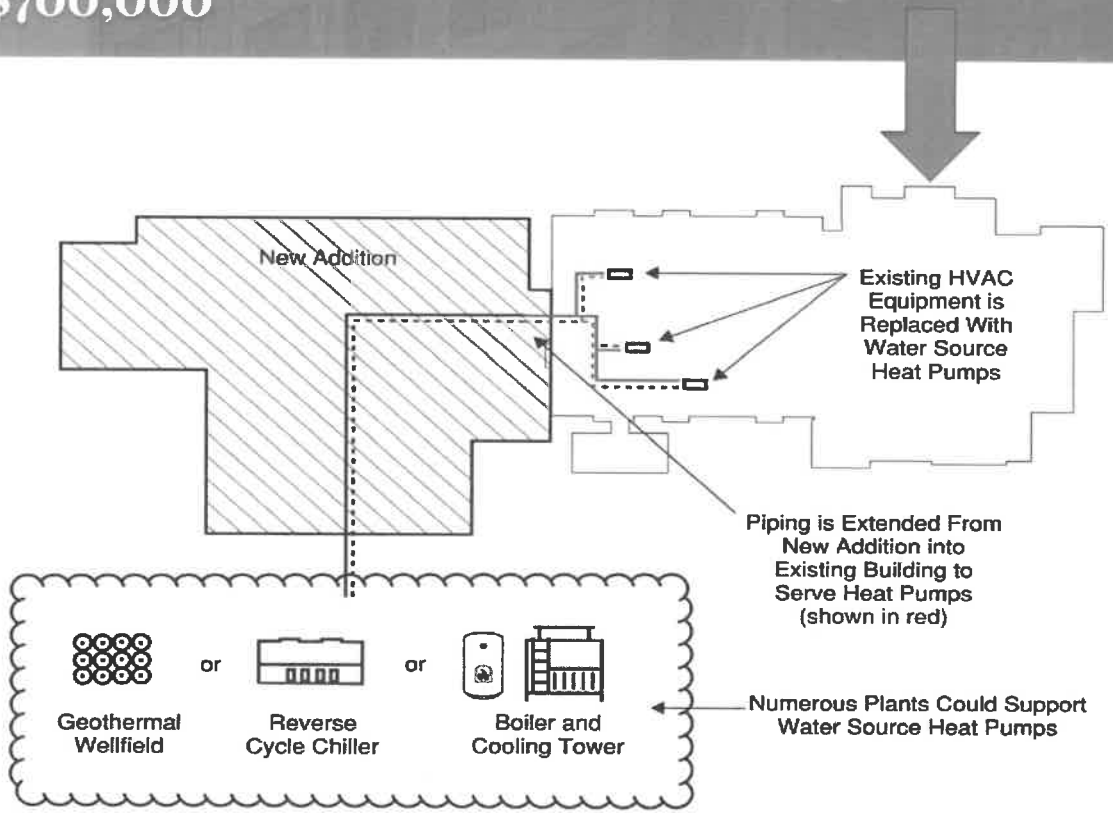
The replacements can be all electric and tie into the new system in the Hopkins addition OR a one-for-one replacement and continue on fossil fuel, if the Hopkins addition does not move forward.



HVAC DISTRICTWIDE $700,000

Future Road Map

- Commonality:
  - All systems utilize water source heat pumps operating off of a 2-pipe water loop.
- Versatility:
  - This configuration is versatile, allowing for many different types of HVAC plants to be used.
- Provisions Coordinated Into Design:
  - There are many provisions that can be coordinated into the design now to make a future upgrade seamless.
  - Equipment and piping can be sized with extra capacity.



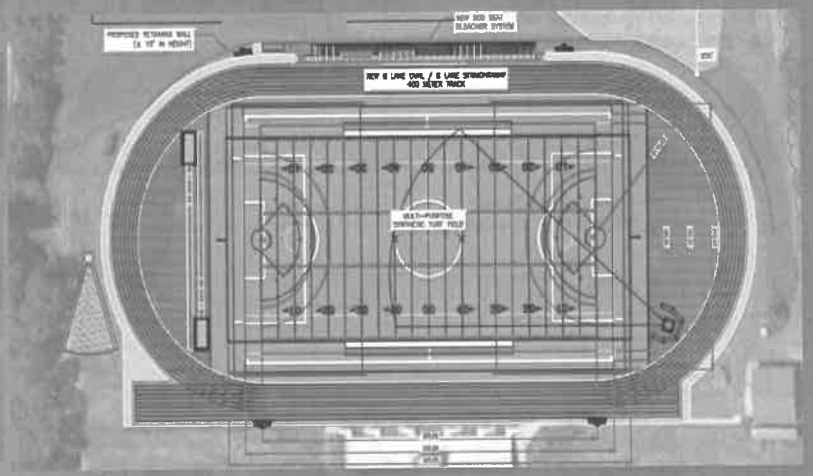
CMTA

HIGH SCHOOL TRACK & FIELD 3 (Design & Engineering)

$350,000

The Track and Field 3, with an amenities building, was identified as the priority to increase access for students and the community. The Track is at the end of its useful life. The Track has base layer deterioration. Field 3 is only utilized a few times a year to preserve the grass for football games only. There is not enough seating for events.

This funding will be for design and engineering for the track, field 3 and an amenities building.



Current use:

- XC, Football, Track
- 100 XC, 125-150 Football, 346 Track
- Field 3 reserved for games only
- All TVL football games on Turf except 1 school

MARATHON PLAYGROUND $1,000,000

The Marathon School was built with a planned enrollment of 395 students. The K-1 enrollment, the grades that share this playground, is currently over 575 students. The existing playground is not able to accommodate the increased enrollment.

The playgrounds at the schools are also used by the community at large

A Community Preservation Act Funding Application has been submitted for this project.

HOPKINS SCHOOL ADDITION

$43,940,000

The Hopkins School is currently unable to fit two grades. The existing school was designed to hold 628 students. The current enrollment is 677 students and is expected to reach 802 students, an increase of 174 students over capacity. The addition will include a new gym space, general and special education classrooms, and increased parking. It will also include relocation of the new modular classrooms from the Elmwood School (assuming the Elmwood Project moves forward). There will also be levels of renovation in the existing building as required by code.

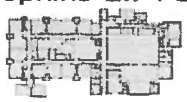
The addition is currently in the design phase.

HOPKINS SCHOOL ADDITION $43,940,000

Districtwide Study Results

Built, Current, Projected Enroll.

CURRENT CONFIGURATION

Marathon	Elmwood Gr. 2-3	Hopkins Gr. 4-5	Middle School Gr. 6-8	High School
				
6 PreK CRs x 15 = *90 14 K CRs x 18 = 252 14 Gr-1 CRs x 22 = 308 (Incl. planned addition) 1 Spec-Needs x 12 = 12 *662	29 Gen. CRs x 22 = 638 (with existing modulars) 1 Spec-Needs x 12 = 12 650	28 Gen. CRs x 22 = 616 (with existing modulars) 1 Spec-Needs x 12 = 12 628	39 Gen. CRs x 23 = 897 9 Science x 23 = 207 1 Spec-Needs x 12 = 12 1116	43 Gen. CRs x 23 = 989 11 Science x 23 = 253 2 Sep Sp-Educ x 12 = 24 9 Arts/Tech x 23 = 207 spaces at 100% = 1473 HS's typ at 85% = 1252
As Planned Enroll = *662	**As Built Enroll = 650**	**As Built Enroll = 628**	**As Built Enroll = 1116**	**As Built Enroll = 1252**
Current Enroll = *661	**Current Enroll = 626**	**Current Enroll = 640**	**Current Enroll = 977**	**Current Enroll = 1233**
Projected Enroll = *779	**Projected Enroll = 774**	**Projected Enroll = 802**	**Projected Enroll = 1198**	**Projected Enroll = 1498**
+118 Students	+148 Students	+162 Students	+221 Students	+265 Students

* FTE capacity not full PreK enroll.

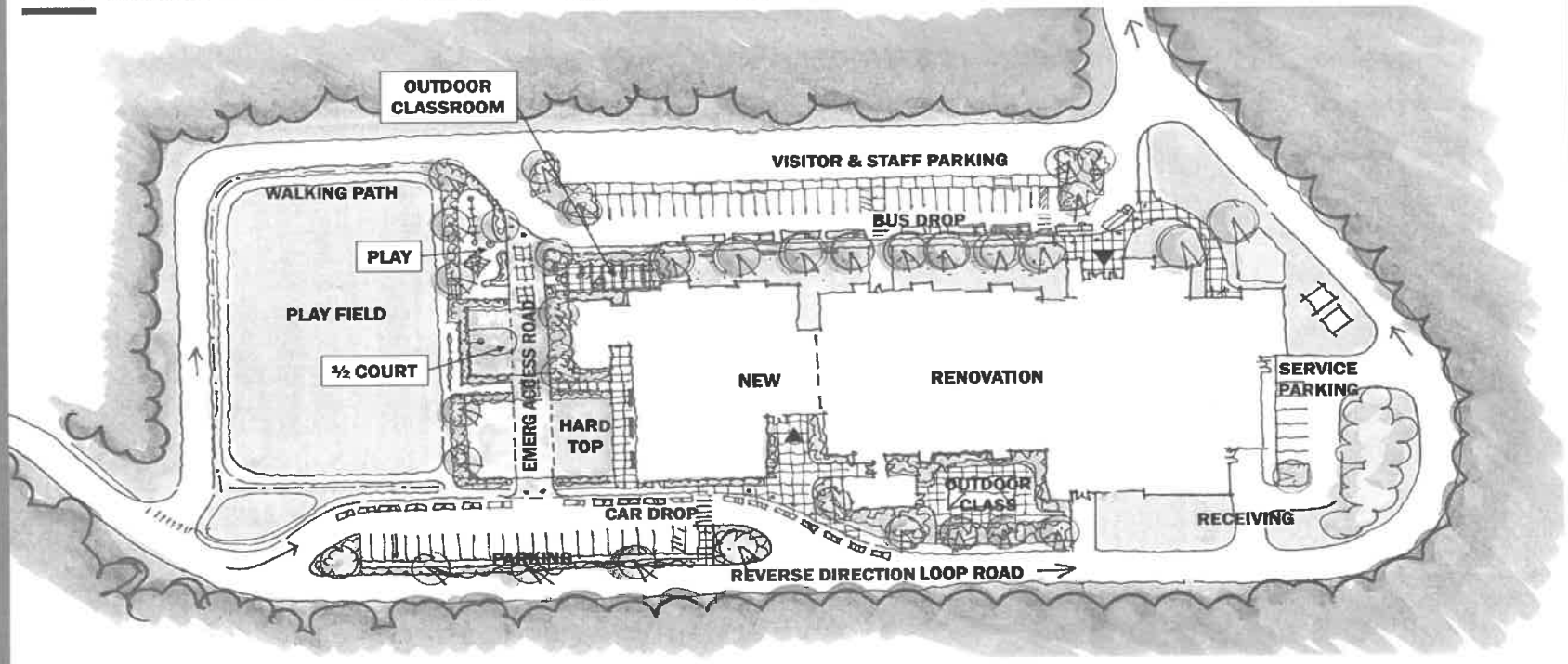
PERKINS EASTMAN

SYSTEM-WIDE STUDY, HOPKINTON PUBLIC SCHOOLS

MSBA 10 Year Projected Average = Projected Enrollment

HOPKINS SCHOOL ADDITION $43,940,000

HOPKINS SCHOOL- NEW GYM OPTION



SITE PLAN SKETCH

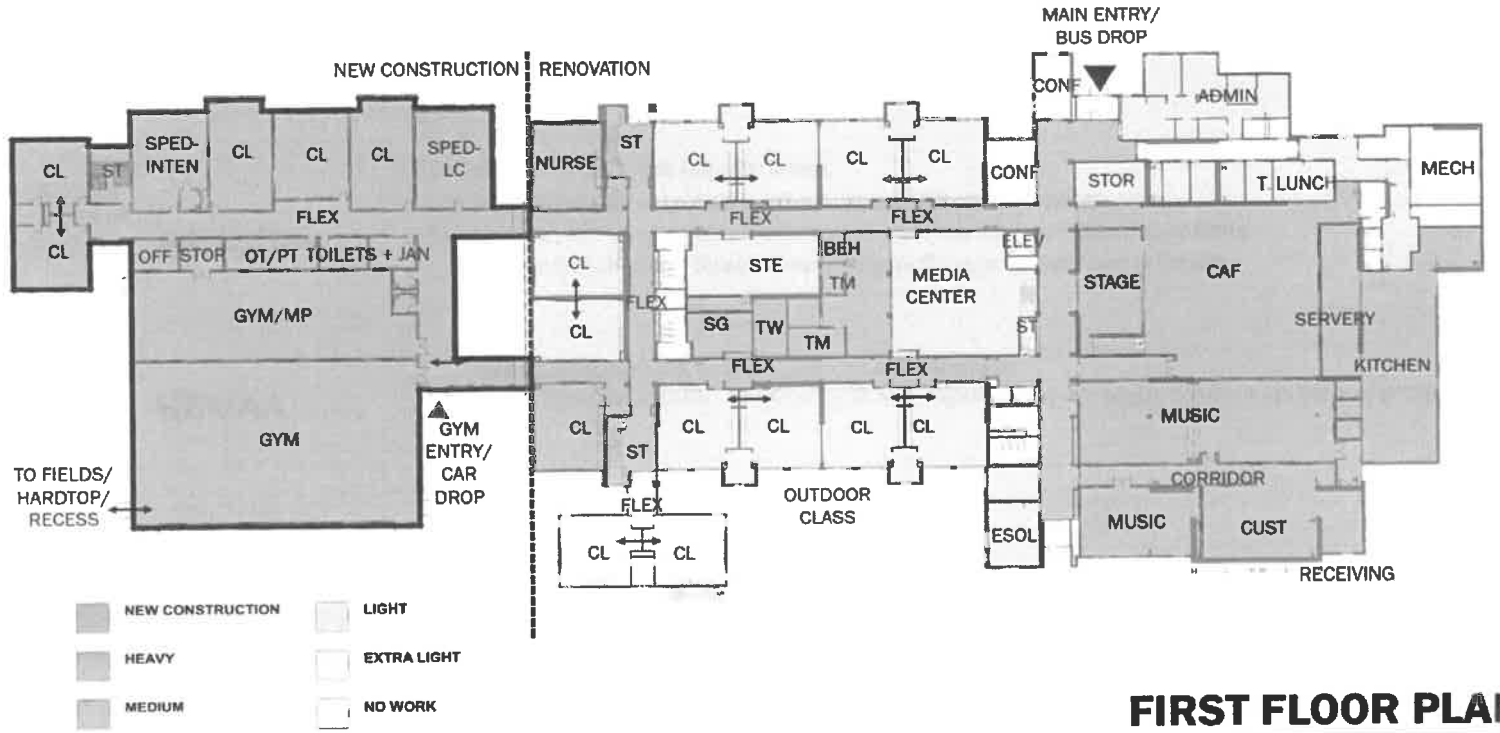
HOPKINS SCHOOL ADDITION $43,940,000

HOPKINS SCHOOL - LEVELS OF RENOVATION

☐	**HEAVY**	1. Full get renovation, remove all walls, ceilings, floors, utilities, minor structural modifications including trenching and cutting of existing slabs
☐	**MEDIUM**	1. Floors, ceilings, painting and patching. Stair treads and landings. 2. Update, re-furbish woodwork or remove entirely, patch and paint 3. Update all stair and ramp hand railings with stainless steel 4. Replace guard railings, paint
☐	**LIGHT**	1. Ceilings 2. Painting, update teaching walls 3. Flooring, remove casework and replace with base cabinet and laptop/chrome book charging center 4. Replace, update or remove ceiling fans and controls
☐	**EXTRA LIGHT**	1. Ceilings, painting

HOPKINS SCHOOL ADDITION $43,940,000

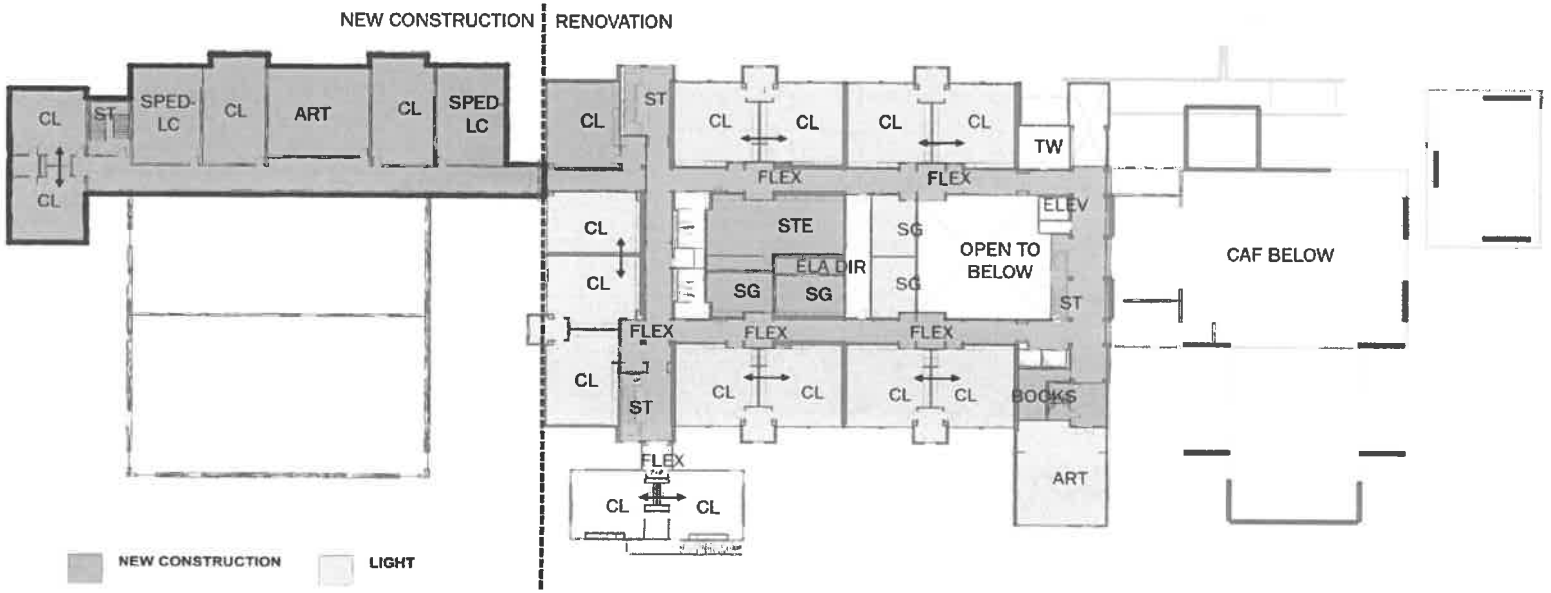
HOPKINS SCHOOL - RENOVATION



FIRST FLOOR PLAN

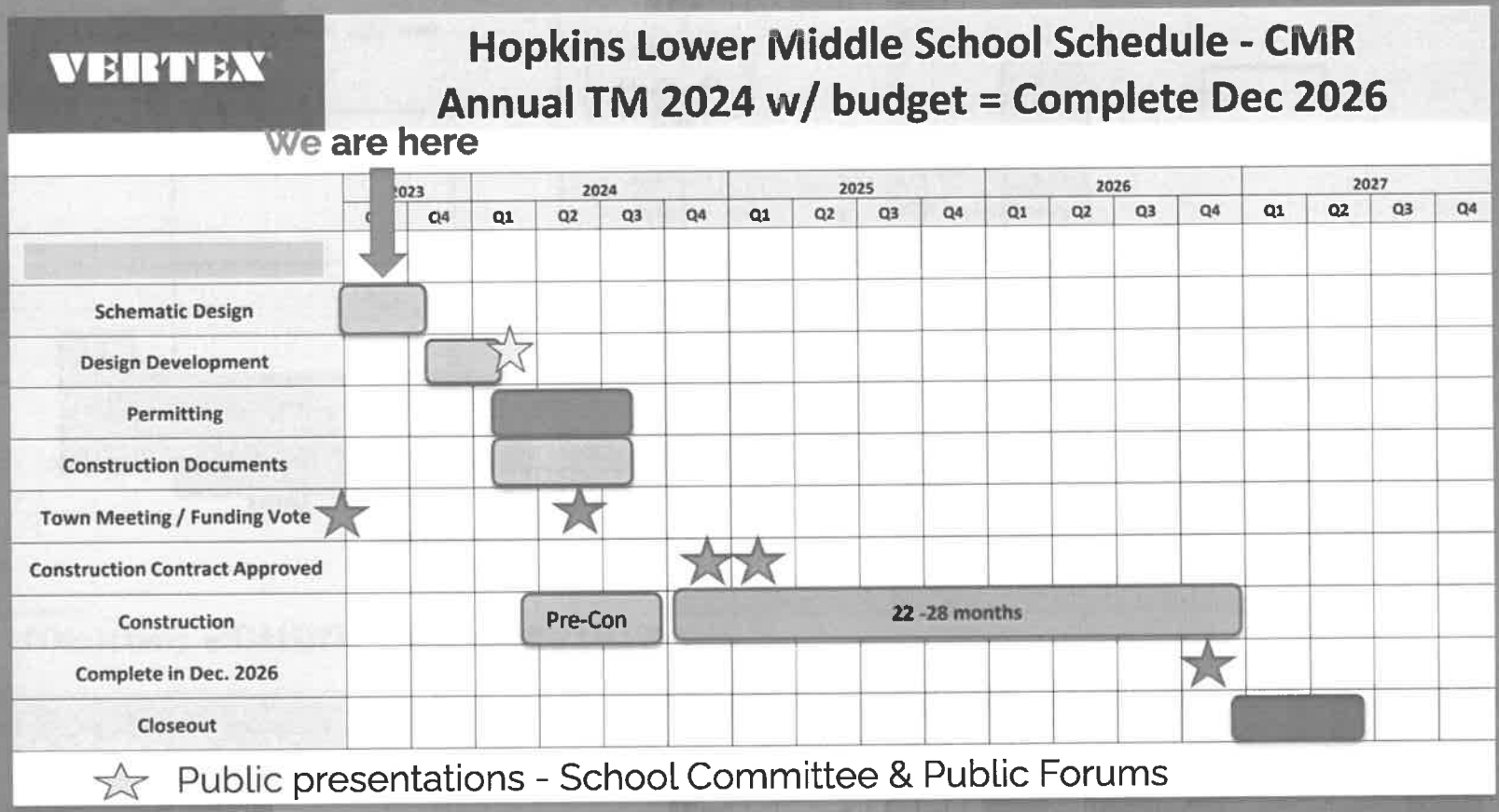
HOPKINS SCHOOL ADDITION $43,940,000

HOPKINS SCHOOL - RENOVATION



SECOND FLOOR PLAN

HOPKINS SCHOOL ADDITION $43,940,000



HOPKINS SCHOOL ADDITION $43,940,000

Update:

The first cost estimates were received yesterday on the initial schematic design submission.

Concept Budget - December 2022 (District Wide Study)	$43,940,000 (1)
Initial Project Budget - November 2023	$46,226,723 (1)
Cost Increase to Concept Budget	$ 2,286,723 (2)

1. *Cost excludes $3,000,000 already allocated at May 2023 town Meeting for this phase AND before any expected rebates.*
2. *Scope added since Concept Budget such as geothermal, loop road paving close to school, walking track around playfields. The scope will continue to be defined.*

HOPKINS SCHOOL ADDITION $43,940,000

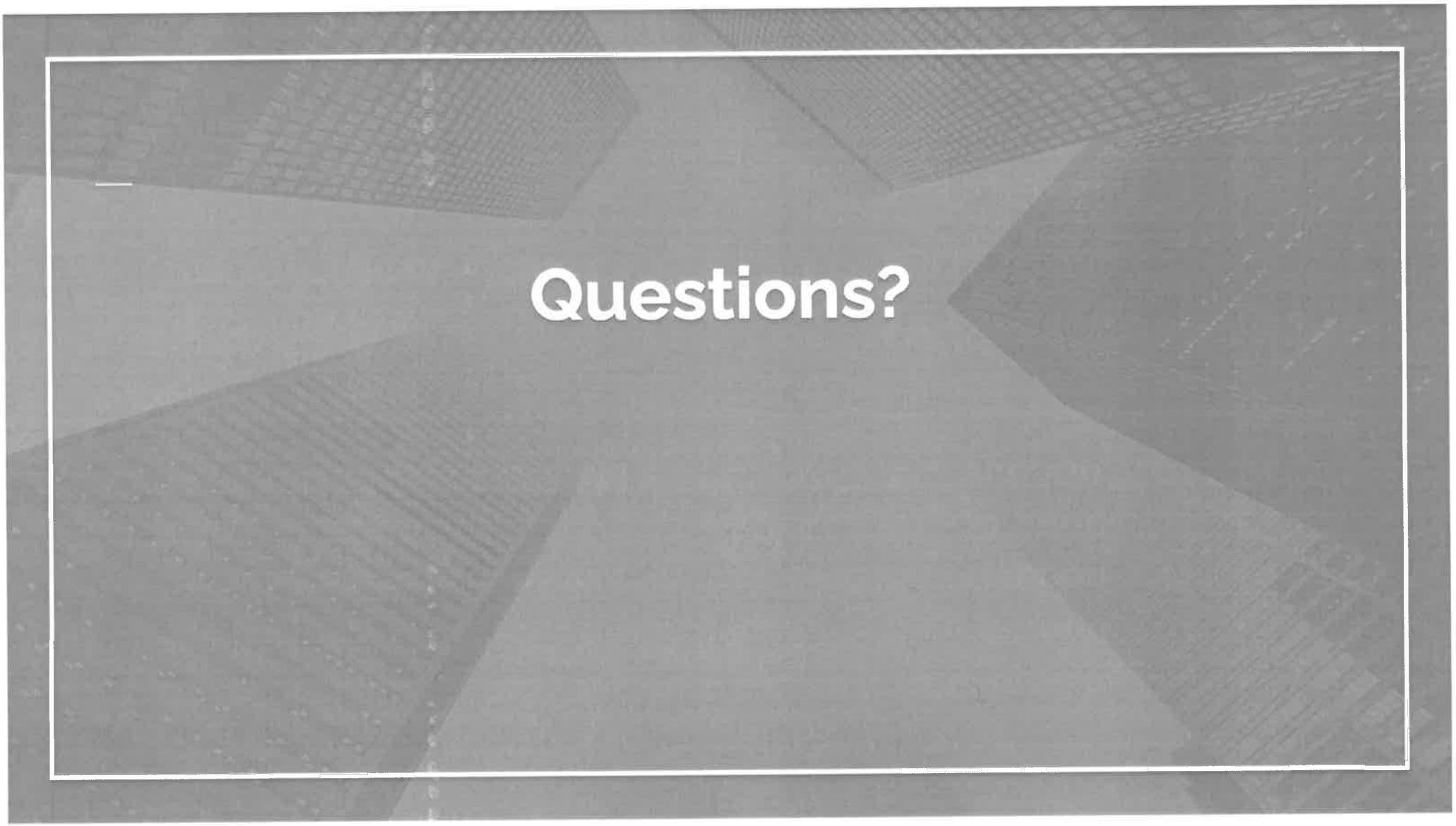
1. Early November update the School Committee on the initial Cost Estimate
2. Early January Hopkins Design presentation to School Committee
3. Mid-January hold Community Forum on the Hopkins School project
4. Late January start permitting filings with Conservation Committee and Planning Board
5. January CM-Selection Committee shortlists Construction Managers (CM) for 2nd round submission with fees.
6. Late February CM-selection Committee Interviews 3 Construction Management teams and recommends award
7. Early March School Committee reviews and authorizes hiring CM. Design team makes a presentation update
8. April School Committee votes a Subcontractor Prequalification committee. (i.e. add 2 CM members to the CM-Selection Committee)
9. May/June presentation of final design scope prior to bidding.

End of Life Replacement Cycle

• Vehicle	$ 80,000
• Technology Districtwide	$ 100,000
• HVAC Districtwide	$ 700,000
• High School Track & Field 3	$ 350,000

Enrollment Growth

• Marathon Playground	$ 1,000,000
• Hopkins School Addition	$ 43,940,000
Total	$ 46,170,000


Questions?

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Facilities**
Requesting Official: David Daltorio
Item Description: Fruit Steet Garage - Main O/H Door Replacement (4)
Capability to be replaced or new risk/opportunity to be addressed:

_____
_____
_____

Cost:

FY 2024 capital amount requested; note contingency amount:	$30,000
Amount/duration of future FY follow-on costs:	N/A
Available grants, subsidies, trade-in, or other cost reductions:	N/A

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Full use of the building.
(Why) Describe link to Town Vision or Goals:	Well maintained facilities.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Facilities, DPW, Senior Center, Police, Fire, Town Hall, Library, and Residents.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Days vehicles park outside.
(How Long) Describe the expected service life:	20 years.

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: 1 of 1 Town Manager Priority: _____ of _____
Enclosure: N/A

Town of Hopkinton Fiscal Year 2024 5-Year Capital Need Projection

Department: __Facilities_____
Requesting Official: __David Daltorio_____

Required for projected needs of $25,000 or more, FY 2025 - FY 2029
Detailed capital request forms (Enc: 1) required for FY 2025 only

FY:	Item Description	Estimated Amount	General Fund, Enterprise Fund, or CPA
25	Fruit Street Garage - Main O/H Doors (4)	**$30,000**	GF
26	Town Hall - Boiler (need updated estimate)	$100,000	GF
26	Senior Center - Update all Kitchen Equipment (need updated estimate)	$100,000	GF
26	Senior Center - Dining Facility Expansion (need updated estimate)	$265,000	G
26	Police Condensing Unit - 20 years old (need updated estimates)	$200,000	GF
26/27	Fruit Street Garage Repairs (need updated estimates)	$250,000	GF
27	Senior Center Condensing Units - 20 years old (need updated estimates)	$300,000	GF
28	Fire Main - Envelope Repairs (need updated estimates)	$150,000	GF
25/26	Center School Re-Use Schematic Design - $100,000 (Connected to Elmwood Project and Schedule)	$100,000	GF
26/27	Center School Re-Use Construction (Connected to Elmwood Project and Schedule) (Cost is Worst Case, cost will depend on final deevelopment agreement, if any).	$20,000,000	GF

Enclosure: (2)

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Highway Division**
Requesting Official: Kerry Reed
Item Description: **Vehicle Replacement - S-22 2005 Elgin Pelican Sweeper**
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a 2005 Street Sweeper, a 19-year old vehicle that has 4,390 hours and poor cab condition for operator.

Cost:$325,00

FY 2025 capital amount requested; note contingency amount:	$325,000 (inflation rates have been 7-13% each year since FY22 (original request)
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The old sweeper will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	One of two street sweepers that are necessary to clean the Town's 220+ lane miles of roads and parking lots at public buildings and parks to improve public safety, ensure regulatory compliance, and to help maintain the beauty of the Town. The Town is required by the EPA under the NPDES MS4 permit to sweep every public road at least once per year and to sweep paved areas in the Charles River watershed (southern end of Town) and around Lake Whitehall twice a year. Street sweeping must be conducted according to a mandated schedule to address pollutants. Therefore, the Town's street sweeping operations require both sweepers to be in use full-time from April to July and October to November. As of July 2024, the Town must fully implement the street sweeping program to comply with water quality requirements for discharges to the Charles River. Failure to comply with the federal permit can result in enforcement orders and fines or lawsuits from environmental groups like the Conservation Law Foundation. The Town will be unlikely to meet permit requirements without a new street sweeper.
(Why) Describe link to Town Vision or Goals:	Street sweeping protects natural resources by reducing the amount of pollutants entering our water bodies and removes litter from roadways which helps the Town achieve Green Community goals. Street sweeping also assists with maintaining safe roads for travel. Additionally, The Town strives to provide high quality of life for residents and employees. Improvements that are not on the existing sweeper that will be on the new version of the street sweeper will significantly improve the safety of the operator and public which include: improved cab visibility, air tight cabin to reduce dust, backup cameras, and improved controls that are less likely to

	malfunction, be damaged, and will reduce potential operator error.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Motoring public, pedestrians, bicyclists, and sweeper operators (greater safety due to increased cab visibility and back up cameras, better working conditions through an airtight cabin that eliminates breathing and being covered in dust) Protects water quality of Charles River, Lake Whitehall, and other water bodies. Supports regional water quality initiatives.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Miles swept. Compliance with NPDES MS4 permit Savings from repair costs on 2005 sweeper (over $41,000 invested in repairs and increasing each year) or need to subcontract sweeping services
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

See attached quote, dated 9/24/2023 and photos of current condition of vehicle in Oct 2023.

Departmental Priority: **_1_ of ___5_____** Town Manager Priority: _____ of _____

Photo 1: Front (operator side) of S-22 Sweeper

Photo 2: Front (opposite side of operator) of S-22 Sweeper

Photo 3: Closeup of side broom. Note evidence of wear.


Photo 4: Operator's seat in cab. Note working conditions and amount of dust. New street sweeper will significantly improve the safety of the operator with improved cab visibility, airtight cabin to reduce dust, backup cameras, and improved controls that are less likely to malfunction, be damaged, and will reduce potential operator error.

C.N. WOOD

C.N. Wood Enviro LLC

an affiliate of C.N. Wood Co., Inc.

09/24/2023
ORDER DATE

WOBURN, MA
BRANCH

200 Merrimac Street
Woburn, MA 01801
(781) 935-1919

140 Wales Ave
Avon, MA 02322
(508) 584-8484

102 State Road
Whately, MA 01093
(413) 665-7009

60 Shun Pike
Johnston, RI 02919
(401) 942-9191

84B Warren Ave
Westbrook, ME 04092
(207) 854-0615

25A Bernhard Road
North Haven, CT 06473
(203) 848-6735

Sales Order

Customer P.O. # _____

Sold To: Town of Hopkinton

Address: Department of Public Works
66 fruit St
Hopkinton MA 01748

Phone: 508 497 9768 Fax: _____

F.O.B. _____ SHIPPED VIA: _____

Ship To: Same

Email: _____

QTY	ITEM #	S/N	DESCRIPTION	EACH	TOTAL
1	1		Elgin Pelican NP dual street sweeper, Air ride seats, limb guards- dual, convayer cleanout,	$ 295,500.00	$295,500.00
			LED stop, turn and tail lights,am/fm/cd radio, air conditioning, JD tier four engine,		0
			front dump hopper,220 gallons of water, auto reverce broom pick up, auto lube,		0
			right hand door sliding window, license plate holder front and rear, cold weather start aid,		0
			rear view camera,lower roller washout, sprung guide wheel, hopper lift capacity 9,000lbs,		0
			painted Yellow, operating weight 15,000lbs, 1 year standard warranty		0
			SOURCEWELL CONTRACT NUMBER 093021-ELG		0
			Option		0
1	2		roof corner flashers front and rear	$ 3,780.00	$3,780.00
1	3		Hopper liner	$ 6,000.00	$6,000.00
1	4		5 year warranty part/service	$ 14,995.00	$14,995.00
1	5		Spare drive / spare guide tire and rim mounted	$ 3,600.00	$3,600.00
			Due to the current market conditions and the on-going supply chain		0
			issues pricing is subject to change		0
					0
			This is a budget proposal only		0
					0
					0

	YEAR	MAKE	MODEL	S/N	HRS	WORKING CONDITION	ALLOWANCE	PAYOFF
TRADE #1	2005	Elgin	Pelican Single	S-9303-S	4390	Poor	$ 600.00	
TRADE #2								

Sale Price	$323,875.00
Plus Tax	$ 0.00
F.E.T.	
Total	$323,875.00
Less Trade	$600.00
Total Payoff	0
Less Deposit	
Net Due	$323,275.00

***Finance Details**: (ALL FINANCE IS SUBJECT TO CREDIT APPROVAL)*

TERMS: ☐ ***NET CASH UPON INVOICE*** ☐ ***FINANCE:*** _____

CONDITION: ☐ ***AS IS*** ☐ ***NEW*** ***WARRANTY:*** _____

THIS DOCUMENT IS A CONTRACT INCLUDING IMPORTANT TERMS AND CONDITIONS. I HAVE REVIEWED AND ACCEPT ALL TERMS AND CONDITIONS, INCLUDING WITHOUT LIMITATION THOSE ON PAGES 2 - 4 OF THIS CONTRACT. I HAVE READ THIS CONTRACT AND AUTHORIZE THE ENTRY OF THE ABOVE ORDER SUBJECT TO THE TERMS AND CONDITIONS CONTAINED HEREIN

SELLER

C.N. WOOD ENVIRO, LLC

BY: Steve Russell
SALES REP

ACCEPTED: _____
AUTHORIZED SIGNATURE

PURCHASER

COMPANY: Town of Hopkinton Public Works Department

PRINT NAME: Mike Mansir Public Works Highway Manager

SIGNATURE: _____
***BUYER** (If Corporation, Signature and Title of Officer)*

THIS ORDER NOT ACCEPTED OR BINDING UNTIL APPROVED BY AN OFFICER OF C.N. WOOD ENVIRO LLC

Shipping Reference | This space for internal use only | 70

C.N. Wood Enviro, LLC

Sale Standard Terms and Conditions

These Sale Standard Terms and Conditions shall be effective upon the completion of an Invoice, Sales Order, Purchase Order or other documentation evidencing agreement to the sale of a product or service (collectively, "Purchase Order") pursuant to these terms, and are incorporated by reference into any sale or proposed sale of products by C.N. Wood Enviro, LLC ("Company") and the customer identified on any such Purchase Order ("Customer"). Any and all exhibits and Purchase Orders are incorporated by reference into these Terms and Conditions (collectively, this "Agreement"). In consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

1. General. The sale of any equipment, goods, or products (collectively, "Products") or the sale of services by Company is expressly conditioned on Customer's assent to this Agreement. Any acceptance of Company's offer is expressly limited to acceptance of this Agreement and Company expressly objects to any additional or different terms proposed by Customer. Any order of Product or services and Company's delivery of Product or performance of services shall constitute Customer's assent to this Agreement. Unless otherwise specified in a Purchase Order, Company's price quotation shall expire thirty (30) days from its date and may be modified or withdrawn by Company before receipt of Customer confirming acceptance. All Purchase Orders are not final until subsequent acceptance by Company at its home office in Woburn, Massachusetts.

2. Prices. Unless otherwise provided in this Agreement, prices listed do not include freight, handling fees, taxes, and/or duties, and are subject to correction or change without notice. Customer shall pay all license fees, sales, use, service use, personal property and excise taxes, and any other fees, assessments or taxes which may be assessed or levied by any national, federal, state, provincial or local government, and any departments and subdivisions thereof, as a result of Customer's order and purchase of Company's Product or services. Export orders may be subject to other special pricing. Company reserves the right to accept or reject any order.

3. Payment. Unless otherwise expressly provided, payment will be due at the time of delivery of the Product. No deductions are allowed for liquidating damages, back charges, retainage, set-off or start up. In the event that collection efforts are required to be instituted in order to collect monies under the terms of this Agreement, the Customer agrees to pay all costs incurred through all collection efforts, including, but not limited to, attorney's fees and costs to repossess any Product sold to Customer.

If Customer fails to make payment within thirty (30) days of shipment or pick-up, or fails to comply with Company's credit terms, or fails to supply adequate assurance of full performance to Company within a reasonable time after requested by Company (such time as specified in Company's sole discretion), Company may defer shipments until such payment or compliance is made, require cash in advance for any further shipments, demand immediate payment of all amounts then owed, elect to pursue a collection action (which action shall include, without limitation, payment of attorneys' fees and any and all other associated costs of collection), and/or may, at its option, cancel all or any part of an unshipped order. Company further reserves the right to charge Customer a late payment fee at the rate of one and one-half percent (1-1/2%) of the amount due for each month or portion thereof that the amount due remains unpaid, or such amount as may be permitted under applicable law.

4. Financing. Financing may be available from third parties for the purchase of Product or services from Company. THE COMPANY DOES NOT PROVIDE FINANCING AND ANY FINANCING RATES, TERMS AND CHARGES ARE SUBJECT TO RATES, TERMS AND CHARGES NEGOTIATED BY CUSTOMER WITH A THIRD-PARTY FINANCIAL INSTITUTION OR OTHER FINANCIER. Any financing information, including but not limited to projected payments, financing offers, terms rates, or charges, are provided by Company for informational purposes only and nothing contained herein constitutes financial advice or an offer to finance the Product or services by the Company or any third-party. Company does not guarantee the availability of financing and financing is subject to approval by a third-party financial institution or financier.

5. Credit History. As part of this transaction, Company may investigate Customer's credit history. Company reserves the right to cancel and terminate any Purchase Order if it reasonably believes that there is any risk of nonpayment or Company otherwise deems itself insecure with respect to any payments to be made by Customer prior to delivery of the Product or performance of the services specified in this Agreement.

6. Shipping. Shipping dates are approximate and based on prompt receipt of all necessary information by Company. Company will not be liable for delays in manufacture or delivery or additional costs or expenses that may arise from causes beyond Company's reasonable control. All Products are shipped at Customer's risk, F.O.B. Company's facilities, with transportation charges to be paid by Customer. Customer shall be solely responsible for, and shall pay, all freight, insurance and handling charges in connection with the delivery of Company Products from Company's facilities to the location specified by Customer and Company is not responsible for Product damaged or lost in transit. In the event the Product are shipped directly from the manufacturer to Customer, product are shipped at Customer's risk, F.O.B. manufacturer's facility. When shipped directly from manufacturer to Customer, Customer shall be solely responsible for, and shall pay, all freight, insurance and handling charges in connection with the delivery of Company Products from Company's facilities to the location specified by Customer and neither Company nor manufacturer are responsible for Product damaged or lost in transit.

7. Security. To secure the payment and performance of all indebtedness and obligations of Customer to Company arising out of, or in connection with, the sale of any Product or services by Company to Customer, Customer grants to Company a purchase money security interest in all Product sold to Customer by Company, until such time as the purchase price (including principal, interest, and any late fees) is paid in full to Company, and such security interest shall extend to all cash proceeds, promissory notes, and products of the sale, rental, lease or other disposition of such Product (the "Collateral"). Customer will, at the cost of Customer, and without expense to Company, do, execute, acknowledge and deliver to Company all and every such security agreement, financing statement, assignment or other writing that Company may, from time to time, reasonably deem necessary or appropriate to create, perfect, continue perfected, protect and collect the Collateral and Company's title to, security interest in and lien upon the Collateral or which Customer may be or may hereafter become bound to convey or assign to Company, or for carrying out the intention of facilitating the performance of the terms of this Agreement ("Security Instrument"). Customer, on demand, will execute and deliver any Security Instrument demanded by Company in its sole discretion, and in the event it shall fail to so execute and deliver any such Security Instrument at the time, Customer hereby authorizes Company to file, and hereby appoints Customer as Customer's agent and attorney to sign and cause to be filed any Security Instrument that Company may reasonably deem necessary or appropriate to create, perfect, continue perfected, protect and collect the Collateral and Company's title to, security interest in and lien upon the Collateral. Customer grants to Company an irrevocable power of attorney coupled with an interest for the purpose of exercising and perfecting any and all rights and remedies available to Company at law and in equity, including, without limitation, such rights and remedies available to Company pursuant to this Agreement, including this Section 7 and Section 8. Customer acknowledges that its right to lease or rent any Product is subject to Company's security interest and the terms of any security agreement executed by Customer and delivered to Company, if any.

8. Failure of Payment. If Customer fails to make payment in full or in part when due, Company shall have the right at Company's election to: (i) immediately suspend performance and cancel the unfinished portion of any outstanding orders, (ii) declare all unpaid amounts for the Products or services immediately due and payable, (iii) withhold further deliveries, and/or (iv) convert the Customer's use of the Product to a standard Master Equipment Rental Agreement using the standard rental rates for the Customer's use of the Product from the date the Product was delivered to Customer. Company's rights for Customer's failure to pay shall not be limit by this Section, the rights described above shall be cumulative, and the exercise of any right or remedy shall not limit Company's right to exercise any other right or remedy available at law or herein.

If Company elects to proceed with an order after the suspension of performance, Company shall have an extension of time for performance as is necessitated by the suspension. Company shall have the right to enforce payment of the full purchase price, including any price increase or surcharge, for Products or services already delivered or in process. Customer shall reimburse Company for all costs of collection, including reasonable attorney's fees, costs, interest, and late fees, incurred as a result of Customer's failure to make payments when due.

9. Insurance. Until such time as the purchase price, plus all interest, late fees, and other penalties is paid in full to Company, Customer shall, at its own expense, obtain and maintain all risk general liability and property damage insurance covering any Products delivered under this Agreement, naming Company as an additional insured, in an amount at least equal to the Product' replacement value. Upon request of Company, Customer shall furnish certificates of such insurance listing the Company as an additional insured, which insurance may not be cancelled except on advance written notice to Company. At all times, the insurance required of Customer under this Agreement shall be primary to any applicable insurance carried by Company.

10. Inspection. All Product and services shall be finally inspected and accepted by Customer, and Customer shall make written claim for all visible or detectable defects or nonconformities within seven (7) days after delivery to Customer. Customer's failure to notify Company within the seven (7) day period will constitute a waiver of Customer's right to reject the Product for visible or detectable defects or nonconformities. Acceptance of Product by Customer shall also be deemed to have occurred if Customer uses the Product. There shall be no revocation of acceptance, except for invisible, non-detectable or latent defects or nonconformities which were not discovered by Customer which could not reasonably have been discovered prior to acceptance. Any collections, controls, inspections, tests and certificates requested by Customer shall be at Customer's expense.

11. Returns. No Product may be returned for any reason without Company's prior written consent (and then only under such terms and conditions as Company may specify). Company may decline to allow any claim, credit or refund for Products returned without such written consent. Without limiting the foregoing, non-standard Products (including Products which have been manufactured to Customer's specifications), are not returnable. Transportation, freight, assembly or disassembly costs for authorized returns will be returned solely at the expense of Customer unless Company otherwise agrees in writing. Authorized returns must be in new and/or unused condition, and may be subject to administrative or other charges determined by Company.

12. Cancellation. Unless otherwise agreed by Company in writing, orders are non-cancellable, and will not be subject to change or suspension by Customer. If Company agrees to cancel, change or suspend any order, it may impose administrative or other charges as determined by Company. If a requested change (inclusive of delivery date) or suspension is approved, Customer will send to Company an acknowledgement confirming the change or suspension and any additional charges, and the same will become part of this Agreement.

13. Warranty. For the sale of new Product, provided that Customer is not in default under its payment obligations, Company hereby assigns to Customer any warranties or guaranties provided by each manufacturer or each seller of each Product. THE FOREGOING WARRANTY BY COMPANY IS THE ONLY WARRANTY GIVEN BY COMPANY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

USED PRODUCTS ARE SOLD ON AN "AS IS" BASIS AND COMPANY PROVIDES NO WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO ANY USED ITEM OF EQUIPMENT OR ANY PART SOLD BY COMPANY, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

14. Limitation of Liability. The liability of Company for any Product or services supplied by Company, whether in contract, in tort, in strict liability, or otherwise, shall not exceed the contract price or, if a particular product gave rise to, or is the subject of, the damage or liability claim, then the Company's liability shall not exceed the amount of the purchase price for that particular product which gave rise to, or is the subject of, the damage or liability claim. IN NO EVENT WILL COMPANY BE LIABLE IN CONTRACT, IN TORT, IN STRICT LIABILITY OR OTHERWISE, TO CUSTOMER OR TO ANY THIRD-PARTY, FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECULATIVE, PUNITIVE OR EXEMPLARY DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF ANTICIPATED PROFITS OR REVENUES, LOSS OF USE, NON-OPERATION OR INCREASED EXPENSE OF OPERATION OF EQUIPMENT, COST OF CAPITAL, OR FOR FAILURE OR DELAY IN ACHIEVING ANTICIPATED PROFITS OR PRODUCTS.

15. Indemnification. Customer shall defend, indemnify and hold Company harmless from and against any claims brought by a third party arising from Customer's negligence, use or misuse, or intentional misconduct arising out of or attributable to the Customer's use of Company's Product or services, including but not limited to, claims of: (a) personal injury or death, or (b) physical damage to tangible personal or real property.

16. Use. Company is not responsible for Customer's use of the Product or services being sold under this Agreement. CUSTOMER SHALL OPERATE THE EQUIPMENT AND ALL PARTS THEREOF IN ACCORDANCE WITH THE EQUIPMENT'S OPERATIONS MANUAL, MANUFACTURER REQUIREMENTS, WARRANTIES AND PRODUCT MANUALS, INCLUDING, WITHOUT LIMITATION, ANY AND ALL REQUIREMENTS PERTAINING TO THE RECHARGING OR RESTORATION PROCESSES OF THE EQUIPMENT'S EMISSIONS SYSTEMS, SELECTIVE CATALYTIC REDUCTION, DIESEL OXIDATION CATALYSTS OR DIESEL PARTICULATE FILTERS.

17. Maintenance. Unless otherwise stated in the Purchase Order or provided by the manufacturer, Customer shall at its own expense maintain all Products and services and pay the cost of all necessary repairs to the Products or services provided under this Agreement. Customer acknowledges that certain manufacturers require that the Company perform certain maintenance on specific products at specific intervals. If this Agreement provides for preventative maintenance to be provided by Company either as required by the manufacturer or agreed to be performed by Company, Customer shall notify Company of the need for such maintenance at the required intervals and allow Company access to the work site during regular work hours to perform all maintenance that the manufacturer requires the Company to perform or the Company agreed to perform. Customer shall not be entitled to any credit, payment or other compensation as a result of the down time of the Product caused by the maintenance of the Product. If Company is required to provide such maintenance outside of normal business hours, Customer shall pay the increased costs incurred by Company in performing such services.

18. Data Collection. Any Product being sold under this Agreement may be equipped with a manufacturer's tracking system that allows for the equipment location, usage and other machine information to be tracked, monitored and transmitted via global positioning systems, satellites and/or other means to the manufacturer, Company, or other third parties. By accepting the Product, Customer agrees to the use of such manufacturer's tracking system with respect to this Product while being used by Customer and Customer acknowledges that it shall have no right in any data collected. Customer agrees that any data collected may be used by manufacturer, Company or any third-party, as manufacturer, Company or any third-party shall each determine in their sole discretion. Customer is prohibited from disabling, disconnecting, interfering with, or using or attempting to gain access to the hardware or software which are part of any manufacturer's tracking system and from attempting to alter, modify, adapt, translate, decompile, copy, create a derivative work of, reverse engineer, reverse assemble or to discover any source code of the tracking system. Nothing in this Agreement conveys to Customer any rights in the manufacturer's tracking system or any related hardware or software.

19. Entire Agreement. This Agreement constitutes the entire agreement of the parties hereto with respect to the subject matter herein and supersedes all prior oral or written agreements or proposals to Customer.

20. Conflict of Terms. In the event, and to the extent, there is a conflict between the terms of these Terms and Conditions and the terms of any exhibit or any Purchase Order, the terms set forth on the exhibit or Purchase Order shall control. In the event, and to the extent, there is a conflict between the terms of any exhibit and any Purchase Order, the terms set forth on the Purchase Order shall control.

21. Waiver. No failure or delay on the part of either party in exercising any right or remedy under this Agreement shall operate as a waiver thereof; nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise thereof or of any other right or remedy. No provision of this Agreement may be waived except in a writing signed by the party granting such waiver.

22. Assignment. Neither party may assign this Agreement or delegate any of its duties under this Agreement without the prior written consent of the other party, except that either party may assign this Agreement in its entirety without the other party's prior written consent to any present or future parent, subsidiary, or successor, or a purchaser of all or substantially all of its assets. Such acquiring party shall agree in writing to comply with and be bound by the assigning party's obligations under this Agreement.

23. Notice. All notices, communications and reports permitted or required by the provisions of this Agreement shall be in writing and will be deemed to have been given when delivered by personal service or sent by recognized overnight courier service to the addressee party at the following address:

If to COMPANY, to: C.N. Wood Enviro, LLC
200 Merrimac Street Woburn, MA 01801
Attn: Chief Financial Officer

If to CUSTOMER, to:Name and address on first page of this Agreement.

or to such other address or person as the addressee party may designate in writing from time to time in accordance with this paragraph. All such communication will be deemed to be effective on the earlier of (a) actual receipt or (b) if sent by courier service, on the second day following the date presented to the courier service for delivery to the other party.

24. Severability. In the event that any one or more of the provisions or parts of any provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, the same shall not invalidate or otherwise affect any other provision of this Agreement, and this Agreement shall be construed as if the invalid, illegal or unenforceable provision had never been contained in this Agreement.

25. Governing Law. This Agreement and all amendments, modifications, alterations, exhibits, supplements, schedules, attachments and Purchase Orders of any kind now, previously or entered into by Customer with Company shall be governed by and construed and interpreted in accordance with the laws of the State for the location of Company at which this Agreement was submitted, without regard to conflict of laws rules.

26. Venue. With respect to any claim or action arising under this Agreement, Customer (a) irrevocably submits to the jurisdiction of the courts of the Commonwealth of Massachusetts located in the Middlesex or Suffolk Counties, and the United States District Court located in Boston, Massachusetts, and (b) irrevocably waives any objection which it may have at any time to the laying of venue of any suit arising out of or relating to this Agreement brought in any such court, and (c) irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

27. Force Majeure. Except for the payment obligations of Customer, neither party hereto shall be liable for their failure to perform any obligation under this Agreement if such failure is caused by the occurrence of any contingency beyond the reasonable control of such party, including, without limitation, fire, flood, strike and any other industrial disturbance, failure of transport, accident, war, riot, insurrection, act of God or order of any governmental agency. In the event that any such contingency occurs which affects the performance of Company, Company may allocate delivery of its equipment and parts among its customers as it sees fit in its sole discretion and without liability to Customer, or any other party.

28. Headings: The headings in this Agreement have been added for the convenience of the parties and are not to be deemed a part of this Agreement.

29. Integration: This Agreement is the sole understanding and agreement of the parties with respect to its subject matter and supersedes all other such prior or contemporaneous oral and written agreements and understandings.

30. Binding Agreement: This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. This Agreement is subject to the approval and acceptance of Company evidenced by the execution of this Agreement through its authorized officer and shall not become binding upon Company until so approved, accepted and executed.

758039.1

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Highway Division**
Requesting Official: Kerry Reed
Item Description: **Vehicle Replacement - M-1 Ford F-350 Pickup Truck**
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a 2006 pickup truck, an 18-year old vehicle that has over 115,000 miles. M-1 is used by the DPW maintenance team.

Cost:$131,000

FY 2025 capital amount requested; note contingency amount:	$131,000
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The current vehicle will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	M-1 is the mechanics' vehicle which is used to respond to emergency repairs on DPW vehicles and equipment throughout Town in all weather conditions, assists with routine maintenance for other Town department vehicles and equipment, and is used for transportation to obtain parts and equipment from vendors. Assists with day-to-day maintenance of DPW's fleets and supports emergency maintenance during snow & ice operations. Replacement of this vehicle is consistent with the DPW's vehicle replacement plan.
(Why) Describe link to Town Vision or Goals:	Safe work environment, efficient operations, well maintained roads, and well maintained fleet to provide safe roads and public infrastructure. The Town strives to provide high quality of life and safety for employees, as well as residents. This truck is equipped with a lift gate and other tools that assist with lifting tires or equipment and protects employees from possible injury.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Residents, businesses, and visitors who rely on year-round, safe roadways. Provides snow & ice operations to ensure safe roads and access for emergency services during storms.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days the vehicle is out of service due to repairs plus cost of necessary repairs (over $24,000 invested in repairs and increasing each year); Savings for not needing to contract towing, roadside repairs, and delivery of equipment.
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **__2_____ of ___5_____** Town Manager Priority: _____ of _____

Photo 1: Front, passenger side of M1 Ford F-350.

Photo 2: Front, driver side of M1 Ford F-350.

Photo 3: Rear of M1 Ford F-350 with rusted lift gate

Photo 4: Closeup view for wear on vehicle

Estimate

Date: 10/23/2023
Estimate# HPWD10232023
Customer ID:

To: Hopkinton Public Works
Attn: Mike Mansir
83 Wood Street
Hopkinton, MA 01748

REVISED1

Salesperson: Paul G King
508-918-2210

GBPC/BAPERN Contract

Qty	Item #	Description	Unit Price	Line Total
		2024 Chevrolet Silverado 3500HD (CK30903) 4WD Reg Cab 142" Work Truck		$44,744.00
	9W3	EXTERIOR COLOR: **SPECIAL PAINT -** Wheatland Yellow	$ 450.00	$ 427.50
	L8T	Engine, 6.6L V8 with Direct Injection and Variable Valve Timing, gasoline (401 hp [299 kW] @ 5200 rpm, 464 lb-ft of torque [629 N-m] @ 4000 rpm)(STD)		$
	MKM	Transmission, Allison 10-speed automatic (STD)(Standard with (L8T) 6.6L V8 gas engine.)		$
	JFP	GVWR, 11,300 lbs. (5126 kg) with single rear wheels (STD)		$
		Gross Vehicle Weight Rating: 11,300 Lbs		$ -
		Gross Combined Weight Rating: 26,000 Lbs		$
	GT4	Rear axle, 3.73 ratio (STD)		$ -
	1WT	Work Truck Preferred Equipment Group includes standard equipment		$ -
	PYT	Wheels, 18" (45.7 cm) painted steel (STD)		$
	QF6	Tires, LT275/70R18E all-terrain, blackwall (STD)		$
	ZYG	Tire, spare LT275/70R18 all-terrain, blackwall (STD)	$ 380.00	$ 361.00
	AZ3	SEAT TYPE: Seats, front 40/20/40 split-bench with covered armrest storage and under-seat storage (lockable)(STD)		$ -
	H2G	SEAT TRIM: Jet Black, Vinyl seat trim		$ -
	IOR	Audio system, Chevrolet Infotainment 3 system, 7" diagonal HD color touchscreen, AM/FM stereo Bluetooth audio streaming for 2 active devices, voice command pass-through to phone, Wireless Apple CarPlay and Wireless Android Auto compatibility(STD)		$ -
	ZLQ	WT Fleet Convenience Package (When ordered with (ZW9) pickup bed delete, (QT5) EZ Lift power lock and release tailgate and (UD7) Rear Park Assist is deleted.) includes (UD7) Rear Park Assist, (QT5) EZ Lift power lock and release tailgate and (DWI) trailer mirrors	$ 350.00	$ 332.50
	NQH	Transfer case, two-speed active electronic Autotrac with push button control(Requires 4WD models.)	$ 200.00	$ 190.00
	K4Z	Battery, auxiliary, 730 cold-cranking amps/70 Amp-hr	$ 135.00	$ 128.25
	KW5	Alternator, 220 amps	$ 150.00	$ 142.50
	JL1	Trailer brake controller, integrated	$ 275.00	$ 261.25
		Capped Fuel Fill	INC	INC

	V46	Bumper, front chrome	$ 100.00	$ 95.00
	9J4	Bumper, rear, delete	INC	INC
	U01	Lamps, Smoked Amber roof marker, (LED)	$ 55.00	$ 52.25
	DWI	Mirrors, outside power-adjustable vertical trailering with heated and auto-dimming upper glass lower convex mirrors, turn signal indicators, puddle lamps, perimeter lighting, auxiliary lighting, power folding/manual extending (extends 3.31" [84.25mm])	INC	INC
	9L7	Upfitter switch kit, (5) Provides 3-30 amp and 2-20 amp configurable circuits to facilitate installation of aftermarket electrical accessories. Kit with all required parts will be shipped loose with the truck for installation by the dealer or upfitter at customer expense.	$ 150.00	$ 142.50
	DD8	Mirror, inside rearview auto-dimming	INC	INC
	SFW	Back-up alarm calibration	INC	INC
	5N5	Rear Camera Kit Kit includes camera, fixed position bracket & 19 ft cable with attachment clips. Rear camera radio calibration provided from the factory	$ 73.00	$ 69.35
		THE FOLLOWING EQUIPMENT BEING INSTALLED ON THE ABOVE CHASSIS BY J C MADIGAN		$ -
		8 FT. KNAPHEIDE SINGLE REAR WHEEL UTILITY BODY MODEL 6108 INSTALLED ON TOWN SUPPLIED CHASSIS UNDERCOATED AND PAINTED YELLOW TO MATCH WITH THE FOLLOWING ITEMS		$ 72,091.30
		STAINLESS/POLY ROTARY PADDLE HANDLES		$ -
		RHINO LINE CARGO AREA, CABINET TOPS, AND BUMPER		$
		REGUIRED LED LIGHTING, BACKUP ALARM		$ -
		REAR CLASS III RECEIVER AND RV 7 –SPADE LIGHT PLUG		$ -
		ALUMINUM CUSTOM CAB GUARD W/ SCREEN WINDOW & LIGHTBAR MOUNT		$
		CABINET INTERIOR MOUNTED LED LIGHTS		$ -
		C TECH PULL OUT ALUMINUM DRAWER SYSTEM (5) 4-3", 1-5" DRAWERS (SRW 1V) - BOTH SIDES		$ -
		REWIRE & MOUNT DEALER SUPPLIED BACKUP CAMERA		$ -
		REAR FACTORY LED LIGHTS WIRED AS FLASHERS		$ -
		UNDERHOOD MOUNTED V-MAC 70cfm AIR COMPRESSOR W/ AIR DRYER		$
		REELCRAFT OR EQUAL 50' X 1/2" AIR HOSE REEL		$ -
		1300lb G-2 SERIES TOMMY-GATE W/ ALUMINUM PLATFORM		$
		9’ FISHER HC SERIES SNOW PLOW ASSEMBLY W/ JOYSTICK CONTROLS		$
		SNOW FOIL ATTACHMENT		$ -
		WESTIN BLACK TUBE STEPS		$ -
		Pair SoundOff Signal 4" mPower Lights Quick, Stud or Screw Mount, Amber LED Mounted in Grille		$ 500.00
		54 Inch SoundOff Signal nFUSE XL Amber LED White Scenelight		$ 2,500.00
		Wiring for Emergency Lights		$ 150.00
		Shop Supplies		$ 150.00
		Weathertech Floorliners		$ 150.00

		2 Piexe Rainguards		$ 101.00
				$
		PLEASE NOTE - MODEL YEAR 2023 HAS ALREADY CLOSED , PRICING FOR MODEL YEAR 2024 IS CURRENTLY BASED ON "DRAFT PRICING" FROM FORD MOTOR COMPANY. IF MODEL YEAR IS LESS IT WILL BE DEDUCTED		$
		WE WOULD SUGGEST THAT YOU ADD 5% FOR ANY POTENTIAL INCREASE - IF LESS AMOUNT WILL BE DECREASED, IF MORE AMOUNT WILL BE INCREASED - WE SUGGEST ADDING - $6,000.00 TO THE AMOUNT SHOWN		$ 6,000.00
				$ -

Special Instructions:

Custom or Special Orders are Non-Refundable

This Estimate is for Budgetary Purposes and is Not a Guarantee of Cost for Services.

Estimate is Based on Current Information From Client About the Project Requirments

Actual Cost May Change Once Project Elements are Finalized

Vehicle Subtotal	
Upfit Subtotal	
Grand Total	$128,588.40

McGovern Municipal 1200 Worcester Road, Framingham MA 01702

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Highway Division**
Requesting Official: Kerry Reed
Item Description: **Ash Street drainage improvement**
Capability to be replaced or new risk/opportunity to be addressed: Engineering and construction for drainage improvements in the vicinity of 28 Ash Street to address ponding in roadway, pavement damage, and overtopping adjacent sidewalk. Improvements to associated drainage easement are also required, which will address flooding complaints from adjacent properties..

Cost:$500,000

FY 2025 capital amount requested; note contingency amount:	$500,000
Amount/duration of future FY follow-on costs:	Annual maintenance of drainage system and easement
Available grants, subsidies, trade-in, or other cost reductions:	None

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	No stormwater system is located near the low spot within the roadway in the vicinity of 28 Ash Street. Stormwater runoff ponds in the low spot and will overtop the adjacent sidewalk and flow onto the adjacent property during heavy rains. The ponding water has damaged the underlying pavement. Additionally, the area ices over in the winter causing safety concerns. A town-owned drainage easement exists on the adjacent property but has not been maintained or improved to convey runoff from the road. Numerous abutting property owners have complained and requested drainage improvements.
(Why) Describe link to Town Vision or Goals:	Safe community, protect open space and natural resources, treasure our beautiful and special places, vibrant and sustainable community, well maintained town facilities, infrastructure improvements that support targeted growth and development while protecting the environment.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Vehicle and pedestrian travelers on Ash St. Residents that abut the area and easement (i.e. 26 Ash St, 28 Ash St, 32 Ash St, 15 Fenton St, 13 Fenton St, 11 Fenton St, 7 Fenton St)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	No flooding of public streets or private property.
(How Long) Describe the expected service life:	25 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

ADD VHB Alternative Analysis & cost estimate when complete

Departmental Priority: **_3_____ of ____5_____** Town Manager Priority: _____ of _____

Photo: View looking south on Ash Street. Ponding on road and overtopping of sidewalk during storm event on Oct 21, 2023 from approximately 1 inch of rain. Photo provided by property owner at 28 Ash Street.

Photo: View looking north on Ash Street. Property at 28 Ash Street is located to the left.
Note alligator cracking in the front of the driveway and fire hydrant where ponding usually occurs.
Photo taken Oct 27, 2023..

1.1 Data Collection

VHB will perform an initial desktop review of the Task 1 Project Area. The following will be provided: review of aerial imagery, LiDAR topographic data, approximate property lines from the Town of Hopkinton Geographic Information System (GIS) database, and approximate resource areas as indicated in MassMapper datalayers. Record information provided by the Town will also be reviewed, such as available subdivision design plans, utility record plans, or as-built surveys.

Two (2) VHB personnel will perform a site visit to review the project limits and surrounding area, as indicated in Figure 1. If necessary to confirm conceptual alternatives are feasible based on existing topography, VHB personnel will perform limited ground level observations to determine relative slopes or pitches of select site features. Please note that this limited field work will not be of sufficient detail for use as an existing conditions basemap for final design plans. Town will be responsible for notification and communication with the property owners to advise of the work to be performed in this area.

1.2 Conceptual Alternatives Assessment

Based on the data collected in Task 1.1, VHB will investigate up to two (2) conceptual alternatives to convey water from the ponding area to a discharge location to the north of the driveway for the #10 Hawthorne Lane property, at or near the discharge location of the existing driveway cross-culvert pipe. At this time, conceptual alternatives may illustrate either a swale and lowered driveway cross-culvert pipe or an inlet structure and lowered driveway cross-culvert pipe.

VHB will develop a conceptual sketch for each conceptual alternative. Sketches will use an aerial imagery basemap and will depict the proposed work associated with each alternative, drawn to an approximate scale. Sketches will provide graphical representation of potential easements based on GIS information.

VHB will generate a high-level probable construction cost estimate for each alternative of sufficient detail to be used for capital planning for each alternative. MassDOT nomenclature and unit pricing will be used through the State's Weighted Average Bid Application (WABA). Some contingencies or allowances are anticipated to be carried until it is decided if additional permitting or final design is needed or if the Town is going to construct on their own.

1.3 Summary Memorandum

VHB will prepare a brief memorandum to document the existing issue at #8-10 Hawthorne Lane and to describe design concept alternatives that were considered. Conceptual design sketches and conceptual construction costs for each alternative developed in Task 1.2 will be attached to the memorandum.

Deliverables:

- Summary Memorandum – Electronic Copy (pdf)
- Conceptual Design Sketch(es) – Electronic Copy (pdf)
- Conceptual Construction Cost Estimate(s) – Electronic Copy (pdf)

Task 2: #28 Ash Street Drainage Assessment

An existing low point in front of #28 Ash Street experiences frequent ponding, as water is trapped in the area due to the lack of an inlet structure and adjacent sidewalk. The discharge is now flooding portions of the property and the Town would like to address the issue. It is believed that prior to the installation of the sidewalk, a conveyance swale from this location conveyed stormwater from the roadway toward the rear of the #28 Ash Street property.

The Task 2 project limits follow portions of Ash Street and Fenton Street between #28 Ash Street and #10 Fenton Street, as well as portions of the residential properties where an existing pipe may exist. The following image depicts the approximate Task 2 Project Area:

Figure 2: Task 2 Project Area (#28 Ash Street)

2.1 Data Collection

VHB will perform an initial desktop review of the Task 2 Project Area. The following will be provided: review of aerial imagery, LiDAR topographic data, approximate property lines from the Town of Hopkinton Geographic Information System (GIS) database, and approximate resource areas as indicated in MassMapper datalayers. Record information provided by the Town will also be reviewed, such as available subdivision design plans, utility record plans, or as-built surveys.

VHB will perform deed research at the Town of Hopkinton Assessor's Office and Middlesex South Registry of Deeds to determine if existing historic easements exist within the Task 2 Project Area.

Two (2) VHB personnel will perform a site visit to review the project limits and surrounding area, as indicated in Figure 2. If necessary to confirm conceptual alternatives are feasible based on existing topography, VHB personnel will perform limited ground level observations to determine relative slopes or pitches of select site features. Please note that this limited field work will not be of sufficient detail for use as an existing conditions basemap for final design plans. Town will be responsible for notification and communication with the property owners to advise of the work to be performed in this area.

2.2 Conceptual Alternatives Assessment

Based on the data collected in Task 2.1, VHB will investigate up to two (2) conceptual alternatives to convey water away from the ponding area in Ash Street. At this time, conceptual alternatives may illustrate either a catch basin connected to an existing pipe in the easement, or a catch basin connected to the closed drainage system on Fenton Street.

VHB will develop a conceptual sketch for each conceptual alternative. Sketches will use an aerial imagery basemap and will depict the proposed work associated with each alternative, drawn to an approximate scale. Sketches will provide graphical representation of potential easements based on GIS information.

VHB will generate a high-level probable construction cost estimate for each alternative of sufficient detail to be used for capital planning for each alternative. MassDOT nomenclature and unit pricing will be used through the State's Weighted Average Bid Application (WABA). Some contingencies or allowances are anticipated to be carried until it is decided if additional permitting or final design is needed or if the Town is going to construct on their own.

2.3 Summary Memorandum

VHB will prepare a brief memorandum to document the existing issue at #28 Ash Street and to describe design concept alternatives that were considered. Conceptual design sketches and conceptual construction costs for each alternative developed in Task 2.2 will be attached to the memorandum.

Deliverables:

- Summary Memorandum – Electronic Copy (pdf)
- Conceptual Design Sketch(es) – Electronic Copy (pdf)
- Conceptual Construction Cost Estimate(s) – Electronic Copy (pdf)

Task 3: #360 Wood Street Drainage Assessment

An existing closed-drainage system currently discharges toward the western portion of #360 Wood Street, resulting in ponding on portions of the property. It is currently unknown whether the Town has an existing easement for the discharge. The Town would like to address the issue, by either rerouting the closed-drainage system discharge or by constructing a swale or channel to convey flows around the developed portions of the property.

The Task 3 project limits follow the western portion of the #360 Wood Street property. The following image depicts the approximate Task 3 Project Area:

Figure 3: Task 3 Project Area (#360 Wood Street)

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Highway Division**
Requesting Official: Kerry Reed
Item Description: **Roadway & sidewalk improvements - Dicarlo, Barbara, Peppercorn neighborhood**
Capability to be replaced or new risk/opportunity to be addressed: Engineering and construction for resurfacing roads and sidewalks.

Cost:$780,000

FY 2025 capital amount requested; note contingency amount:	$780,000
Amount/duration of future FY follow-on costs:	Annual maintenance
Available grants, subsidies, trade-in, or other cost reductions:	None

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	The Town's Pavement Management Plan (PMP) recommends resurfacing roads every 20-25 years. The roads & sidewalks in this subdivision have not been resurfaced since the subdivision was built in the 1980s. The PMP identified these roads as "Level 3" showing more surface damage, age & wear and recommended mill & overlay treatment. This project will extend the life cycle of the pavement and bring the sidewalks to current ADA standards.
(Why) Describe link to Town Vision or Goals:	Safe community, protect open space and natural resources, treasure our beautiful and special places, vibrant and sustainable community, well maintained town facilities, infrastructure improvements that support targeted growth and development while protecting the environment.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Residents, businesses, and visitors who rely on year-round, safe roadways.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Miles of roads & sidewalks resurfaced
(How Long) Describe the expected service life:	25 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **_4_____ of _____5____** Town Manager Priority: _____ of _____

Photo: View looking east along Dicarlo Rd from West Main Street Google street view Aug 2023.
Note the alligator cracking and puddling.

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Highway Division**
Requesting Official: Kerry Reed
Item Description: **Culvert Replacement (engineering)**
Capability to be replaced or new risk/opportunity to be addressed: Engineering and permitting services to design replacement of two high priority culverts at Granite Street and Chestnut Street.

Cost:$250,000

FY 2025 capital amount requested; note contingency amount:	$250,000
Amount/duration of future FY follow-on costs:	Regular operations & maintenance
Available grants, subsidies, trade-in, or other cost reductions:	Potential for FEMA Building Resilient Infrastructure and Communities (BRIC) grant or Massachusetts Municipal Vulnerability Preparedness (MVP) grant

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Design, permit, and bid support for replacement of two high priority culverts at Granite Street and Chestnut Street. These culverts have noted flooding during heavy storms that can cause road closures. Replacement of the culverts is required to maintain the roadways and flow of the streams..
(Why) Describe link to Town Vision or Goals:	Infrastructure improvements that protect the environment through the use of sustainable practices. Supports Hopkinton's green community and climate resiliency initiatives.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Residents, businesses, and visitors who rely on year-round, safe roadways. Provides safe roads access during storms.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days road is accessible; reduced road closures
(How Long) Describe the expected service life:	50 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ___**5**_____ **of** ___**5**_____ Town Manager Priority: _____ of _____

Photo 1: Granite Street culvert, on south side of Granite Street looking north

Photo 1: Granite Street culvert, on north side of Granite Street looking south.
Town cemetery is located to the right of this photo.

Planning Level Engineer's Opinion of Probable Construction Cost
CLVT-59 (9.6' Concrete Box Culvert, 33.5' Long) Culvert Replacement
Granite Street
Town of Hopkinton, MA

ITEM	DESCRIPTION	QTY	UNITS	UNIT PRICE	AMOUNT
101.	Clearing and Grubbing	0.30	ACRE	$ 60,000	$ 18,000
116.1	Demolition of Existing Culvert	1	LS	$ 30,000	$ 30,000
140.1	Culvert Excavation	150	CY	$ 60	$ 9,000
151.2	Gravel Borrow for Backfilling Structures and Pipes	60	CY	$ 60	$ 3,600
156.1	Crushed Stone for Bridge Foundations	30	TON	$ 75	$ 2,250
460.	Hot Mix Asphalt	50	TON	$ 250	$ 12,500
620.12	Guardrail, TL-2 (Single Faced)	100	FT	$ 50	$ 5,000
627.82	Guardrail Tangent End Treatment, TL-2	4	EA	$ 6,000	$ 24,000
748.	Mobilization	1	LS	$ 16,000	$ 16,000
850.	Maintenance of Traffic	1	LS	$ 20,000	$ 20,000
983.	Dumped Riprap	30	CY	$ 150	$ 4,500
986.	Modified Rockfill	20	CY	$ 100	$ 2,000
991.1	Control of Water - Structure No. 1	1	LS	$ 40,000	$ 40,000
995.011	Culvert Structure, Culvert No. 1	1	LS	$ 250,000	$ 250,000
	Minor Item Allowance	1	LS	$ 105,000	$ 105,000
				Subtotal:	**$ 541,850**
ALTERNATIVE 1					
987.4	Bio-Stabilized Slope	1	LS	**$ 29,000**	**$ 29,000**
983	Dumped RipRap	(20)	CY	**$ 150**	**$ (3,000)**
	Construction Contingency		20%		$ 109,000
	Data Collection, Design, and Permitting				$ 100,000
	Construction Phase Services		10%		$ 55,000
				Total (Base Bid)	**$ 806,000**
				Total (Alt. 1)	**$ 832,000**

This is an engineer's Opinion of Probable Construction Cost (OPCC). Tighe & Bond has no control over the cost or availability of labor, equipment or materials, market conditions or the Contractor's method of pricing, and that the estimates of probable construction costs are made on the basis of the Tighe & Bond's professional judgment and experience. Tighe & Bond makes no guarantee nor warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from this estimate of the Probable Construction Cost.

Note: Unit Prices are based upon Massachusetts Department of Transportation Weighted Bid Prices (District 3), as of August 2023, and recent bids results for similar Tighe & Bond designed projects.

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: Vehicle Replacement - W-3
Pickup Truck
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a 2012 pickup truck

Cost:$65,000

FY 2025 capital amount requested; note contingency amount:	$65,000
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The current vehicle will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of a 11 year old diesel pickup truck, per the 10-year vehicle replacement plan.
(Why) Describe link to Town Vision or Goals:	Efficient operations and well maintained fleet to support providing clean, reliable drinking water. This is an essential vehicle in the Water Enterprise and is used daily to ensure the proper operation of the water system and reliable service to its customers
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents and businesses) and the Town's water technicians (greater safety, better working conditions)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days the vehicle is out of service due to repairs plus cost of necessary repairs. (approx 10 - 20 days per year, $8,000 - $15,000 per year)
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **___1_____ of ____7_____** Town Manager Priority: _____ of _____


TOWN of HOPKINTON
D.P.W.
WATER-SEWER DIVISION
W-3


W-3
M67-002
J.C. MADIGAN


W-3
MASSACHUSETTS
M67·002
OFFICIAL
SLOW

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: **Town-wide water main line unidirectional flushing program**
Capability to be replaced or new risk/opportunity to be addressed: Program to address water quality issues and decolorization problems.

Cost:$100,000

FY 2025 capital amount requested; note contingency amount:	$100,000 ($80,000 for engineering services; $20,000 contingency to supplement Town staff to perform flushing program)
Amount/duration of future FY follow-on costs:	Water main line flushing should be conducted periodically to maintain water quality. It should be noted that we anticipated that MWRA will require an annual flushing program.
Available grants, subsidies, trade-in, or other cost reductions:	None

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Flushing is an effective way to keep our drinking water safe, clean and pleasant tasting. Unidirectional flushing uses up to 40% less water than conventional flushing, and allows for a better response to localized water quality complaints. Because of better sediment removal, the effects of unidirectional flushing last longer. Additionally, unidirectional flushing will test almost all of the water system valves and hydrants, identifying those in need of repair or replacement.
(Why) Describe link to Town Vision or Goals:	Support providing clean, reliable drinking water. Maintain Hopkinton as a safe community through continued support of public safety functions (enures fire hydrants work properly).
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents, businesses, public schools, and public facilities) and emergency responders
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of residents & days experiencing water discoloration
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: ___**2**_____ **of** ___**7**_____ Town Manager Priority: _____ of _____

Massachusetts Department of Environmental Protection
Drinking Water Program
One Winter Street – Boston, MA 02108
617-292-5770 email: Program.Director-DWP@state.ma.us
Web: https://www.mass.gov/drinking-water-program

Fact Sheet

Water Main Flushing FAQ for Consumers

What is water main flushing?

Water main flushing moves water systematically through sections of a drinking water distribution system, creating a scouring action to clean the line. The increased flow rate scours the water pipe's inner walls and helps to remove build-up of naturally occurring debris and sediment. The water is discharged through select fire hydrants onto local roads or other surface areas.

- The process is critical to the overall maintenance of a distribution system and is one of the most important practices carried out by public drinking water systems to maintain high water quality, improve the carrying capacity of pipes, and ensure proper operation of distribution system components, such as hydrants and valves.
- Flushing the water main lines also ensures that fire hydrants are operational and allows the operator to assess the available water pressure and flow rate for firefighting purposes. Flushing at lower velocities can also be used to bring fresh water into a part of the distribution system where the water main ends or dead-ends. Water main flushing is typically carried out through either conventional or unidirectional flushing (UDF). The type of flushing performed is based on the specific goals to be achieved within the distribution system.
    - Conventional flushing consists of opening hydrants in targeted areas and discharging the water until any accumulations are removed and the water becomes clear. The water moves freely from all directions to an open hydrant. Since there is less flow in a given pipe, velocities may be too low to adequately clean, or scour, the pipes.
    - UDF means that water mains are flushed systematically from areas closest to the source water to the outer edges of the water system. Certain valves are closed during UDF operations to minimize disturbance. Fire flow tests are not conducted during UDF because the closed valves alter the normal flow pattern and may skew results.
- Flushing may be done as an important part in maintaining adequate chlorine residuals in outer areas of a water distribution system
- MassDEP recommends and in some instances requires public water systems to maintain a flushing program.

Why is a flushing program important?

- Removes sediment- Loose sediment and other deposits may slowly build up on the inside of the water mains over time causing discolored water. Flushing at the appropriate velocities can remove these sediments and deposits and will improve taste, odor and color that may be problematic e.g. naturally occurring iron or manganese deposits in the distribution system may affect color.
- Reduces biofilm - Biofilm is a thin layer of microorganisms that can grow on the inside of the distribution piping, A proper scouring velocity must be achieved to effectively minimize biofilm.
- Maintains proper distribution system operation- Flushing requires the opening and closing of hydrants and valves to ensure that water moves through pipe segments for effective cleaning. This operational practice also provides water operators with the opportunity to identify broken or inoperable valves and hydrants which is important to ensure that they will work properly in an emergency.

- Improves the age of the water in the distribution system - Flushing can remove water from areas of the distribution system that have low water use. Older water may no longer have the desired chlorine residual.
- Allows the assessment of the flow rate available for firefighting purposes.

How will you know when your local water supplier will be flushing in your area?

Your Public Water Supplier (PWS) should notify you of the location (streets), date and time of flushing. PWSs may use more than one of the following methods to notify you: hand delivered notice, postal letter, posters, newspaper, website, electronic boards, telephone, text, emails, social media, etc. For a list of Massachusetts PWSs see the contacts section of https://www.mass.gov/lists/drinking-water-health-safety.

What should you do when your public water supply informs you that they will be flushing your water distribution lines?

MassDEP recommends the following:

- Prior to the designated flushing period: consider collecting water for drinking, cooking and other human consumption purpose. Fill a pitcher or pot.
- During the designated flushing period in your area, you may experience water discoloration or sediment.
    - Do not use the water in your home, as the water quality may be temporarily reduced at this time and you do not want to draw the water being flushed from the mains into your home piping. **Using the water during flushing may result in staining or sediment in laundry, ice machines, dishwasher, bathtubs, or hot water tanks.**
- If you water appears dirty after the designated flushing period:
    - Run a cold water tap closest to your meter (usually found in the basement or a first floor sink) for a few minutes up to 15 minutes.
    - Keep the tap open until the water runs clear. If you have trouble seeing if the water is clear, fill a light or white colored cup or container to view the water. If the water coming from the tap is not clear after running for 15 minutes, wait 15-30 minutes and try again.
    - Do not run a tap that has a water filter connected to it or the sediment may clog your filter.
    - Avoid running a hot water tap because it could draw sediment into your hot water tank.
    - If you inadvertently drew discolored water into your home and the staining of clothes or fixtures does occur, rust removal products are available at most home products stores and may be available from your water supplier.

When (time of day) is flushing normally conducted?

Flushing may be done at any time depending on the situation, particularly if there has been a water main break that requires emergency flushing during off hours. However, in many communities planned flushing for distribution system maintenance is more commonly done during daylight when it is safer for staff to work on the streets. Daylight also provides better visibility to see discolored water being flushed out of the system and when water is running clear. Customers should understand that the schedule for flushing may change (perhaps with little to no notice) based on the progress of the crews.

What time of year is flushing typically conducted?

Flushing is typically conducted in the spring and the fall but flushing can be conducted at any time it is needed and safe to do so. During the summer, it may be necessary for some water suppliers to flush certain locations to remove stagnant water to ensure that the water is adequately disinfected to the limits of their piping system. In warmer weather disinfectants in the water are consumed more rapidly than in the winter, creating the need to flush even during drought conditions.

How will you be affected?

There may be a slight drop in pressure or noticeable discoloration of the water from the minerals and sediments that are being flushed out. During the flushing operation in your neighborhood, you will be able to see crews flushing the water mains through fire hydrants and ends of water main pipes commonly called blow-offs. Crews will usually direct the water being flushed into appropriate areas to avoid sediment erosion or localized pooling of water, but you may notice water on the street or roadway. In some communities, the fire department may be the crew operating the fire hydrants during the flushing operation. There may also be traffic and parking changes because specific hydrants will be used to discharge water.

What about water pressure and safety?

Flushing may cause short-term pressure fluctuations; however, specific water pressure is required to be maintained within the system. If you experience little to no water pressure during flushing, you should contact your water supplier.

How long does it typically take to clean the water mains on each street?

Typically it takes 30 minutes to 60 minutes to flush the water mains on each street.

What should I do if my water is discolored after flushing of water mains?

Water is often discolored after water main flushing, but this should not last long. In the event customers draw discolored water into the home, flush a cold tap for a few minutes, up to 15 minutes. As a precaution, prior to using hot water run the cold water tap to ensure discolored water is not drawn into the hot water tank.

What should I do if the water is still discolored after three to four hours?

Contact your local water supplier. For a list of Massachusetts PWSs see the contacts section of https://www.mass.gov/lists/drinking-water-health-safety.

What if you notice a chlorine smell?

It is normal for there to be an increased amount of chlorine in the water during flushing, because the velocity the water is moving through the pipes shortens the travel time from the treatment plant. Systems that normally do not use chlorine may add it during flushing. Customers can easily remove the chlorine taste and smell by filling an open container with water and keeping it in the fridge for drinking as chlorine will dissipate.

Is water main cleaning a waste of water?

No, this is a normal and necessary part of maintaining a safe and reliable drinking water supply, and in some instances the water is returned to the aquifer, rivers or streams from which it was withdrawn as groundwater recharge or surface water runoff.

Is it possible to capture and reuse the water being flushed?

In most cases, it is not feasible to capture and reuse the water being flushed due to the high velocities and volume of water being released. If you are running water to clear out your own pipes after flushing, you can capture that water and use it for watering plants.

What if discolored water gets into the hot water tank?

If you are sure that sediment got into your hot water tank, use the clean out tap at the bottom of the tank to remove any settled material. Follow the instructions which came with the tank to drain the tank and be careful of the hot water.

What if you don't have a hot water tank – you have an on-demand water heater?

The hot water should run clear when the cold water is clear.

Do most public water suppliers have similar water main cleaning programs?
MassDEP recommends that all public water suppliers have a routine flushing program. These programs are considered the best way to improve water quality and increase the reliability of the water distribution system.

Are there particular situations when MassDEP requires a public water system to implement a flushing program or flush certain segments of a system?
After a public health order has been issued for bacteria or some other contaminant of concern, MassDEP may require a water supplier to implement a flushing program to remove the contaminant and to notify its consumers to flush their household and building lines. For information on consumer flushing after a Boil Water Order see https://www.mass.gov/service-details/consumer-information-on-boil-orders.

How is routine flushing impacted by drought conditions?
During times of drought, suppliers may consider delaying routine water main flushing, if such delay will not adversely affect water quality. Suppliers with mandatory flushing schedules consult with MassDEP to discuss the possibility of delaying scheduled water main flushing to protect the availability of the supply.

For more information:
For questions on individual PWS flushing programs please contact your local PWS. For a list of Massachusetts PWSs see the contacts section of https://www.mass.gov/lists/drinking-water-health-safety.

You may also contact the MassDEP Drinking Water Program at program.director-dwp@state.ma.us or 617-292-5770.

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: **Replace ozone system at Howe Water Treatment Plant**
Capability to be replaced or new risk/opportunity to be addressed: Ozone system needs replacement to continue to provide safe drinking water..

Cost:$958,000

FY 2025 capital amount requested; note contingency amount:	$958,000 (According to the IMA between Ashland & Hopkinton, parties share costs ⅝ and ⅜; Total estimated cost: $4,994,000; Hopkinton cost estimate includes Hopkinton's share + approx 15% contingency)
Amount/duration of future FY follow-on costs:	Regular operations, maintenance, & repairs as outlined in IMA (until connection to MWRA)
Available grants, subsidies, trade-in, or other cost reductions:	Potential for State Revolving Fund Drinking Water Program - Ashland would take lead

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Hopkinton relies on the Howe Water Treatment Plant to supply approximately 35% of Hopkinton's drinking water supply. The ozone system is a key part of the treatment process.
(Why) Describe link to Town Vision or Goals:	Supports providing clean, reliable drinking water.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents, businesses, public schools, and public facilities)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Gallons of water provided by Howe Water Treatment Plan to Hopkinton; Cost savings from repairs
(How Long) Describe the expected service life:	20 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **_3_____ of __7_____** Town Manager Priority: _____ of _____

MEMORANDUM

TO: Doug Small, Director of Public Works

CC: Dan Maurer, Foreman of Water and Sewer

PREPARED BY: Morgan Roper, P.E., Woodard & Curran

DATE: July 20, 2023

RE: Ozone System Evaluation - Preliminary Summary of Findings

This memorandum is intended to summarize the components and condition of the existing ozone system and present recommendations to ensure the continued operation and reliability of the manganese oxidation process.

1. PROCESS DESCRIPTION

1.1 Hydraulic Conditions

The Town of Ashland's drinking water treatment facility, the Howe Street Regional Water Treatment Facility (WTF), operates with a design capacity of 5.9 million gallons per day (GPD). Hydraulic design parameters for the facility are listed in **Table 1**.

Table 1: Hydraulic Design

Criteria	Flow
WTF Hydraulic Design Capacity	5.9 MGD
WTF Maximum Daily Flow	3 MGD
WTF Average Daily Flow	2 MGD
WTF Minimum Flow	1.1 MGD
WTF Operating Schedule	Varies according to system demand, running nearly 24 hours per day in the summer.

The plant produces between 1.1 and 3 million gallons per day (MGD). The minimum flow rate of the plant is 764 GPM (1.1 MGD) and when this is not required the plant shuts down.

1.2 Ozone Treatment Overview

Ozone (O_3) is a strong oxidant that is commonly produced in municipal drinking water facilities by flowing oxygen gas (O_2) through an applied electrical field. It is widely used in water treatment due to its strong oxidation potential, oxidizing dissolved metals and organic compounds, as well as its use as a disinfectant.

The Howe Street WTF uses ozone as a pre-oxidant, primarily for the oxidation of dissolved iron and manganese to convert them into particulate forms which are more suitable for removal by the subsequent

treatment processes. The WTF provides coagulation and flocculation, followed by sedimentation and filtration, which is an effective treatment strategy for removing particulate forms of iron and manganese.

While increasing the applied ozone dose to the raw water can increase manganese removal, it is important to note that excessively high ozone dose can cause dissolution of the manganese back into the water. This happens when over-oxidized manganese forms soluble permanganate. Carefully monitoring and adjusting the applied ozone dose allows for optimal manganese removal while minimizing undesired byproducts.

The ozone dose applied at Howe Street varies seasonally from 3 mg/L to 6 mg/L, depending on manganese concentration. The ozone system includes several subsystems, consisting of the following:

- Ozone Generation System;
- Liquid Oxygen Storage and Vaporization;
- Nitrogen Addition System;
- Sidestream Injection System;
- Ozone Contacting; and
- Ozone Destruct System.

1.3 Ozone Generation System

The existing ozone generation system consists of two liquid oxygen (LOX) fed tube dielectric ozone generator skids manufactured by Ozonia (currently a subsidiary of Veolia Water Technologies & Solutions). Each ozone generator has a design production rate of 132 pounds of ozone per day (lbs./day) at 6% concentration by weight oxygen.

The ozone generators each include process monitoring instrumentation for gas pressure, ozone gas concentration, cooling water flow and temperature. Each ozone generator has a dedicated Power Supply and Control unit.

1.4 Liquid Oxygen Storage and Vaporization

The feed gas is ANSI/AWWA B304 liquid oxygen (<99.5% by weight oxygen). Liquid oxygen is supplied by a cryogenic gas vendor. Onsite, the LOX is housed in a vertical Process Engineering cryogenic storage vessel and vaporized by a single vaporizer. Gaseous oxygen (GOX) is piped to the ozone generators.

1.5 Nitrogen Addition System

The ozone generators require the feed gas to be approximately 2% nitrogen to operate at the design conditions. A nitrogen addition system consisting of an air compressor and dryer provide nitrogen to the gaseous oxygen upstream of the ozone generators.

1.6 Cooling Water System

Ozone generators rely on a cooling water system to offset the heat created in the process of ozone formation. Ozone degradation increases with temperature, so efficient and safe ozone generation must incorporate a cooling system.

The existing ozone generators utilize an open-loop cooling system that utilizes finished water from the Howe Street facility and discharges the water back into the adjacent reservoir via the lagoon discharge pipe.

1.7 Ozone Sidestream Injection

In a sidestream injection system, motive water is pumped through a venturi injector to create a vacuum that draws the ozone gas into the solution. In the case of the Howe Street WTF, motive water is pumped from the raw water main via vertical in-line pumps through the injectors in the ozone room.

There are two Mazzei Model 4091 venturi injectors. Each venturi has motor-actuated valves for both the raw water and ozonated gas piping, allowing for individual control.

The ozonated sidestream then passes through one of two reactor vessel/degassing separator trains. The reactor vessel is a 266-gallon 316L stainless steel tank that provides reaction volume for gas/water contact and mixing before entering the degassing separator, which utilizes a centrifugal process to remove entrained ozone. Off-gas from the degassing separator passes through a combination pressure/vacuum relief valve before being piped to the ozone destruct systems.

This process was developed by Mazzei and referred to as the Mazzei GDT process.

1.8 Ozone Contacting

The ozonated side stream then mixes with the rest of the raw water flow in one of two ozone contactors. These ozone contactors are 2,100 gallons each and are also located in the ozone room.

1.9 Ozone Destruct

The existing ozone destruct system consists of two thermal catalytic destruct skid units, each consisting of a heater, catalytic chamber, and off-gas blower.

Each ozone destruct unit is equipped with an independent vent line.

2. EXISTING CONDITIONS

Nearly all components of the existing ozone system are over 20 years old and approaching the end of their useful life due to visible corrosion and deterioration, and the amount of service work required to repair failed or failing parts of the system. This section describes deficiencies found at each ozone process.

2.1 Ozone Generation System

Of the two ozone generators, only one has been operable due to material build-up on the ceramics that resulted in failure. The ozone generators have exceeded their useful life and are difficult to service and maintain due to their age. It is recommended that these generators be replaced with modern ozone generation equipment.

2.2 Liquid Oxygen Storage and Vaporization

The Howe Street WTF utilizes only one vaporizer, where facilities will typically utilize three vaporizers (one active, one thawing, and one in standby). It is recommended that the capacity and redundancy of the

existing LOX tank and vaporizers be evaluated in the preliminary design of a new ozone system to ensure it can meet the full range of current average day to future anticipated peak system demands. If the tank is of adequate capacity, rehabilitation is an option to ensure the vacuum system in the tank is functioning correctly and that all instrumentation associated with the tank is modern and functional.

Excessive icing was present on the LOX line between the tank and the vaporizers, which is common because of the very low temperature in which LOX is kept when it is in liquid form (LOX boils at -297 degrees F). Preliminary design should consider whether the piping at the LOX tank should be replaced with vacuum jacketed insulated pipe to mitigate icing.

2.3 Nitrogen Addition System

The existing nitrogen addition system has reached the end of its useful life and will need to be replaced if such a system is required by the selected ozone generator manufacturer. Not all vendors of ozone systems require nitrogen in their process. If the selected ozone system manufacturer requires nitrogen boost, an evaluation should be completed to determine if a compressor-based system or a liquid nitrogen-based system is the most cost-effective solution for the Town.

2.4 Cooling Water System

The existing ozone generators utilize an open loop cooling water system with no mechanical cooling. It is recommended that installing a chiller system be considered depending on the cooling water requirements of the selected ozone equipment. This decision will be made during preliminary design once an ozone system manufacturer is selected because each ozone system has unique cooling characteristics.

2.5 Ozone Sidestream Injection

The booster pumps that pump raw water to the venturi injectors are severely corroded (see **Figure 1b**) and are in need of replacement.

Figure 1: Sidestream Booster Pump

Figure 1a

Figure 1b

The Mazzei Venturi injectors are also in need of replacement. One was replaced approximately four years ago due to pinhole formation. The second injector is currently leaking into an open-top bucket as shown in **Figure 2**, allowing ozonated water to evaporate and release unmonitored ozone into the room.

Figure 2: Mazzei Venturi Injector

The reaction vessels are in need of replacement due to severe corrosion and apparent manganese oxide staining from raw water escaping the vessel through pin holes at the seam weld. There is also leaking between the outlet flange and the piping to the degas separator, shown below in **Figure 3b**.

Figure 3: Reaction Vessel

Figure 3a

Figure 3b

The degas separators have both developed pin hole leaks which have been attempted to be remedied through installing collars (**Figure 4a**) and epoxy seals (**Figure 4b**).

Figure 4: Degas Separator

Figure 4a

Figure 4b

The degas relief valves are also in need of replacement. Three were recently taken out of service after over 20 years of operation due to pin hole leaks developing at the bottom weld.

Figure 5: Degas Relief Valves

Figure 5a

Figure 5b

The float located in these valves, which regulates the water level in the tank, has little to no buoyancy after filling with water due to pin holes located in the seam welds. These floats are no longer in service as they have reached the end of their useful life and need replacement.

The gas vent piping for the degas separator is also misaligned and in need of replacement. The original degas separator piping (**Figure 6a**) was rebuilt several times due to stress failure from piping misalignment and vibration. They currently utilize a revised configuration with ozone resistant tubing as shown in **Figure 6b**. This existing configuration creates a hydraulic restriction in the critical vent piping and should be replaced with properly aligned pipes to prevent future failure.

Figure 6: Degas Separator – Gas Vent Piping

Figure 6a

Figure 6b

2.6 Ozone Contacting

The contact tanks have suffered from leaking and subsequent iron and manganese staining originating from the seam weld (**Figure 7a**). Pin holes have also been found to develop on these tanks, remedied by an epoxy seal (**Figure 7b**).

Figure 7: Ozone Contact Tank

Figure 7a

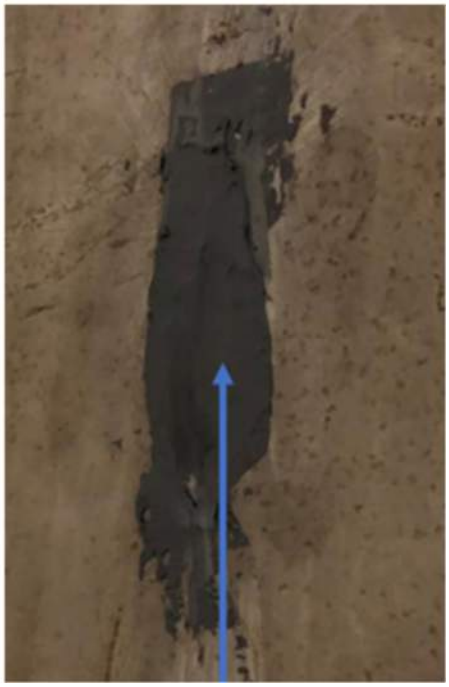


Figure 7b

Given the degradation of the existing ozone contact tanks, they should be replaced as a part of ozone system improvements.

2.7 Ozone Destruct

The ozone destruct system has reached the end of its useful life and should be replaced to ensure ambient ozone does not become a hazard.

2.8 Analytical Equipment

There are several analyzers present in the space monitoring ambient ozone levels in the air to initiate alarms and high-rate ventilation if ozone levels exceed established safe thresholds. Other analyzers associated with the system measure ozone concentrations in the water, flow, etc. All of these analyzers should be replaced with a upgraded ozone system to ensure proper operation and compatibility with the selected ozone manufacturer's system.

2.9 Ventilation System

Facility staff report that the ventilation system is in proper working condition, and they believe it provides the required air changes per hour when the system is initiated due to a high ozone concentration in the ambient air. We will investigate in more detail during preliminary design and make any additional recommendations at that time, but for the purpose of this analysis it is assumed that the HVAC does not need upgrade or replacement as part of an ozone system upgrade.

3. RECOMMENDATIONS

In summary, the ozone treatment system at the Howe Street WTF has surpassed its useful life and replacement of the ozone generators and ancillary systems are critical to reliable operation of the manganese removal system.

Common practice in the industry is to replace older generation ozone equipment with modern equipment when the age and condition of the system reaches a point that is similar to that at the Howe Street facility. Over time, older generation ozone equipment will fail at an increasing frequency and spare parts will become harder to obtain as manufacturer's pivot operations towards their modern line of equipment. W&C has assisted numerous utilities throughout Maine and Massachusetts through this process that were driven by factors nearly identical issues to those present at Howe Street. Most recently and closest to Ashland, W&C designed the replacement ozone systems for the water treatment facilities in Worcester (~50MGD capacity) and Billerica (~8MGD capacity), and we are actively in the design phase for a replacement in Attleboro (~6MGD capacity).

A conceptual-level cost estimate is attached to this memorandum.

1 OZONE EQUIPMENT

Item #	Process	Unit	Quantity	Equipment Cost	Equipment Total
1.01	Ozone Generator and Ancillary Equipment	EA	2	$ 800,000	$ 1,600,000
1.02	Ozone Contact Tank	EA	2	$ 20,000	$ 40,000
	OZONE EQUIPMENT SUBTOTAL				**$ 1,640,000**

2 OZONE EQUIPMENT INSTALLATION LABOR

Item #	Process	Unit	Quantity	Material Total	Direct Labor Factor	Labor Cost
2.01	Ozone Generator and Ancillary Equipment	EA	2	$ 1,600,000	30%	$ 480,000
2.02	Ozone Contact Tank	EA	2	$ 40,000	20%	$ 8,000
	INSTALLATION LABOR SUBTOTAL					**$ 488,000**

3 SUBCONTRACTED WORK

Item #	Subcontracted Work	Unit	Quantity	Unit Cost	Subcontracted Cost
3.01	Controls Design & Integration	LS	1	$ 100,000	$ 100,000
3.02	Demolition	LS	1	$ 30,000	$ 30,000
	SUBCONTRACT SUBTOTAL				**$ 130,000**

4 ANCILLARY ITEMS

Item #	Process	% Needed	Material Factor	Material Cost	Direct Labor Factor	Direct Labor Cost	Total Cost
4.01	Mechanical	0%	15%	$ -	100%	$ -	$ -
4.02	Structures	0%	5%	$ -	50%	$ -	$ -
4.03	Building Modifications	100%	3%	$ 50,000.00	100%	$ 50,000.00	$ 100,000
4.04	Insulation	100%	1%	$ 17,000.00	150%	$ 26,000.00	$ 43,000
4.05	Instrumentation	0%	10%	$ -	40%	$ -	$ -
4.06	Electrical	100%	10%	$ 164,000.00	75%	$ 123,000.00	$ 287,000
4.07	Piping	100%	10%	$ 164,000.00	75%	$ 123,000.00	$ 287,000
4.08	Painting	100%	1%	$ 17,000.00	300%	$ 51,000.00	$ 68,000
4.09	Miscellaneous	100%	1%	$ 17,000.00	100%	$ 17,000.00	$ 34,000
	ANCILLARY ITEM SUBTOTAL			$ 429,000.00		$ 390,000.00	**$ 819,000**

5 CONSTRUCTION, EQUIPMENT & CONTINGENCY

Item #		Cost
5.01	Total Direct (Equipment and Direct Labor)	$ 2,947,000
5.02	General Conditions (10% of Direct Labor)	$ 88,000
5.03	Subcontract Total	$ 130,000
5.04	Contractor Fee & Bonds	$ 379,000
5.05	Contingency (25%)	$ 886,000
	CONSTRUCTION, EQUIPMENT & CONTINGENCY SUBTOTAL	**$ 4,342,000**

6 ENGINEERING

Item #			Cost
6.01	Engineering Design, Permitting, Construction Administration, and Periodic Inspection	15%	$ 652,000
	ENGINEERING SUBTOTAL		**$ 652,000**

	TOTAL ESTIMATED PROJECT COST	**$ 4,994,000**

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: Replace Grove Street Water Tank #1 - Engineering
Capability to be replaced or new risk/opportunity to be addressed: The current Grove Street water service storage footprint consists of two tanks, located to the east of Hopkinton Middle School. Tank #2 was installed in 2017. The second tank (Tank #1) is at the end of its service life. The Massachusetts Department of Environmental Protection is requesting the Town address the deteriorated condition of Tank #1.

Cost:$250,000

FY 2025 capital amount requested; note contingency amount:	$250,000 (10% of estimate construction costs)
Amount/duration of future FY follow-on costs:	Regular operations & maintenance
Available grants, subsidies, trade-in, or other cost reductions:	Potential for State Revolving Fund Drinking Water Program

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of existing water tank that provides operating storage (1.5 million gallons), emergency storage, and equalization storage. Two Grove Street water tanks provide redundancy to support uninterrupted water service. MassDEP requires existing water tank be rehabilitated or replaced.
(Why) Describe link to Town Vision or Goals:	Supports providing clean, reliable drinking water. Reliable water supply for fire fighting and emergency services.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents, businesses, public schools, and public facilities)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Gallons of water storage; Avoided interruption of service for maintenance or responding to emergencies; Compliance with MassDEP regulations
(How Long) Describe the expected service life:	50 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **__4_____ of ___7_____** Town Manager Priority: _____ of _____

Photo: Water tank that needs to be replaced is the light blue tank in the background. New (2017) water tank in foreground.

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: **Water Main Replacement - East Main Street (engineering)**
Capability to be replaced or new risk/opportunity to be addressed: Engineering services to design replacement of 5,200 linear feet of water main along East Main Street from Wilson St to Clinton St, originally installed circa 1928-1930.

Cost:$400,000

FY 2025 capital amount requested; note contingency amount:	$400,000
Amount/duration of future FY follow-on costs:	Construction costs estimated to be approximately $1.5 - 1.7M
Available grants, subsidies, trade-in, or other cost reductions:	Potential for State Revolving Fund Clean Water Program

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Design, permit, and bid support for replacement in-kind of approximately 5,200 linear feet of 8-inch cast iron water line on West Main street between Wilson St to Clinton St to maintain current level of water service. The existing water main is almost 100 years old. Replacement was recommended in the Town's Asset Management Plan. Additionally, it is expected that the lead service line inventory currently being conducted to comply with MassDEP regulations will reveal that several lead services (goosenecks) will need to be removed and replaced.
(Why) Describe link to Town Vision or Goals:	Supports providing clean, reliable drinking water. Reliable water supply for fire fighting and emergency services.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers along Fruit Street, Wood Street, and surrounding neighborhoods.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days without water supply for domestic and fire-fighting purposes Compliance with MassDEP regulations, avoiding enforcement order
(How Long) Describe the expected service life:	50 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)
Departmental Priority: **__5_____ of ___7_____** Town Manager Priority: _____ of _____

Weston & Sampson

westonandsampson.com

WESTON & SAMPSON ENGINEERS, INC.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
tel: 978.532.1900

REPORT

October 2020

TOWN OF
Hopkinton
MASSACHUSETTS

Asset Management Plan

7.0 5-YEAR IMPLEMENTATION PLAN

Using the priority asset list discussed in Section 6, Weston & Sampson and the Town grouped together streets to include in annual replacement projects for each of the three utilities. These spatial considerations were included as it is practical to group pipe replacements by neighborhood to minimize mobilization costs, traffic control and reduce the impact on area residents.

7.1 5-Year Implementation Plan for the Water System

Table 30 shows the estimated unit replacement cost for the horizontal water system assets. To estimate the pipeline improvements, unit costs were based on historical pricing in Hopkinton and surrounding communities. Estimated costs are present day (2020) costs, including design, bidding, construction administration and construction with a 20% contingency. Construction costs include water main replacement, temporary water main, water service replacement to the property line, replacement of valves and hydrants, trench paving, and police personnel for traffic control.

Table 30– Replacement Unit Costs	
Main Size (in.)	Cost per l.f.
<6	$250
6	$275
8	$300
10	$350
12	$400
>12	$500

Table 31 provides a summary of the 5-Year Water System Implementation Plan and Appendix I provides a map of the proposed improvements.

Table 31– Water System 5-Year Implementation Plan						
Year	Street	Project Extents	Existing Size	Proposed New Size	Project Length (l.f.)	Projected Project Cost
Year 1	East Main St.	Wilson St. to Legacy Farms Rd.	8-inch	8-inch	3,000	$877,049
					Year 1 Total	**$877,049**
Year 2	East Main St.	Legacy Farms Rd. to Clinton St.	8-inch	8-inch	2,200	$668,192
					Year 2 Total	**$668,192**
Year 3	Fruit St.	WTP to Cunningham St.	10-Inch	10-inch	2,075	$830,000
					Year 3 Total	**$830,000**
Year 4	Fruit St.	Cunningham St. to Wood St.	10-inch	10-inch	400	$174,000
Year 4	Wood St.	Fruit St. to Reed Field	12-inch	12-inch	1,400	$621,900
					Year 4 Total	**$795,900**
Year 5	Wood St.	Reed Field to Winter St.	12-inch	12-inch	1,800	$830,000
					Year 5 Total	**$830,000**
					5-Year Total	**$4,001,141**

Years 3 and 4 focus on the in-kind replacement of main extending from the treatment plant south along Fruit Street to the intersection of Wood Street. Year 5 is focused on the replacement of the 12" from Reed Field in the area of Piazza Lane south and east to Winter Street. These extents comprise a pair of mains one of which is 10" 1928-1930 for the entire extent. Between the treatment plant and the intersection of Wood Street the second main is 12" 1973 Ductile Iron with the rest identified as cement lined cast. An alternative scenario therefore to replacing the 10" cast iron is to migrate services to the 12" 1973 main and to abandon the 10" between the treatment plant and Winter Street.

The analysis revealed a few other opportunities to eliminate similar paired cast iron scenarios and to ensure a maintenance of the level of service. One of these is the doubled main on Pleasant Street between West Main and Hayden Rowe Streets. In this area 8" 1884 cast iron serves most of the residents with only a few being served from the 12" 1973 ductile iron. This represents another opportunity to migrate service and abandon the older cast iron main for relatively little cost compared to replacement. Another area that was identified was a stretch of 1960's cast iron main along a pair of bridges on West Main Street along the northern edge of Lake Maspenock roughly between Oakhurst road on the west and South Street to the east. It was noted that there are several lengths along this extent where the 10" main is exposed. Previous attempts to insulate and protect the main have aged and have begun to fail resulting in further exposure. While the exposure itself is of serious concern there have been no reported problems with this segment. Encasing the pipe in polyethylene is recommended.

7.2 5-Year Implementation Plan for the Wastewater System

The estimated unit costs for force and gravity main replacements can be found in Tables 32 and 33 respectively. To estimate the pipeline improvements, unit costs were based on historical pricing in Hopkinton and surrounding communities. Estimated costs are present day (2020) costs.

Year 1
~3,000 lf
8" Cast Iron(1938)
Estimated cost: $877,049

Supports the fire protection for LNG facility and primary Distribution main for Legacy Farms

Year 2
~2,200 lf
8" Cast Iron (1934)
Estimated Cost: $668,192

Primary distribution main contributing to redundancy on south side of East Main Street

Year 3
~2,075 lf 10" Cast Iron (1928)
Total estimated cost: $830,000

Year 4
~435 lf 10" Cast Iron (1928) &
~1,382 lf 12" Cement Lined Cast (1973)
$174,000 and $621,900 respectively
Total estimated cost: $795,900

Year 5
~1,844 lf 12" Cement Lined Cast (1973)
Total estimated cost: $830,000

Withdrawl limits surpassed

Well 5 produces 500 GPM but Fe content renders is unusable.

Historic Breaks

Problem Area 5: Breaks Pressure Related

Problem Area 1: Breaks

Chlorine Residual Maintenance Issues

LNG Facility Service/ Plant Feed

Intermittent pressure complaints

Problem Area 3: Breaks Pressure related

Low flow during fire flow; Primary driver for high service consideration

Problem Area 4: Breaks Pressure

Very shallow/exposed main. 10" Cast 1960s

Early 1990's Mueller Valves (bolts failing)

Stale water complaints (Hydraulic related, bidding spring 2020)

Possible emergency connection hydrant to hydrant with Milford as yet untried

Lincoln Street
Cedar Street Extension
Roosevelt Lane
Edge Hill Road
Overlook Road
Kruger Road
Rafferty Road
Wilson Street
Frankland Road
Crest Street
Cross Road
East Main Street
C Street
Walcott Street
Maple Street
Hayden Rowe Street
Pine Street
Holt Street
Merrithorne Road
Carriage Hill Road
Kerry Lane
Susan Drive
Hazel Road
Blueberry Lane
Ash Street
Front Street
Valentine Road
Coburn Road
South Mill Street
Maple Avenue
Clinton Street
Alprilla Farm Road
East Street
Whitlin Drive
Pheasant Hill Road
North Mill Street
Ledgestone Drive
Hidden Brook Road
Percillum Pass
Tallmer Lane
Jordan Road
Courtney Circle
Sterling Drive
Thayer Heights Road
Briarcliff Drive
Chestnut Street
Gibbon Road
Benson Road
Kimball Road
Jackson Street
Smith Road
Bowker Road
Oak Street
College Street
Granite Street
Deer Run
Blueberry Circle
Nicholas Road
Teresa Road
Joseph Road
Daniels Road
Chamberlain Street
Ridge Road
Palomino Drive
Equestrian Drive
Applecrest Circle
Proctor Street
Reserve Street
Oliver Lane
Rim Street
Winter Street
Sylvan Way
Plaza Lane
Rice Street
Longwood Drive
Meadowwind Drive
Emma Ralph Road
Spring Street
Hill Street
Donna Pass
Stewart Street
Jamie Lane
Victory Lane
Cunningham Street
Rocky Woods Road
Washington Lane
North Street
Truell Street
Huckleberry Road
Tremwood Road
Dunster Road
Pond Street
Westcott Drive
Raccin Ridge Drive
Tiffany Trail
Valleywood Road
Erika Drive
Berwood Drive
Old Farm Road
Princilla Road
John Matthew Road
Olivia Drive
Stonegate Road
Elizabeth Road
West Elm Street
West Main Street
Oakhurst Road
Barbara Road
Dorann Road
Bolton Street
West Main St. Tank
Hayward Street
Whitcrest Drive
Dursley Street
Knoll Road
Lake Shore Drive
Lumber Street
Breakneck Hill Road
Glen Road
Whitney Circle
South Street
Pine Island Road
Tanner Road
Wood Road
Groton St. Tank (Old)
Groton St. Tank (New)
Water Road

1,000 0 1,000
Scale In Feet

N

Legend

Water Main Risk Exposure
- 2.2 - 4.0
- 4.0 - 5.5
- 5.5 - 7.0
- 7.0 - 9.5
- 9.5 - 15.0

Storage Tank Risk Exposure
- 1
- 3

Critical Facilities (Water Score)
- 1
- 2
- 3
- 4
- 5
- WTP Water Treatment Plant

APPENDIX I

TOWN OF HOPKINTON, MASSACHUSETTS
ASSET MANAGMENT GRANT

WATER DISTRIBUTION SYSTEM ASSET PRIORTY SCORES AND 5 YEAR PLAN

OCTOBER 2020 SCALE: NOTED

Weston & Sampson SM

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: Vehicle Replacement - W-1 Pickup Truck
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a 2011 pickup truck

Cost:$70,000

FY 2025 capital amount requested; note contingency amount:	$70,000
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The current vehicle will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of a 12 year old pickup truck, per the 10-year vehicle replacement plan.
(Why) Describe link to Town Vision or Goals:	Efficient operations and well maintained fleet to support providing clean, reliable drinking water. This is an essential vehicle in the Water Enterprise and is used daily to ensure the proper operation of the water system and reliable service to its customers
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents and businesses) and the Town's water technicians (greater safety, better working conditions)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days the vehicle is out of service due to repairs plus cost of necessary repairs.
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **_6_____ of ___7_____** Town Manager Priority: _____ of _____

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Water Division**
Requesting Official: Kerry Reed
Item Description: Vehicle Replacement - W-2
Pickup Truck
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a 2012 pickup truck

Cost:$125,000

FY 2025 capital amount requested; note contingency amount:	$125,000
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The current vehicle will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of a 11 year old diesel pickup truck, per the 10-year vehicle replacement plan.
(Why) Describe link to Town Vision or Goals:	Efficient operations and well maintained fleet to support providing clean, reliable drinking water. This is an essential vehicle in the Water Enterprise and is used daily to ensure the proper operation of the water system and reliable service to its customers
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Water customers (over 9,000 residents and businesses) and the Town's water technicians (greater safety, better working conditions)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days the vehicle is out of service due to repairs plus cost of necessary repairs. (approx 10 - 20 days per year, $8,000 - $15,000 per year)
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **__7_____ of ____7_____** Town Manager Priority: _____ of _____

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Sewer Division**
Requesting Official: Kerry Reed
Item Description: **Fruit Street Wastewater Treatment Facility (WWTF) - Membrane Replacement**
Capability to be replaced or new risk/opportunity to be addressed: The existing membranes have reached their targeted limit for design life and will need to be replaced to avoid disruption in the operation of the facility.

Cost:$345,000

FY 2025 capital amount requested; note contingency amount:	$345,000 (cost of membranes, installation fees, start-up costs, 18% contingency based on fluctuating costs for materials & construction)
Amount/duration of future FY follow-on costs:	Regular operations & maintenance
Available grants, subsidies, trade-in, or other cost reductions:	None

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of existing membranes that have reached their targeted limit for design life to avoid disruption in the operation of the facility. The membranes are a critical step in the wastewater treatment process before effluent is discharged into the ground and are required to maintain the Town's compliance with our Groundwater Discharge Permit from MassDEP. Please note that the Town has previously received a notice of violation of the permit when the membranes were unable to provide proper treatment.
(Why) Describe link to Town Vision or Goals:	Supports providing reliable wastewater services that are protective of the environment.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Sewer customers (over 2,000 accounts including residents, businesses, public schools, and public facilities). The Fruit Street WWTF services the area directly adjacent to Lake Maspenock, the greater downtown area of Hopkinton in proximity of Routes 135 and 85, and limited areas to the south of the downtown area.
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Gallons of wastewater treated; Days down for service - avoided interruption of service; Compliance with MassDEP regulations
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **__1_____ of ____3_____** Town Manager Priority: _____ of _____

ONSITE ENGINEERING INC.

Water, Wastewater and Stormwater Specialists

August 8, 2023

Joe Malloy, Manager
WhiteWater, Inc.
235B Worcester Road
Charlton, MA 01507

Re: Fruit Street WWTF, Hopkinton, MA: GWDP 841-1, Hopkinton, Massachusetts
Onsite Wastewater Treatment Facility Evaluation - Project No: 01724

Membrane Bioreactor: While the membranes are regularly cleaned and maintained and the current permeability and trans-membrane pressures are within the acceptable range for a properly functioning membrane system, the membranes themselves are at least 10 years old and are reaching their targeted limit for design life. Therefore, given the age of the membrane system, the cost for membrane replacement should be planned for in an upcoming budget, so that the replacement can be properly planned/scheduled to avoid disruption in the operation of the facility.

Based on the recommendations provided herein, we have prepared the following summary of opinions of budgetary cost as listed in Table 4 below:

Table 4
Opinions of Budgetary Cost
Fruit Street WWTF, Hopkinton, Massachusetts

Recommended Item	*Opinion of Cost*
Influent Screen Room Coating Mitigation	$45,000 - $65,000
Screen System Replacement	$350,000 - $400,000
Safety Grate Retrofit (14 Grates)	$25,000 - $30,000
Control System Upgrade	$30,000 - $40,000
Membrane Replacement	To Be Determined

CONCLUSIONS

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Sewer Division**
Requesting Official: Kerry Reed
Item Description: Vehicle Replacement - E-2 Pickup Truck
Capability to be replaced or new risk/opportunity to be addressed: Replacement of a pickup truck

Cost:$63,000

FY 2025 capital amount requested; note contingency amount:	$63,000
Amount/duration of future FY follow-on costs:	Routine, ongoing maintenance
Available grants, subsidies, trade-in, or other cost reductions:	The current vehicle will either be traded in or auctioned, whichever option generates the most revenue for the Town.

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Replacement of a pickup truck, per the 10-year vehicle replacement plan.
(Why) Describe link to Town Vision or Goals:	Efficient operations and well maintained fleet to support providing reliable sanitary sewer services. This Sewer Enterprise vehicle is used daily to ensure the proper operation of the sewer system and reliable service to its customers
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Sewer customers (over 7,000 residents and businesses) and the Town's sewer technicians (greater safety, better working conditions)
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Number of days the vehicle is out of service due to repairs plus cost of necessary repairs. (approx 10 - 20 days per year, $8,000 - $15,000 per year)
(How Long) Describe the expected service life:	10 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)

Departmental Priority: **__2_____ of ___2_____** Town Manager Priority: _____ of _____

Town of Hopkinton Fiscal Year 2025 Capital Request

Department: **Public Works - Sewer Division**
Requesting Official: Kerry Reed
Item Description: **Sewer System Evaluation Survey (SSES) - Hayden Rowe Pump Station area**
Capability to be replaced or new risk/opportunity to be addressed: Infiltration/Inflow investigation to address concerns and operational issues related to wastewater flows to the Hayden Rowe Pump Station during storm events.

Cost:$221,500

FY 2025 capital amount requested; note contingency amount:	$221,500
Amount/duration of future FY follow-on costs:	The study may recommend rehabilitation of pipeline and sources of infiltration and inflow.
Available grants, subsidies, trade-in, or other cost reductions:	None

Benefit:

(What) Describe how the request sustained existing service or meets a new risk/opportunity:	Infiltration/Inflow investigation to address concerns and operational issues due to excessive wastewater flows to the Hayden Rowe Pump Station during storm events.
(Why) Describe link to Town Vision or Goals:	Supports providing reliable wastewater services. Supports targeted growth and development while protecting the environment.
(Who) Describe the Town element or community stakeholders (number and identity) who will benefit:	Current sewer customers in the area including residents, businesses, and public schools (Marathon School, Hopkins School, Hopkinton High School, Hopkinton Middle School). Supports wastewater services for proposed new Elmwood School. Supports recent and future sewer customers at new subdivisions including Edgewood at Hopkinton (off Chamberlain Rd), Elmwood Farms Phase III (off Blueberry Lane), and Connelly Hills Farms (off Hayden Rowe).
(How Much Benefit) Provide a metric or criteria that will be used to assess post-spend benefit:	Hours of operation at Hayden Rowe pump station; Reduced cost of pumping and emergency services during storms; Avoiding Sanitary Sewer Overflows (SSOs) and compliance with MassDEP regulations
(How Long) Describe the expected service life:	20 years

(Attach brochures, links, or additional descriptive information. Large capital request will require more detailed cost benefit analysis)
Departmental Priority: **__3_____ of ____3_____** Town Manager Priority: _____ of _____

55 Walkers Brook Drive, Suite 100, Reading, MA 01867
Tel: 978.532.1900

September 14, 2023

Ms. Kerry Reed, P.E., Director
Town of Hopkinton, Massachusetts
Department of Public Works
83 Wood Street
Hopkinton, Massachusetts 01748

Re: Annual Infiltration/Inflow (I/I) and Operation & Maintenance (O&M) Plan – ***Proposal for 2024 Sewer System Evaluation Survey (SSES) – Hayden Rowe Pump Station Tributary Area***

Dear Ms. Reed:

Based on our recent discussions, Weston & Sampson Engineers, Inc. proposes to conduct a sewer system evaluation survey (SSES) in the existing sewers tributary to the Hayden Rowe Pump Station in the town of Hopkinton (the Town) in the Spring 2024. Our recommended scope of services, and associated schedule and fee, for assisting the Town, is presented herein.

PROJECT UNDERSTANDING

- Weston & Sampson completed the Town's original *Annual Plan for I/I and O&M Program*, dated January 24th, 2019. This plan was submitted to the Massachusetts Department of Environmental Protection (MassDEP) – Central Regional Office (CERO), on behalf of the Town, for review and approval in accordance with the revised 314 CMR 12.04 regulations. MassDEP-CERO provided "Conditional Approval" of the plan in a letter to the Town, dated May 21st, 2019. Based on the MassDEP-CERO's proposed conditions, the *Annual Plan for I/I and O&M Program* was revised and a response letter with the revisions to the annual plan was submitted to the MassDEP-CERO in September 2019.

- The final annual plan included thirteen (13) projects to be completed over thirteen (13) years. The Town has completed the first two (2) projects of the annual plan. Project #1 was a smoke testing program in Meter Areas #3, #7, #8, #9, and #11 of Town. Project #2 was an SSES in Meter Area #11 (Wood Street (partial) and Elm Street). Please note that the meter areas were defined as part of the 2018 Flow Metering Program.

- Based on recent discussions with the Town, there are concerns with excessive wastewater flows to the Hayden Rowe Pump Station during storm events. Therefore, the Town wishes to investigate the existing sewers that are tributary to this pump station for I/I. The sewer manholes in this tributary area were investigated by Weston & Sampson in Spring 2022 and identified issues with the sewer manholes have been addressed by the Town.

- The investigation of the existing sewers tributary to the Hayden Rowe Pump Station were identified as Project #6 (Meter Area #4), Project #7 (Meter Area #12), and Project #12 (Meter Area #5) in the final annual plan, dated September 2019. The proposed project area consists of approximately 28,500 linear feet (lf) of existing 8-inch sanitary sewers in the following streets:

  - Alexander Road
  - Briarcliff Drive
  - Chamberlain Street
  - Chestnut Street
  - Hayden Rowe Street
  - Hilltop Road
  - Joseph Road
  - Maria Lane
  - Nicholas Street
  - Teresa Road
  - Ursula Drive
  - Wild Road

- The SSES shall include flow isolation and closed-circuit television (CCTV) inspections of the existing 8-inch sewers in the above streets that are tributary to the Hayden Rowe Pump Station. The proposed work shall be performed in accordance with the MassDEP *Guidelines for Performing I/I Analyses and Sewer System Evaluation Surveys (SSES).*

- Following the above field investigations, Weston & Sampson will analyze the results and provide cost- and value-effective recommendations for improvements to the existing wastewater collection system based on the results of our analysis. These results will be presented in an SSES summary report.

PROPOSED SCOPE OF WORK

The scope of services includes flow isolation and light cleaning with CCTV inspection of the existing 8-inch sanitary sewers in the streets tributary to the Hayden Rowe Pump Station.

Task 1 – Flow Isolation

Weston & Sampson will utilize a subconsultant to conduct night-time flow isolation on as many as 28,500 lf of sewers. Manhole-to-manhole sewer segments will be isolated by plugging flows at upstream manholes with weir measurements taken at downstream manholes. Work will generally be performed during the hours of midnight to 6 a.m. and during a high groundwater and dry weather period. Weston & Sampson will provide oversight during the flow isolation and will monitor local groundwater levels throughout the duration of the Spring 2024 investigation work using United States Geological Survey (USGS) groundwater data. Observed infiltration from manholes, if any, will be noted at the time of the flow isolation and will be deducted from line section measurements.

Task 2 – CCTV Inspections

Weston & Sampson will utilize the same subconsultant as Task 1, to light clean and CCTV inspect as many as 28,500 lf of sewers to locate problem areas and potential sources of I/I within manhole-to-manhole segments of sewer. The work will be conducted in the Spring when groundwater levels are

typically at their highest. Weston & Sampson will provide oversight during the CCTV inspections.

Task 3 – Data Review and Analysis

Weston & Sampson will review the data collected under Tasks 1 and 2 and prepare a summary of deficiencies and potential problem areas. Both cost-effective and value-effective analyses of various sewer rehabilitation measures of repair will be conducted to assist with recommendations for improvements to the existing wastewater collection system.

Task 4 – Summary Report

Weston & Sampson will submit a SSES summary report to the Town that will describe the areas in which work was performed, summarize the work completed to date and include recommendations and a prioritization analysis for rehabilitation of those pipeline and sources of infiltration and inflow that may have been identified during this investigation. Estimated construction costs will also be provided. For those sources of I/I that will require additional investigation work, the report will include a plan and a cost estimate to conduct the investigation. The report will also identify additional program activities and future goals that could be addressed as a part of the ongoing annual program for the existing gravity sewers.

PROPOSED SCHEDULE

Weston & Sampson will initiate work on the project following execution of an Agreement with the Town. Weston & Sampson will provide services for the estimated duration of work, starting within seven (7) days of signing the Agreement and concluding within ten (10) months.

PROPOSED FEE

Based on the proposed scope of services, the following table summarizes the not to exceed costs based on the proposed scope of work presented herein.

TASK	PROJECTED COST
1 – Flow Isolation	$47,650
2 – CCTV Inspections	$104,250
3 – Data Review and Analysis	$39,700
4 – Summary Letter Report	$30,000
TOTAL	$221,500

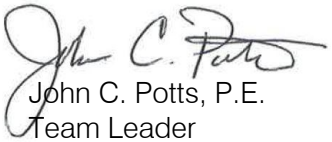
Work will be performed on a time plus expenses basis for the proposed scope of work. Fees for this project shall be billed monthly as they accrue based upon the services performed.

We appreciate the opportunity to present this proposal and look forward to continuing our work with the Town of Hopkinton on this important project. The first step will be for Weston & Sampson to solicit prices for a subcontractor to perform the flow isolation and CCTV work in the Spring 2024. Therefore, please provide us with a written Notice to Proceed (NTP) at your earliest convenience and we will commence with this work. An e-mail NTP is acceptable.

If you have any questions regarding this proposal, please do not hesitate to contact me at (978) 573-4092.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.



John C. Potts, P.E.
Team Leader

Possible Capital Article Related to Keefe Technical Vocational School:

The Hopkinton 2023 Annual Town Meeting passed the following article:

> ARTICLE: 12 Establish Capital Stabilization Account for South Middlesex Regional Vocational Technical School District; Sponsor: South Middlesex Regional Vocational Technical School District This Article would authorize the creation of a new Capital Stabilization Fund under the control of the South Middlesex Regional Vocational Technical School (aka Keefe Regional Technical 58 School) District Committee as allowed by Massachusetts General Laws chapter 71, §16G½. The South Middlesex Regional Vocational Technical School District would be authorized to assess the Town up to 5% of operating costs as contribution to this fund each year. Based on Hopkinton's FY 2024 budget for the Vocational Technical School of $565,876, the assessment could be $28,294.

That article may result in a capital assessment in FY25. It is not yet know if such an assessment would be a capital article for the purposes of the Town of Hopkinton budget process, or if it would be added to the operating assessment line for Keefe Technical Vocational School. This information is inserted as a placeholder for a possible capital article.