CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise

DEPARTMENT PRIORITY: 4

(1) PROJECT NAME: Garvey Rd. Water Services - Construction

PROJECT STATUS: NEW Project This Year

(2) PROJECT DESCRIPTION AND JUSTIFICATION:

Black plastic water services have been prone to failure. Before the road project takes place, the water mains need to be replaced to improve service and reduce the need to excavate a newly rehabilitated road to repair a service leak. There are approximately 43 water services to be replaced varying in sizes of 1", 1.5", and 2". Ten fire hydrants will be replaced to improve reliability due to the current hydrants being over 40 years old. Isolation valves will be installed to limit the amount of interruption in service to each resident on the street. This will be a combined effort between City staff and the on call utility contractor.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

Project added to address water service connection improvements prior to roadway project

(3) PURPOSE OF PROJECT:

X	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) BUDGET REQUEST BY YEAR:

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction	550,000					
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	550,000	-	-	-	-	-

(5) PRIORITY:

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):

1) **Bond**
2)
3)

(10) PROJECT OR EQUIPMENT LOCATION:

Garvey Road

(11) ASSET TYPE:

Building

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

Robert A. Lewis

(9) FINANCE DEPARTMENT NOTES:

CITY OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS | OPERATIONS

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M E M O R A N D U M

DATE: 9/29/2023

TO: Robert Lewis
Director Department of Public Works

FROM: Steve Leone
Director of Water & Wastewater

RE: Garvey Rd Water Services Capital Appropriation FY25

Garvey Road is a neighborhood road that is in extreme need of road re construction which includes pavement, curbing, sidewalk, drainage and lighting repairs. The Wastewater pump station is currently under rehabilitation as well as some minor wastewater piping improvements in advance of the road reconstruction. This work is expected to be completed by the summer of 2024. The water services to the homes are made of black plastic pipe. At the time of installation this was the standard but it is now known to be prone to leaking. In advance of the road reconstruction project the Water Department would like to replace the water services to the property lines “curb stop valve” with type k copper to prevent the chance of a leak in the new roadway. The fire hydrants are from the early 1980’s and are over 40 years old. They are in need of replacement and will be replaced under this appropriation. There will also be several line valves installed on the water main to help minimize water service disruption to residents. The water main itself is made of Ductile Iron and is from the early 1980’s. It is of sufficient size and is todays standard for material. There is no need to replace it at this time.

Garvey Road Water Service Replacement Project – FY25 Capital Project Submission

Garvey Road: 8" DI water main installed 1984-85 with black plastic services.
Utility work needed before roadway repaving begins.

Why replace black plastic polybutylene (Poly B) water services?

- ***Poly B water pipe have known high rates of failure – increases as pipe gets older.***
- ***Black plastic water services were made with defective seams and services burst at seams.***
- ***Framingham is replacing failed black plastic water services at a rate higher than iron water services installed in Framingham in the 1950s.***

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise

DEPARTMENT PRIORITY: 3

(1) PROJECT NAME: Saxonville Intersection Water Mains Construction

PROJECT STATUS: NEW Project This Year

(2) PROJECT DESCRIPTION AND JUSTIFICATION:

This project will upgrade and increase the capacity of the existing 100-year-old 10-inch cast iron water distribution main at the north end of Saxonville Intersection prior to the intersection improvements. The project will connect new 12-inch ductile iron pipe to existing 12-inch pipe installed in 2008 at the intersection of Concord and Central Streets and extend that pipe to Chestnut Street. The existing pipe needs to be upgraded beyond that point, but the priority at this stage is to do work that is within the intersection before the intersection project begins. This work is relatively straightforward and can be completed efficiently and cost-effectively with DPW resources and the on-call utility contractor. The work will also include replacement of outdated and undersized main on Chestnut Street and will be completed through the use of temporary water main bypass.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

Project added to address water main upgrade prior to Saxonville Intersection project.

(3) PURPOSE OF PROJECT:

X	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) BUDGET REQUEST BY YEAR:

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction	700,000					
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	700,000	-	-	-	-	-

(5) PRIORITY:

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):

1) **Bond**
2)
3)

(10) PROJECT OR EQUIPMENT LOCATION:

Elm Street at Saxonville

(11) ASSET TYPE:

Building

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

Robert A. Lewis

(9) FINANCE DEPARTMENT NOTES:

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M E M O R A N D U M

DATE: 9/29/2023

TO: Robert Lewis
Director Department of Public Works

FROM: Steve Leone
Director of Water & Wastewater

RE: **Saxonville Intersection Water Mains Project**

The Saxonville Intersection is scheduled to be under construction within the next several years. The water main was replaced a decade ago on Central St, and Concord St beyond the limits of the intersection construction. The limits also extend up Elm St several hundred feet. The water main was not replaced at that time on Elm St. It is in the best interest of the City to replace the water main on Elm St from the Saxonville intersection to Chestnut St. This will remove an old 10" cast iron pipe from 1920 and replace it with 12" Ductile Iron. Not only is 10" an odd size to stock parts for repairs this will minimize the need to have to excavate within the limits of the new intersection for any repairs. Any water services within this section of road will be replaced to the "curb stop valve" as well as all other appurtenances. Due to the logistics of installing water main and bypass piping, as well as the water main on Chestnut St. being undersized 6" pipe from 1907, it makes sense to replace that water main, services, and appurtenances at the same time on Chestnut St. There is also an appropriation request to replace the water mains on Elm St from Chestnut St to Pinewood St as well as replacing the Elm St water pumping station. The work of this appropriation will eliminate the need of excavating in the new intersection during the construction of the Elm St water mains in the future. The appropriation amount of $700,000 will cover the cost of the installation and materials for the water main replacement as well as the associated services, valves, and hydrants.

Saxonville Water Main Project – FY25 Capital Project Submission

Why the Saxonville Intersection Area water mains?

- ***Provides necessary utility improvements in advance of the Saxonville Intersection Improvements.***
- ***Improves reliability and reduces risks of water main breaks.***
- ***Increases water main capacity.***
- ***Eliminates aged unlined cast iron water mains.***

Chestnut Street --
Replace 250 feet of 6" diameter cast iron main (1907) with new 8" ductile iron main

Elm Street --
Replace 250 feet of 10" diameter cast iron main (1920) with new 12" ductile iron main

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise

DEPARTMENT PRIORITY: 2

(1) PROJECT NAME: Meter System End-Point Replacements

PROJECT STATUS: NEW Project This Year

(2) PROJECT DESCRIPTION AND JUSTIFICATION:

The Water Meter Replacement Program aims to remove water metering equipment from the water distribution system that has reached or exceeded end-of-life. Removing inaccurate, inefficient, or failed units from the water system improves the accuracy of water meter readings, thereby decreasing underbilling or overbilling customers and water loss to the City. Replacing outdated equipment and implementing newer technology will increase the reliability of data collection, offer the City more streamlined customer invoicing, and enhance the overall reliability of the City's water and sewer billing system. In FY2025 the target is to remove all meters from the distribution system installed before 2000, and all 2" meters installed before 2002. We have been informed by the manufacturer that for these units, batteries are only intended to last into 2027, so replacements will be critical to avoid increasing numbers of equipment failures in the system.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

Project added to address critical meter infrastructure component replacement

(3) PURPOSE OF PROJECT:

X	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) BUDGET REQUEST BY YEAR:

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction	2,610,000	2,132,000	2,132,000			
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	2,610,000	2,132,000	2,132,000	-	-	-

(5) PRIORITY:

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):

1) **Bond**
2)
3)

(10) PROJECT OR EQUIPMENT LOCATION:

City-wide

(11) ASSET TYPE:

Building

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

Robert A. Lewis

(9) FINANCE DEPARTMENT NOTES:

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M E M O R A N D U M

DATE: 10/12/2023

TO: Stephen Leone
Director of Water & Sewer

FROM: Alex MacKenzie
Assistant Director of Water & Sewer

RE: **Cost Estimate for FY2025**
Water Meter Collection System Endpoint Replacement Plan

As part of our program to enhance the City's Water & Sewer Billing, our aim is to improve the reliability and dependability of the City's data collection system. As you are aware, approximately over 80% of the meter transceiver units (MXUs) in the current radio-based data collection system are within three years of end of life. As end-of-life approaches, these MXUs begin to fail and become increasingly unreliable. When these units fail to transmit data from water meters to the data collection system, customer water usage information is not received by the Water & Sewer Billing office. In FY2025 it is our goal to initiate the first year of our three-year replacement plan to eliminate aged and unresponsive MXUs from our system, and transition to a new more robust, reliable, adaptable, and customer-friendly system.

The Water & Wastewater Division has committed to transitioning our data collection system from a 100% radio-based system to a hybrid radio and cellular-based system. This decision was made largely as a response to the lack of available equipment for the foreseeable future to replace the City's existing end-of life equipment. As a fully radio-based system, the current collection system also has limitations that the new system will not have, and the equipment cost per unit to replace the end-of-life units would have been greater.

The collection system conversion has required the Division to invest in the installation of new radio collectors located at carefully mapped locations within the City. This initiative began in FY2023 and is anticipated to be complete by FY2024. For those areas where communication with a radio collector was previously not reliable or not possible, we will now have the opportunity to utilize cellular-based data transmitters to capture those data. The new system will also support drive-by data collection if there is a failure to receive data by radio or cellular, which is a feature the City's current system doe not have.

An FY2025 appropriation for the *Water Meter Collection System Endpoint Replacement Plan* will provide the funds necessary to procure the equipment needed to perform approximately one-third of the unit conversions to the new collection system. Our objective first and foremost will be to eliminate units that are not providing reliable water usage data to Water & Sewer Billing office – which in turn will reduce the number of customer

accounts requiring Division personnel to access properties to manually read usage data and/or requiring estimated usage invoices to be generated. The following describes the funding required over the next three fiscal years to complete the collection system conversion.

Water Meter Collection System
Endpoint Replacement Plan

Description	FY2025	FY2026	FY2027
Meter Endpoints	*$1,110,240*	*$1,102,530*	*1,102,530*
2 to 3-wire conversion plates	*$463,302*	*$0*	*$0*
Installation	*$1,036,800*	*$1,029,600*	*$1,029,600*
Total Estimated Cost	*$2,610,342*	*$2,132,130*	*$2,132,130*
FY2025 WATER METER REPLACEMENT REQUEST			**$2,650,000**

We are requesting funding in the sum of **$2,650,000 in FY2025 for the Water Meter - Collection System Endpoint Replacement Plan**. The anticipated costs for the FY2025 through FY2027 capital requests are based on FY2024 federal contract pricing plus projected adjustments for contract adjustments over the subsequent years. Contingency of approximately 20 percent has also been added to the unit costs to cover the price of ancillary parts required for installation and any additional fees associated with installation. The *Water Meter Collection System Endpoint Replacement Plan* is a critical project with financial implications for the Water & Wastewater Division that cannot be resolved without funding to perform the work described.

Water Meter Collection System Endpoint Replacement Plan – FY2025 Capital Proposal

Aged water meter and transceiver unit (MXU)

Inaccessible meter & MXU in need of replacement and relocation

Existing end-of-life endpoint removed from collection system

New hybrid system: radio and cellular endpoints + conversion plate

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise **DEPARTMENT PRIORITY:** 5

(1) **PROJECT NAME:** Elm St PS & Water Mains
PROJECT STATUS: Existing in Edmunds

(2) **PROJECT DESCRIPTION AND JUSTIFICATION:**

The 5.4 million gallons per day capacity Elm Street Water Pump Station is vital to the operation of Framingham's water system. This project will design the replacement pump station and investigate and design improved water transmission mains, potentially consolidating two mains into one. The station draws water from the MWRA's Hultman Aqueduct and MetroWest Tunnel and, with the Pleasant Street and Edgell Road Pump Stations, pumps water to all but the highest elevation areas of the City's water system. The three stations are all essential pumping facilities to provide maintain supply, pressure, and water quality. The Elm Street Water Pump Station now no longer can do its part in terms of redundancy and maintaining base operations for the system. It has not been upgraded for decades and is in desperate need of replacement. Equipment and electrical systems are outdated, far from being reliable, and pose safety risks for those who have to operate and maintain systems. The controls, including the electrical system and motor control center (MCC), were installed in the 1960s. The existing backup engine-driven pump no longer functions and the existing MCC now no longer meets electrical codes and presents substantial safety hazards to City personnel. Replacement parts are no longer available, making maintenance challenging. Although one of the electrically-driven pumps was replaced in the 1990s, the other is original and in need of replacement. One of the operating pumps can no longer be connected to the MCC without compromising service to the entire station and now only operates using a standby generator, which requires full-time staffing during operation for monitoring. The heating and ventilation system for the building is old and also in need of upgrade.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

(3) **PURPOSE OF PROJECT:**

X	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) **BUDGET REQUEST BY YEAR:**

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design	575,000					
d.	Construction			5,000,000			
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	575,000	-	5,000,000	-	-	-

(5) **PRIORITY:**

a.	X	**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) **EFFECTS ON ANNUAL OPERATING BUDGET:**

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) **PROPOSED FUNDING SOURCE(S):**

1) **Bond**
2)
3)

(10) **PROJECT OR EQUIPMENT LOCATION:**

Elm Street

(11) **ASSET TYPE:**

Building

(7a) **POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)**

(8)	**PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)**
	Robert A. Lewis
(9)	**FINANCE DEPARTMENT NOTES:**

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M E M O R A N D U M

DATE: 10/16/2023

TO: Stephen Leone
Director of Water & Sewer

FROM: Stephanie Tarves
Senior Water & Wastewater Engineer

RE: **Elm Street Water Pump Station and Water Mains Improvement Project**

The Elm Street Water Pump Station is one of the City's four water supply pump stations that draw water from the MWRA's water supply through the Hultman Aqueduct and the MetroWest Tunnel. The three of these pump stations the Pleasant Street, Edgell Road and Elm Street Pump Stations maintain supply, pressure and water quality to the vast majority of the City, to all but the highest elevations in the City's water system. The Elm Street Water Pump Station is located in Saxonville, and is the City's northern- and eastern-most water supply source. Originally constructed in 1962 and rated for 5.4 MGD, the Elm Street Station pumps drinking water through a 20-inch cast iron transmission main installed in 1964 to the City's Indian Head Water Tanks. The Elm Street Water Pump Station has been maintained through upgrades for decades, but in recent years experienced a number of electrical and mechanical failures where temporary stop-gap measures have been implemented to keep the station online. Due to the age and condition of the station, the Elm Street Water Pump Station is at risk of further failures and requires replacement. This appropriation would provide funding for engineering services to study, design, permit, and prepare bid-ready documents for the Elm Street Pump Station and Water Mains Improvement Project.

Elm Street Water Pump Station

In its current condition, the Elm Street Water Pump Station does not reliably provide the redundancy needed by the City for its public water supply needs. The station cannot operate normally at its design capacity and no longer has functioning auxiliary backup pumping due to multiple electrical and mechanical failures. Equipment and electrical systems are outdated, far from being reliable, and pose safety risks for those who have to operate and maintain systems. Although one of the electrically-driven pumps was replaced in the 1990s, the other is original to the station and in need of replacement. The heating and ventilation system for the building is old and also in need of upgrade. The SCADA equipment – although the most recently upgraded equipment at the station – is reaching end-of-life, and also requires upgrade. The most compelling needs at the station are mechanical and

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electrical improvements because of the deficiencies resulting from failures of those systems. The following describes the major problems present at the station.

The Elm Street Water Pump Station's electrical system and the motor control center (MCC) were installed in the 1960s and no longer meet electrical code. The condition of the MCC presents a substantial safety hazard as noted in the 2021 Technical Memorandum *Elm Street Water Pumping Station – Electrical System Evaluation* prepared for the Division by electrical consultant, Woodard and Curran. The technical memorandum summarizes electrical deficits, and provides recommended improvements. Based on the electrical assessment provided in the memo, Standard Operating Procedures (SOPs) for the City's water operators have been modified such that no operators are to be present in the building while when the existing 50 hp pump – powered utility power – is operating. The risk of a hazardous electrical failure that may cause injury is too great.

Since the 2021 technical memo, the station's 100 hp pump suffered a motor failure. The 100 hp motor was repaired but could not be reconnected to the station's MCC without risk of compromising electrical service to the entire station. Reconfiguration of the electrical supply to the 100 hp pump was performed such that it now only operates by standby generator power and is not connected to the station's utility power. Operating the 100 hp pump in this manner requires full-time attendance for monitoring and operating whenever the pump is utilized, so currently the 100 hp pump is only exercised and is available in the event of an emergency. This temporary stop-gap measure is not a permanent fix and presents a significant limitation to the pumping capacity of the station. The 100 hp pump cannot be operated in regular rotation with the City's other system pumps, and cannot be operated remotely through the City's SCADA system, effectively reducing pumping capacity of the station and removing that capacity from the system.

The auxiliary natural gas engine-driven pump at the Elm Street Water Pump Station, commonly provided in these style stations of this era for emergency backup during periods of power outages, has experienced mechanical failure. Efforts have been made to maintain the engine-driven pump and issues have been troubleshooted. Lack of available replacement parts due to the age of the motor have hindered repairs to bring the engine back into service, so these repairs have not been completed. The engine-driven pump requires major investment to bring the pump back into service, which likely would include complete engine replacement.

The Elm Street Water Pump Station cannot operate in concert with the Edgell Road, Pleasant Street Water Pump Stations as it was designed to do, and the Edgell Road and Pleasant Street Water Pump Stations bare the load to compensate for reduced capacity at the Elm Street Station by producing more volume each day, which translates into more wear and tear at the other stations; in the long term reducing the life of the other stations. By providing funds to replace the Elm Street Water Pump Station reduced compensation load on the Edgell Road and Pleasant Street Water Pump Stations

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would result and reliance on the Elm Street Water Pump Station may be increased as a redundant source to the Edgell Road and Pleasant Street sources.

Elm Street Water Mains

The Elm Street water mains include a 20-inch cast iron transmission main associated with the Elm Street Water Pump Station that was installed in 1964, as well as two domestic water mains that provide drinking water to customers. The domestic water mains are both are cast iron, one an 8-inch main installed in 1940 and the other a 6-inch main installed in 1920, which appear to be redundant. The goal of the water main replacement work would be to investigate and propose a design to consolidate the two domestic water mains and replace the transmission main from the Elm Street Water Pump Station to the Saxonville intersection. The limit of this project would be from Chestnut Street (contingent upon funding of the Saxonville Intersection Water Mains Project) to Pinewood Drive, and will additionally include a section of 6-inch cast iron water main from 1909 located on an easement between Elm Street and Edwards Street and a 16-inch water main from the Elm Street Water Pump Station to Pinewood Drive.

The Elm Street water mains included in this project are all aged infrastructure – some of which are over 100 years old and undersized. There have been multiple breaks of the domestic water mains in recent years, and the location of mains, connections between mains, and age of the associated valves have made for difficult isolation of the mains during emergencies. Elimination of cast iron water mains also contributes to improved water quality in the water system. Elimination of undersized mains improves pressure to customers and increased available fire flow available to hydrants. These improvements are proposed in coordination with the Saxonville Intersection Improvements Project to address the utilities in the Saxonville neighborhood in conjunction with the planned roadway improvements.

Proposed Elm Street Water Pump Station and Water Mains Improvement Project

The proposed Elm Street Water Pump Station and Water Mains Improvement Project will provide necessary capital investment into the City's drinking water pumping infrastructure and distribution system. Replacement of the Elm Street Water Pump Station will provide tremendous improvement to the City's water system by resolving a serious continuously deteriorating conditions and allow for better operation and management of the water system. The work will include investigation of the existing pump station structure, utility service, equipment, and overall facility to provide recommendations for replacement of the station such that it will serve the drinking water needs of the City into the future.

The proposed water main improvements in conjunction with the Saxonville Intersection Water Mains Project is expected to connect new ductile iron domestic water main to existing 12-inch ductile iron main installed in 2008 at the intersection of Concord and Central Streets. The new ductile iron main

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will extend north up Elm Street to Pinewood Drive to eliminate the 6-inch and 8-inch redundant water mains. Replacement of the 6-inch 1909 cast iron water main through the easement from Elm Street to Edwards Road will eliminate an undersized main and result in improved water quality and fire flow in the Edwards Road neighborhood. Additional work will be performed to investigate and provide a design for replacement of the 20-inch cast iron 1964 transmission main that connects the Elm Street Water Pump Station to the Indian Head Tanks, to provide improved reliability of the Elm Street Water Pump Station supply source. Investigation and recommendations will be provided for replacement of the 16-inch 1964 cast iron main that feeds Pinewood Drive from the Elm Street station.

Work of this project will include engineering services to investigate the existing infrastructure and provide recommendations for improvements, engineering design, construction cost estimation, permitting, and all associated work required for the delivery of bid-ready contract documents. The estimated cost for design services for the **Elm Street Water Pump Station and Water Mains Improvement Project is $575,000** proposed for appropriation in the **FY2025** Capital Improvement Project Submission**.**

Elm Street Water Pump Station and Mains Project – FY25 Capital Project Submission

Elm Street Water Mains (north)

Elm Street Water Pump Station locus map

The water mains associated with the Elm Street Water Pump Station transport water from the MWRA's Hultman Aqueduct and MetroWest Tunnel through the City's distribution system to the Indian Head Water Storage Tanks.

Elm Street Water Mains (south)

Upgrading the Elm Street Water Pump Station and Water Mains is critical to maintaining a continuous reliable supply of water to the City.

Replacement of the outdated water pump station and water mains will improve reliability, address safety issues, and consolidate infrastructure to enhance DPW's ability to consistently deliver high quality water to the City.

Elm Street Water Pump Station and Mains Project – FY25 Capital Project Submission

Existing 100 hp electrically-driven pump must be run off generator power; cannot run on station's power – <u>Unsafe to repair.</u>

Diesel-driven pump no longer functions – <u>Station has no backup pump.</u>

<u>Why replace the Elm Street Water Pump Station?</u>

- ***A catastrophic failure at this station is imminent if no action is taken.***
- ***Existing station is not up to current standards – will improve operation and safety.***
- ***Upgrades will improve reliability of the City's water supply.***
- ***The building and associated utilities require upgrades to extend the life of the structure.***

Old, hazardous wiring does not meet electrical code – hazardous to maintain.

Crumbling door frame and delamination of building structure.

TECHNICAL MEMORANDUM

TO: Stefanie Tarves, PE, Senior Water and Wastewater Engineer, City of Framingham, MA

CC: Michael Dunham, Electrician, City of Framingham, MA

PREPARED BY: David Brown, Electrical Engineer, Woodard & Curran

REVIEWED BY: George Weber, PE, Technical Manager, Woodard & Curran

DATE: June 8, 2021

RE: Elm Street Water Pumping Station – Electrical System Evaluation

Introduction:

On May 14th, Woodard and Curran (W&C) evaluated the electrical power distribution system at the Elm Street water pumping station at the request of the City of Framingham. W&C walked the site with the Framingham team to discuss site conditions and pump station operations.

On June 2nd, W&C performed a second site investigation with the Framingham team and Eversource utility representatives. Eversource evaluated the existing utility condition and discussed options for updating the service with the team.

W&C observed the following regarding this pump station.

Existing Conditions:

- A 480V three-phase service feeds the building overhead from a pole-mounted transformer on the property.
- The existing Motor Control Center (MCC) is antiquated, reaching its end of life, and replacement parts are not available for servicing.
    - The MCC contains motor starters for starting two pumps, and a low voltage transformer that feeds two 120/240-volt main lug only lighting panelboards.
- Two suction lift electric pumps (50 HP and 100 HP) appear to be in good condition, but detailed evaluation of the pumps were not in the scope of this task.
- W&C could not determine the condition of the conduit and wiring infrastructure as all wiring and conduit was either concealed or buried.

Recommendations:

From the information gathered, W&C recommends the following changes for the Elm Street Pump station:

- A new 3-phase 480V grounded service and new pole-mounted transformer.
- Replacement of existing MCC with a new 400 ampere main distribution panel, low voltage transformer, 120/240-volt panelboard for lighting and general use, variable frequency drives (VFDs) for motor operation, VFD control conductors, conduits, and power conductors.
- New interior and exterior LED building lighting.

Opinion of Probable Cost:
W&C assessed the pump station and has determined a probable cost for design, construction administration, and construction. The cost listed below in Table 1 does not include any costs that may be charged by Eversource Utility. A more precise project estimate can be prepared by soliciting quotes from electrical contractors and refining the design and construction admin costs.

Table 1: Probable Construction Cost Estimate

Description:	Construction Cost:
Underground Construction:	$33,231
Service Grounding:	$26,165
Power Conduit and Conductors:	$28,165
Pump Station Interior Control Conduit and Conductors:	$11,151
Electrical Equipment:	$85,280
Total Cost	**$183,992**

Table 2: Probable Detail Design and Construction Administration Cost Estimate

Description:	Design Cost:
Detail Design:	$16,423
Construction Administration:	$8,196
Total Design and Construction administration Cost:	**$24,619**

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise | **DEPARTMENT PRIORITY:** 7

(1) PROJECT NAME: Walnut St., Warren Rd., Burdette Ave. Water Main Improvements

PROJECT STATUS: Existing in Edmunds

(2) PROJECT DESCRIPTION AND JUSTIFICATION:

Sections of watermain on Walnut Street, Warren road and Burdette Ave are undersized and/or over 100 years old and past their useful life. This capital request is to fund the design for the replacement of these watermains with the construction intended to be contemporaneous with sewer construction for which the design has been previously authorized. This request will also fund the assessment of water-main in nearby roads such as Prindiville Ave.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

Cost estimate updated. Added placeholder for construction in FY27.

(3) PURPOSE OF PROJECT:

x	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) BUDGET REQUEST BY YEAR:

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design	355,000					
d.	Construction			4,000,000			
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	355,000	-	4,000,000	-	-	-

(5) PRIORITY:

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	x	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):

1) **Bond**
2)
3)

(10) PROJECT OR EQUIPMENT LOCATION:

See description

(11) ASSET TYPE:

Building

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

Robert A. Lewis

(9) FINANCE DEPARTMENT NOTES:

CITY OF FRAMINGHAM

DEPARTMENT OF PUBLIC WORKS | OPERATIONS

OPERATIONS CENTER
100 Western Avenue
Framingham, MA 01702

508-532-6060
wastewater@framinghamma.gov
www.framinghamma.gov

M E M O R A N D U M

DATE: 10/18/2023

TO: William Sedewitz, PE
Chief Engineer

FROM: Eric Johnson, PE
City Engineer

RE: **Walnut St, Warren Rd, Burdette Ave Water Main Improvements - Design**

Sections of watermain on Walnut Street, Warren Road and Burdette Avenue are undersized and/or over 100 years old and past their useful life. This capital request is to fund the design for the replacement of these watermains with the construction intended to be contemporaneous with sewer construction for which the design has been previously authorized. This request will also fund the assessment of watermains in nearby roads such as Prindiville Avenue. In addition, this project will include the replacement of all water services with new copper pipe. The existing water services are HDPE plastic manufactured such that they have a limited lifespan.

Funding for the Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project is requested along with prior funding for the design of the Walnut Street Sewer Force Main and Walnut Street Neighborhood Flood Mitigation Projects, so that necessary work on utilities in the Walnut Street area may be completed in succession, minimizing the duration of construction activities in the Walnut Street neighborhood.

Attached to this memo is a cost summary by Hazen and Sawyer to complete this work in conjunction with the co-located sewer work previously authorized. This work is estimated at $355,000.

Walnut St., Warren Rd. & Burdette Ave. Water Main Improvement Project – FY25 Capital Project Submission

Burdette Ave: Low-flow 6" CI water main installed 1912

Warren Rd: 8" CI water main installed 1910 and 8" DI water main with black plastic water services

Why eliminate low-flow water mains?

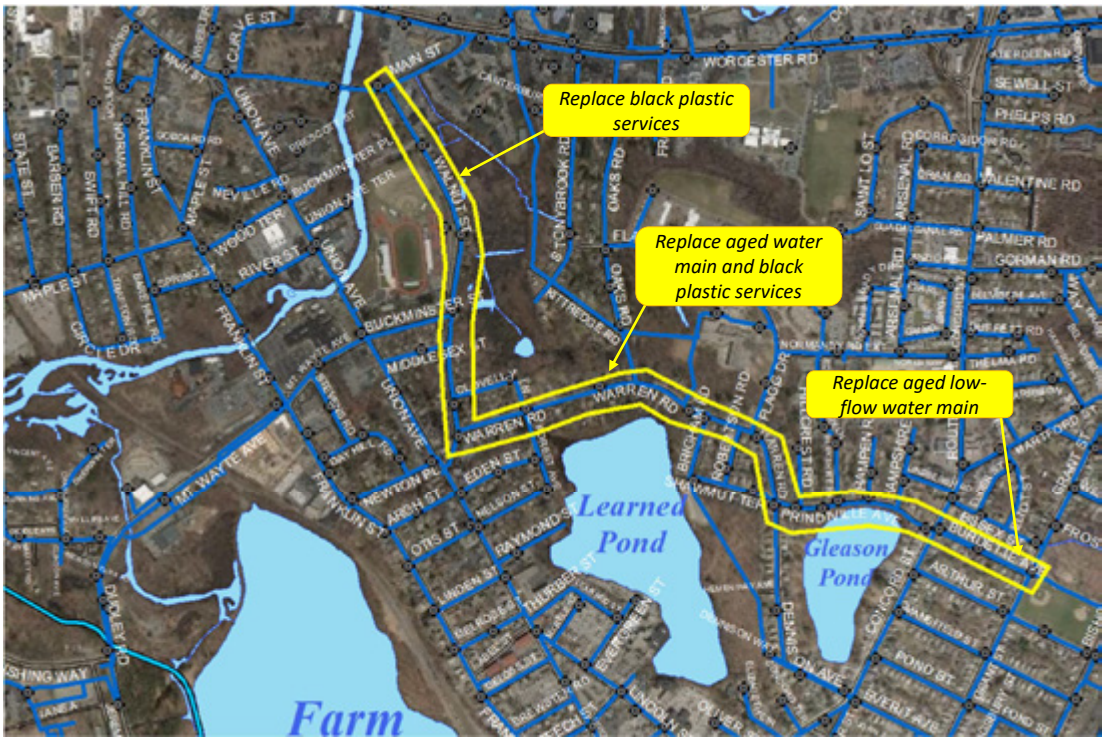
- ***To provide sufficient fire protection to residents.***
- ***To improve drinking water pressure to customers.***
- ***To improve water quality removing unlined CI mains.***

Walnut St: 8" DI water main with black plastic services

Why replace black plastic polybutylene (Poly B) water services?

- ***Poly B water pipe have known high rates of failure – increases as pipe gets older.***
- ***Black plastic water services were made with defective seams and services burst at seams.***
- ***Framingham is replacing failed black plastic water services at a rate higher than iron water services installed in Framingham in the 1950s.***

Walnut St., Warren Rd. & Burdette Ave. Water Main Improvement Project – FY25 Capital Project Submission



Walnut Street, Warren Road & Burdette Avenue: Water Main Improvement Project Route.
Work concurrent with sewer force main replacement along the same route.

Hazen and Sawyer
50 Milk Street, Suite 500
Boston, MA 02110 • 617.574.4747

October 18, 2023

Mr. William R. Sedewitz, P.E.
Chief Engineer
110 Western Avenue
Framingham, MA 01702

RE: Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project Funding Request for Design Services

Dear Mr. Sedewitz:

As requested, Hazen and Sawyer (Hazen) is pleased to provide this letter regarding the estimated funding for design services for the Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project.

Background

The Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project is intended to replace aging, low-flow water mains and upgrade outdated water service connections that are prone to failure on the aforementioned streets. The project includes abandonment of the 6-inch cast iron water main on Burdette Avenue (installed in 1912) and reconnection of water services to the existing 12-inch main on Burdette Avenue, replacement of the Warren Road 8-inch cast iron (installed in 1910) from approximately Oaks Road to Prindiville Avenue, and replacement of all service connections within the project limits. The services connected to these mains are polybutylene (black plastic) and have high rates of failure as the pipe ages due to the fused seams method of construction. The project will also include relocation of various sections of water mains on these streets that may conflict with the concurrent sanitary sewer improvements or other utility upgrades (i.e., geothermal project). This project will improve water pressure and volume for residents, provide sufficient fire protection, and mitigate the frequency of DPW emergency responses due to service line failures. The project scope will include temporary water main bypasses to facilitate construction, replacement of water mains, valves, and hydrants, and replacement of all water services with new copper service connections from the water main to the resident's curb stop. Funding for the Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project is requested along with prior funding for the design of the Walnut Street Sewer Force Main and Walnut Street Neighborhood Flood Mitigation Projects, so that necessary work on utilities in the Walnut Street area may be completed in succession, minimizing the duration of construction activities in the Walnut Street neighborhood.

Job no

Hazen and Sawyer
50 Milk Street, Suite 500
Boston, MA 02110 • 617.574.4747

Estimated Fee

Based on projects we have designed with a similar scope of work, we recommend an appropriation of $355,000 for Walnut Street, Warren Road, and Burdette Avenue Water Main Improvement Project. Please feel free to contact me at (508) 907-5056 or jbarsanti@hazenandsawyer.com with any questions or if you require additional information.

Sincerely,

James Barsanti

James Barsanti, P.E.
Senior Associate

Job no

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise | **DEPARTMENT PRIORITY:** 6

(1) **PROJECT NAME:** Worcester Rd Water Mains Phase II
PROJECT STATUS: Existing in Edmunds

(2) **PROJECT DESCRIPTION AND JUSTIFICATION:**

The project is for replacement and upgrading of approximately 2,750 feet of old 6-inch diameter cast iron water main infrastructure on Worcester Road (Route 9) Westbound between Concord Street and Caldor Road. Replacement includes new domestic and fire service connections to all businesses within the project area. This infrastructure is in poor condition and is between 50 and 120 years old, exceeding its service life and highly likely to fail due to the outdated material (cast iron). Even though some of the pipe was installed as recently as 1968, cast iron pipe produced in the 1950s and 1960s has been a major source of main breaks not only in Framingham but in utilities throughout the US. This water infrastructure serves major portions of Framingham's retail businesses, where emergency repairs and traffic disruption would be significantly expensive because of its location within state road limits. This project will improve water infrastructure in the area by increasing capacity for future demands, enhancing reliability of the system, improving fire flows and water quality, and reducing maintenance costs. This project is also an opportunity to address water and sewer needs together as part of a single construction package, resulting in reduced impacts to the businesses in the area and those who travel on this busy roadway.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:

Cost estimate updated. Note that this project needs to coincide with Worcester Rd Sewers Phase II

(3) **PURPOSE OF PROJECT:**

x	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) **BUDGET REQUEST BY YEAR:**

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction	5,240,000					
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	5,240,000	-	-	-	-	-

(5) **PRIORITY:**

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	x	**level service maintenance**	maintains City desired level of service
c.	X	**economic development**	adds to the City's economic vibrancy
d.	x	**service improvement**	new or improved service to meet demand

(6) **EFFECTS ON ANNUAL OPERATING BUDGET:**

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7)	PROPOSED FUNDING SOURCE(S):	(10) PROJECT OR EQUIPMENT LOCATION:
1)	**Bond**	**Worcester Road between Concord Street and Caldor Road**
2)		(11) ASSET TYPE:
3)		**Building**

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

Robert A. Lewis

(9) FINANCE DEPARTMENT NOTES:

ENVIRONMENTAL PARTNERS
An Apex Company

October 3, 2023

Mr. Robert H. Sheldon, PE
Director, Capital Projects
Department of Public Works
Capital Improvement Program
110 Western Avenue
Framingham, MA 01702

RE: Framingham: Capital Project Planning
Worcester Road Water and Sewer Improvements Phase 2 - Westbound
Updated Cost Estimate

Dear Robert:

As requested Environmental Partners Group, LLC (Environmental Partners) has updated the cost estimate for this project. The detailed cost estimate is attached, and assumes construction in 2024.

Please feel free to contact me if you have any questions or would like to discuss this project further.

Very Truly Yours,

Environmental Partners Group, LLC

Ryan J. Allgrove, P.E.
Principal
P: (617) 657-0281
E: rja@envpartners.com

Attached: Updated Cost Estimate

Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Opinion of Probable Construction Cost - Water and Sewer
Construction Midpoint - December 2024

Item No.	Description	Units	Bid Quantities	Unit Price	Extended Amount
1	Mobilization and Demobilization (5%)	LS	1	$353,310.25	$353,310.25
2	Preconstruction Video and Photographs	LS	1	$36,000.00	$36,000.00
3	**WATER MAINS**				
3a	12-Inch DI Water Main	LF	15	$425.00	$6,375.00
3b	8-Inch DI Water Main	LF	2630	$380.00	$999,400.00
3c	6-Inch DI Water Main	LF	100	$365.00	$36,500.00
4	**GATE VALVES AND BOXES**				
4a	8-Inch Gate Valves and Boxes	EA	19	$3,600.00	$68,400.00
4b	6-Inch Gate Valves and Boxes	EA	6	$2,100.00	$12,600.00
5	Hydrant Assemblies	EA	5	$15,000.00	$75,000.00
6	**WATER SERVICE TAPS AND CURB BOXES**				
6a	1-Inch Water Service Taps and Curb Boxes	EA	4	$1,400.00	$5,600.00
6b	1.5-Inch Water Service Taps and Curb Boxes	EA	2	$1,900.00	$3,800.00
6c	2-Inch Water Service Taps and Curb Boxes	EA	4	$1,950.00	$7,800.00
7	**WATER SERVICES**				
7a	1-Inch Water Services	LF	75	$155.00	$11,625.00
7b	1.5-Inch Water Services	LF	40	$170.00	$6,800.00
7c	2-Inch Water Services	LF	75	$180.00	$13,500.00
8	**FIRE SERVICES**				
8a	4-Inch Fire Service Connection	LF	25	$280.00	$7,000.00
8b	6-Inch Fire Service Connection	LF	65	$195.00	$12,675.00
8c	8-Inch Fire Service Connection	LF	20	$335.00	$6,700.00
9	**TEMPORARY BYPASS SYSTEMS**				
9a	6-Inch Temporary Bypass Piping	LF	1220	$180.00	$219,600.00
9b	8-Inch Temporary Bypass Piping	LF	2340	$190.00	$444,600.00
10	Additional Fittings	LB	1500	$6.00	$9,000.00
11	**GRAVITY SEWERS**				
11a	8-Inch SDR 35 PVC Gravity Sewer Pipe	LF	1070	$520.00	$556,400.00
11b	8-Inch SDR 21 PVC Gravity Sewer Pipe	LF	195	$530.00	$103,350.00
11c	10-Inch Epoxy Lined DI Gravity Sewer Pipe	LF	185	$350.00	$64,750.00
11d	8-Inch Epoxy Lined DI Gravity Sewer Pipe	LF	140	$340.00	$47,600.00
12	**SEWER SERVICE CONNECTIONS**				
12a	8-inch PVC Gravity Sewer Service	LF	30	$700.00	$21,000.00
12b	6-Inch PVC Gravity Sewer Service (Westbound Side)	LF	205	$680.00	$139,400.00
12c	6-Inch Epoxy Lined DI Sewer Service (Westbound Side)	LF	65	$680.00	$44,200.00
13	**SEWER MANHOLES**				
13a	4-foot Diameter Sewer Manhole	VF	50	$1,200.00	$60,000.00
13b	5-foot Diameter Sewer Manhole	VF	24	$1,400.00	$33,600.00
13c	Sewer Manhole Frame and Cover	EA	9	$1,100.00	$9,900.00
13d	Rebuild Existing Sewer Manhole Invert	EA	1	$2,500.00	$2,500.00
13e	Remove and Dispose of Existing Sewer Manhole	EA	1	$675.00	$675.00
13f	Epoxy Line Sewer Manhole	VF	10	$700.00	$7,000.00
13g	Cement Line Existing Sewer Manhole	VF	5	$350.00	$1,750.00
14	**STORMWATER**				
14a	Removal and Replacement of Storm Drain Utilities	IN-FT	2000	$12.00	$24,000.00
15	**CONTAMINATED MATERIAL MANAGEMENT**				
15a	AC Pipe Removal and Disposal	LF	20	$70.00	$1,400.00
15b	Management and Disposal of Crushed AC Pipe and AC Impacted soils	CY	100	$270.00	$27,000.00
15c	Removal and Disposal of Unforeseen Asbestos	ALLOW	1	$145,000.00	$145,000.00
15d	Soil Management Plans	LS	1	$145,000.00	$145,000.00
15e	Removal and Disposal of Background or Unregulated Soil Materials	TON	4000	$80.00	$320,000.00
15f	Removal and Disposal of Impacted Materials	TON	1500	$100.00	$150,000.00
15g	Removal and Disposal of Unlined Landfill Materials	TON	500	$160.00	$80,000.00
15h	Removal and Disposal of Lined Landfill Materials	TON	500	$265.00	$132,500.00
15i	Treatment of Contaminated Groundwater	ALLOW	1	$60,000.00	$60,000.00
16	**REMOVAL/ABANDONMENT OF UTILITIES**				
16a	Abandon Existing Sewer/Water Main with LDCC	CY	10	$3,500.00	$35,000.00
16b	Abandon Existing Structure in Place with CDF	CY	150	$140.00	$21,000.00
16c	Cleaning and CCTV Inspection of Existing Sewer Lateral	EA	15	$2,350.00	$35,250.00
16d	Cut, Cap, Abandon Sewer Lateral in Place	EA	26	$1,200.00	$31,200.00

Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Opinion of Probable Construction Cost - Water and Sewer
Construction Midpoint - December 2024

Item No.	Description	Units	Bid Quantities	Unit Price	Extended Amount
17	**EARTH EXCAVATION**				
17a	Exploratory Excavation	CY	265	$40.00	$10,600.00
17b	Excavation of Unsuitable Materials Below Trench Grade	CY	500	$9.50	$4,750.00
17c	For Performing Soil Compaction Tests, as Specified	1/2 Day	330	$380.00	$125,400.00
17d	Rock Excavation	CY	250	$80.00	$20,000.00
18	**ADDITIONAL MATERIALS**				
18a	Select Fill	CY	800	$9.00	$7,200.00
18b	Special Borrow M1.02.0	CY	5000	$12.00	$60,000.00
18c	1500 PSI Concrete	CY	200	$35.00	$7,000.00
19	**PAVEMENT**				
19a	4-Inch Temporary Trench Pavement	SY	2800	$68.00	$190,400.00
19b	12-Inch Intermediate Trench Pavement	SY	5000	$135.00	$675,000.00
19c	2-Inch Milling	SY	7250	$10.00	$72,500.00
19d	2-Inch Overlay	SY	7250	$27.50	$199,375.00
20	**RESTORATION**				
20a	Bituminous Concrete Sidewalk	SY	135	$18.00	$2,430.00
20b	Portland Cement Concrete Sidewalk	SY	235	$75.00	$17,625.00
20c	Guard Rail	LF	325	$235.00	$76,375.00
20d	Miscellaneous Bituminous Concrete	TONS	500	$70.00	$35,000.00
20e	Remove and Reset Granite Curb	LF	640	$85.00	$54,400.00
20f	Restoration of Growth	SY	100	$125.00	$12,500.00
21	Uniformed Police Officer Allowance	ALLOW	1	$600,000.00	$600,000.00
22	Traffic Management	LS	1	$200,000.00	$200,000.00
23	Variable Message Boards as Shown and Specified	BOARD-WEEKS	80	$265.00	$21,200.00
24	Utility Support and Coordination	ALLOW	1	$235,000.00	$235,000.00
25	Abutter Relocation	ALLOW	1	$12,000.00	$12,000.00
26	For Furnishing and Placing Environmental Protection	LS	1	$30,000.00	$30,000.00
27	Miscellaneous Work and Cleanup	LS	1	$115,000.00	$115,000.00
				Subtotal	$7,419,515.25
				Escalation to Midpoint (5%)	$370,975.76
				Contingency (10%)	$779,049.10
				Engineering Services	$750,000.00
				Total (Rounded)	$9,320,000.00

Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Revised Opinion of Probable Construction Cost - Water
Construction Midpoint - December 2024

Item No.	Description	Units	Water Quantities	Unit Price	Extended Amount
1	Mobilization and Demobilization (5%)	LS	1	$200,458.63	$200,458.63
2	Preconstruction Video and Photographs	LS	0.5	$36,000.00	$18,000.00
3	**WATER MAINS**				
3a	12-Inch DI Water Main	LF	15	$425.00	$6,375.00
3b	8-Inch DI Water Main	LF	2630	$380.00	$999,400.00
3c	6-Inch DI Water Main	LF	100	$365.00	$36,500.00
4	**GATE VALVES AND BOXES**				
4a	8-Inch Gate Valves and Boxes	EA	19	$3,600.00	$68,400.00
4b	6-Inch Gate Valves and Boxes	EA	6	$2,100.00	$12,600.00
5	Hydrant Assemblies	EA	5	$15,000.00	$75,000.00
6	**WATER SERVICE TAPS AND CURB BOXES**				
6a	1-Inch Water Service Taps and Curb Boxes	EA	4	$1,400.00	$5,600.00
6b	1.5-Inch Water Service Taps and Curb Boxes	EA	2	$1,900.00	$3,800.00
6c	2-Inch Water Service Taps and Curb Boxes	EA	4	$1,950.00	$7,800.00
7	**WATER SERVICES**				
7a	1-Inch Water Services	LF	75	$155.00	$11,625.00
7b	1.5-Inch Water Services	LF	40	$170.00	$6,800.00
7c	2-Inch Water Services	LF	75	$180.00	$13,500.00
8	**FIRE SERVICES**				
8a	4-Inch Fire Service Connection	LF	25	$280.00	$7,000.00
8b	6-Inch Fire Service Connection	LF	65	$195.00	$12,675.00
8c	8-Inch Fire Service Connection	LF	20	$335.00	$6,700.00
9	**TEMPORARY BYPASS SYSTEMS**				
9a	6-Inch Temporary Bypass Piping	LF	1220	$180.00	$219,600.00
9b	8-Inch Temporary Bypass Piping	LF	2340	$190.00	$444,600.00
10	Additional Fittings	LB	1500	$6.00	$9,000.00
14	**STORMWATER**				
14a	Removal and Replacement of Storm Drain Utilities	IN-FT	1000	$12.00	$12,000.00
15	**CONTAMINATED MATERIAL MANAGEMENT**				
15c	Removal and Disposal of Unforeseen Asbestos	ALLOW	0.5	$145,000.00	$72,500.00
15d	Soil Management Plans	LS	0.5	$145,000.00	$72,500.00
15e	Removal and Disposal of Background or Unregulated Soil Materials	TON	2000	$80.00	$160,000.00
15f	Removal and Disposal of Impacted Materials	TON	750	$100.00	$75,000.00
15g	Removal and Disposal of Unlined Landfill Materials	TON	250	$160.00	$40,000.00
15h	Removal and Disposal of Lined Landfill Materials	TON	250	$265.00	$66,250.00
15i	Treatment of Contaminated Groundwater	ALLOW	0.5	$60,000.00	$30,000.00
16	**REMOVAL/ABANDONMENT OF UTILITIES**				
16a	Abandon Existing Sewer/Water Main with LDCC	CY	10	$3,500.00	$35,000.00
17	**EARTH EXCAVATION**				
17a	Exploratory Excavation	CY	132.5	$40.00	$5,300.00
17b	Excavation of Unsuitable Materials Below Trench Grade	CY	250	$9.50	$2,375.00
17c	For Performing Soil Compaction Tests, as Specified	1/2 Day	165	$380.00	$62,700.00
17d	Rock Excavation	CY	125	$80.00	$10,000.00
18	**ADDITIONAL MATERIALS**				
18a	Select Fill	CY	400	$9.00	$3,600.00
18b	Special Borrow M1.02.0	CY	2500	$12.00	$30,000.00
18c	1500 PSI Concrete	CY	100	$35.00	$3,500.00
19	**PAVEMENT**				
19a	4-Inch Temporary Trench Pavement	SY	1340	$68.00	$91,120.00
19b	12-Inch Intermediate Trench Pavement	SY	2675	$135.00	$361,125.00
19c	2-Inch Milling	SY	3625	$10.00	$36,250.00
19d	2-Inch Overlay	SY	3625	$27.50	$99,687.50
20	**RESTORATION**				
20a	Bituminous Concrete Sidewalk	SY	67.5	$18.00	$1,215.00
20b	Portland Cement Concrete Sidewalk	SY	235	$75.00	$17,625.00
20c	Guard Rail	LF	325	$235.00	$76,375.00
20d	Miscellaneous Bituminous Concrete	TONS	250	$70.00	$17,500.00
20e	Remove and Reset Granite Curb	LF	585	$85.00	$49,725.00
20f	Restoration of Growth	SY	50	$125.00	$6,250.00
21	Uniformed Police Officer Allowance	ALLOW	0.5	$600,000.00	$300,000.00

Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Revised Opinion of Probable Construction Cost - Water
Construction Midpoint - December 2024

Item No.	Description	Units	Water Quantities	Unit Price	Extended Amount
22	Traffic Management	LS	0.5	$200,000.00	$100,000.00
23	Variable Message Boards as Shown and Specified	BOARD-WEEKS	40	$265.00	$10,600.00
24	Utility Support and Coordination	ALLOW	0.5	$235,000.00	$117,500.00
25	Abutter Relocation	ALLOW	0.5	$12,000.00	$6,000.00
26	For Furnishing and Placing Environmental Protection	LS	0.5	$30,000.00	$15,000.00
27	Miscellaneous Work and Cleanup	LS	0.5	$115,000.00	$57,500.00
				Subtotal	$4,209,631.13
				Escalation to Midpoint (5%)	$210,481.56
				Contingency (10%)	$442,011.27
				Engineering Services	$375,000.00
				Total (Rounded)	$5,240,000.00

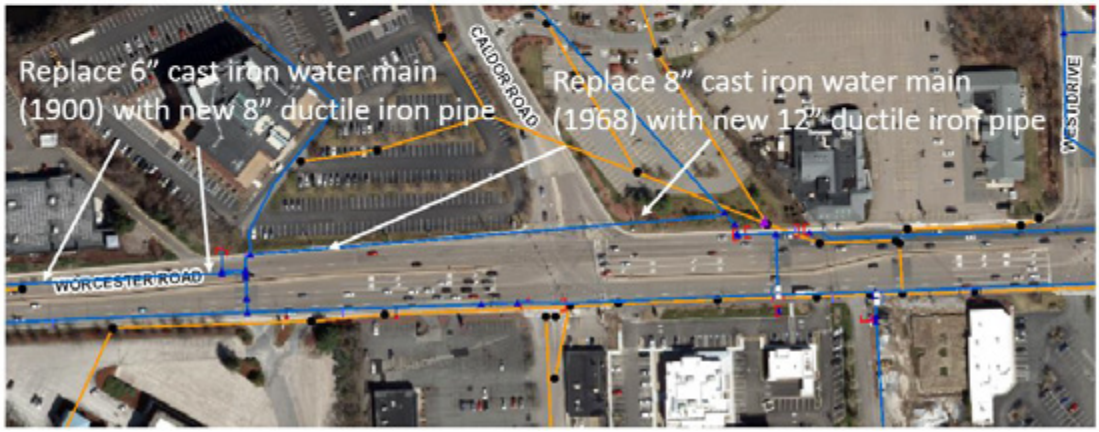
Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Revised Opinion of Probable Construction Cost - Sewer
Construction Midpoint - December 2024

Item No.	Description	Units	Sewer Quantities	Unit Price	Extended Amount
1	Mobilization and Demobilization (5%)	LS	1	$152,851.63	$152,851.63
2	Preconstruction Video and Photographs	LS	0.5	$36,000.00	$18,000.00
11	**GRAVITY SEWERS**				
11a	8-Inch SDR 35 PVC Gravity Sewer Pipe	LF	1070	$520.00	$556,400.00
11b	8-Inch SDR 21 PVC Gravity Sewer Pipe	LF	195	$530.00	$103,350.00
11c	10-Inch Epoxy Lined DI Gravity Sewer Pipe	LF	185	$350.00	$64,750.00
11d	8-Inch Epoxy Lined DI Gravity Sewer Pipe	LF	140	$340.00	$47,600.00
12	**SEWER SERVICE CONNECTIONS**				
12a	8-inch PVC Gravity Sewer Service	LF	30	$700.00	$21,000.00
12b	6-Inch PVC Gravity Sewer Service (Westbound Side)	LF	205	$680.00	$139,400.00
12c	6-Inch Epoxy Lined DI Sewer Service (Westbound Side)	LF	65	$680.00	$44,200.00
13	**SEWER MANHOLES**				
13a	4-foot Diameter Sewer Manhole	VF	50	$1,200.00	$60,000.00
13b	5-foot Diameter Sewer Manhole	VF	24	$1,400.00	$33,600.00
13c	Sewer Manhole Frame and Cover	EA	9	$1,100.00	$9,900.00
13d	Rebuild Existing Sewer Manhole Invert	EA	1	$2,500.00	$2,500.00
13e	Remove and Dispose of Existing Sewer Manhole	EA	1	$675.00	$675.00
13f	Epoxy Line Sewer Manhole	VF	10	$700.00	$7,000.00
13g	Cement Line Existing Sewer Manhole	VF	5	$350.00	$1,750.00
14	**STORMWATER**				
14a	Removal and Replacement of Storm Drain Utilities	IN-FT	1000	$12.00	$12,000.00
15	**CONTAMINATED MATERIAL MANAGEMENT**				
15a	AC Pipe Removal and Disposal	LF	20	$70.00	$1,400.00
15b	Management and Disposal of Crushed AC Pipe and AC Impacted soils	CY	100	$270.00	$27,000.00
15c	Removal and Disposal of Unforeseen Asbestos	ALLOW	0.5	$145,000.00	$72,500.00
15d	Soil Management Plans	LS	0.5	$145,000.00	$72,500.00
15e	Removal and Disposal of Background or Unregulated Soil Materials	TON	2000	$80.00	$160,000.00
15f	Removal and Disposal of Impacted Materials	TON	750	$100.00	$75,000.00
15g	Removal and Disposal of Unlined Landfill Materials	TON	250	$160.00	$40,000.00
15h	Removal and Disposal of Lined Landfill Materials	TON	250	$265.00	$66,250.00
15i	Treatment of Contaminated Groundwater	ALLOW	0.5	$60,000.00	$30,000.00
16	**REMOVAL/ABANDONMENT OF UTILITIES**				
16b	Abandon Existing Structure in Place with CDF	CY	150	$140.00	$21,000.00
16c	Cleaning and CCTV Inspection of Existing Sewer Lateral	EA	15	$2,350.00	$35,250.00
16d	Cut, Cap, Abandon Sewer Lateral in Place	EA	26	$1,200.00	$31,200.00
17	**EARTH EXCAVATION**				
17a	Exploratory Excavation	CY	132.5	$40.00	$5,300.00
17b	Excavation of Unsuitable Materials Below Trench Grade	CY	250	$9.50	$2,375.00
17c	For Performing Soil Compaction Tests, as Specified	1/2 Day	165	$380.00	$62,700.00
17d	Rock Excavation	CY	125	$80.00	$10,000.00
18	**ADDITIONAL MATERIALS**				
18a	Select Fill	CY	400	$9.00	$3,600.00
18b	Special Borrow M1.02.0	CY	2500	$12.00	$30,000.00
18c	1500 PSI Concrete	CY	100	$35.00	$3,500.00
19	**PAVEMENT**				
19a	4-Inch Temporary Trench Pavement	SY	1460	$68.00	$99,280.00
19b	12-Inch Intermediate Trench Pavement	SY	2325	$135.00	$313,875.00
19c	2-Inch Milling	SY	3625	$10.00	$36,250.00
19d	2-Inch Overlay	SY	3625	$27.50	$99,687.50
20	**RESTORATION**				
20a	Bituminous Concrete Sidewalk	SY	67.5	$18.00	$1,215.00
20d	Miscellaneous Bituminous Concrete	TONS	250	$70.00	$17,500.00
20e	Remove and Reset Granite Curb	LF	55	$85.00	$4,675.00
20f	Restoration of Growth	SY	50	$125.00	$6,250.00
21	Uniformed Police Officer Allowance	ALLOW	0.5	$600,000.00	$300,000.00
22	Traffic Management	LS	0.5	$200,000.00	$100,000.00
23	Variable Message Boards as Shown and Specified	BOARD-WEEKS	40	$265.00	$10,600.00
24	Utility Support and Coordination	ALLOW	0.5	$235,000.00	$117,500.00
25	Abutter Relocation	ALLOW	0.5	$12,000.00	$6,000.00
26	For Furnishing and Placing Environmental Protection	LS	0.5	$30,000.00	$15,000.00

Worcester Road Water and Sewer Improvements Phase 2 - Westbound
City of Framingham, MA
254-1904
100% Design Revised Opinion of Probable Construction Cost - Sewer
Construction Midpoint - December 2024

Item No.	Description	Units	Sewer Quantities	Unit Price	Extended Amount
27	Miscellaneous Work and Cleanup	LS	0.5	$115,000.00	$57,500.00
				Subtotal	$3,209,884.13
				Escalation to Midpoint (5%)	$160,494.21
				Contingency (10%)	$337,037.83
				Engineering Services	$375,000.00
				Total (Rounded)	$4,080,000.00

Worcester Road Water and Sewer Improvements Phase II (Westbound)



Installing new water and sewer infrastructure will substantially reduce potential of failure, improve reliability, and increase capacity for area businesses and residents.

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise **DEPARTMENT PRIORITY:** 8

(1) **PROJECT NAME:** Pleasant St and Temple St Phase I Water Mains
PROJECT STATUS: Existing in Edmunds

(2) **PROJECT DESCRIPTION AND JUSTIFICATION:**

Upgrading 5,000 feet of existing 6-inch cast iron and 8-inch asbestos-cement water main on Pleasant Street and Temple Street with new 12" cement-lined ductile iron main will improve flow capacity and substantially increase reliability of the water system. This request is for construction on Pleasant St. from just west of Belknap Rd. to Vernon St. and on Temple St. from Pleasant St. to the I-90. The project will also include new connections to side streets, valves, hydrants, and copper services to each customer's property line. The existing water mains are more than 7 decades old. The 8-inch main on Pleasant Street is beneath the curb and difficult to access for repairs. The 6-inch diameter cast iron main on Temple Street is unlined, which has led to interior tuberculation and corrosion causing decreased capacity. The construction is proposed to be combined with construction to replace sewers in the area, resulting in lower construction costs and much less disruption to the neighborhood and commuters in this busy corridor than if the projects were to be undertaken separately.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:
Updated cost estimate

(3) **PURPOSE OF PROJECT:**

X	Replace existing infrastructure
	Replace existing capital asset
	Replace existing vehicle
	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) **BUDGET REQUEST BY YEAR:**

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction	4,190,000					
e.	Equipment/Vehicles						
f.	Contingency						
g.	Other						
	TOTAL	4,190,000	-	-	-	-	-

(5) **PRIORITY:**

a.		**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) **EFFECTS ON ANNUAL OPERATING BUDGET:**

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) **PROPOSED FUNDING SOURCE(S):**
1) **Bond**
2)
3)

(10) **PROJECT OR EQUIPMENT LOCATION:**
Temple Street and Pleasant Street from Temple Street to Belknap Road

(11) **ASSET TYPE:**
Building

(7a) **POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)**

(8)	**PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)**
	Robert A. Lewis
(9)	**FINANCE DEPARTMENT NOTES:**

ENVIRONMENTAL PARTNERS
An Apex Company

October 4, 2023

Mr. Robert H. Sheldon, PE
Director, Capital Projects
Department of Public Works
Capital Improvement Program
110 Western Avenue
Framingham, MA 01702

RE: Framingham: Capital Project Planning
Pleasant Street Water and Sewer Replacement
Updated Cost Estimate

Dear Robert:

As requested, Environmental Partners Group, LLC (Environmental Partners) has updated the cost estimate for this project. The detailed cost estimate is attached, and assumes construction in 2024.

Please feel free to contact me if you have any questions or would like to discuss this project further.

Very Truly Yours,

Environmental Partners Group, LLC

Paul C. Millett

Paul C. Millett, P.E.
Senior Principal
P: (617) 657-0276
E: pcm@envpartners.com

Attached: Updated Cost Estimate

Pleasant Street Pump Station Downstream Utility Replacement
City of Framingham, MA
254-2001
90% Design Opinion of Probable Construction Cost

WATER CONSTRUCTION					
Item No.	**Description**	**Units**	**Bid Quantities**	**Unit Price**	**Extended Amount**
1	Mobilization and Demobilization (5%)	LS	1	$134,297.28	$134,297.28
2	**WATER MAINS**				
2a	12-Inch DI Water Main	LF	5,020	$250.00	$1,255,000.00
2b	10-Inch DI Water Main	LF	10	$230.00	$2,300.00
2c	8-Inch DI Water Main	LF	260	$200.00	$52,000.00
2d	6-Inch DI Water Main	LF	130	$200.00	$26,000.00
2e	Additional Fittings	LB	2,000	$5.00	$10,000.00
3	**VALVES AND HYDRANTS**				
3a	12-Inch Gate Valves and Boxes	EA	26	$5,000.00	$130,000.00
3d	6-Inch Gate Valves and Boxes	EA	11	$1,800.00	$19,800.00
3e	Hydrant Assemblies	EA	11	$7,500.00	$82,500.00
4	**WATER SERVICE TAPS AND CURB BOXES**				
4a	1-Inch Water Service Taps and Curb Boxes	EA	30	$1,000.00	$30,000.00
4b	1.5-Inch Water Service Taps and Curb Boxes	EA	2	$1,200.00	$2,400.00
4c	2-Inch Water Service Taps and Curb Boxes	EA	1	$1,400.00	$1,400.00
5	**WATER SERVICES**				
5a	1-Inch Water Services	LF	600	$100.00	$60,000.00
5b	1.5-Inch Water Services	LF	70	$120.00	$8,400.00
5c	2-Inch Water Services	LF	40	$140.00	$5,600.00
6	**TEMPORARY WATER BYPASS SYSTEM**				
6	6-Inch Temporary Water Bypass Piping	LF	440	$150.00	$66,000.00
13	**CONTAMINATED MATERIAL MANAGEMENT**				
13a	AC Pipe Removal and Disposal	LF	170	$55.00	$9,350.00
13b	Management and Disposal of Crushed AC Pipe and AC Impacted Soils	CY	50	$320.00	$16,000.00
13c	Removal and Disposal of Unforeseen Asbestos	ALLOW	0.5	$75,000.00	$37,500.00
13d	Soil Management Plans	LS	0.5	$75,000.00	$37,500.00
13e	Removal and Disposal of Background or Unregulated Soil Materials	TON	50	$20.00	$1,000.00
13f	Removal and Disposal of Impacted Materials	TON	250	$25.00	$6,250.00
13g	Removal and Disposal of Unlined Landfill Materials	TON	375	$45.00	$16,875.00
13h	Removal and Disposal of Lined Landfill Materials	TON	50	$50.00	$2,500.00
14	**REMOVAL/INSPECTION/ABANDONMENT OF UTILITIES**				
14e	Remove and Dispose of Existing Cast Iron Water Main	LF	190	$50.00	$9,500.00
15	**EARTHWORK**				
15a	Exploratory Excavation	CY	125	$34.00	$4,250.00
15b	Excavation of Unsuitable Materials Below Trench Grade	CY	125	$8.00	$1,000.00
15c	Rock Excavation	CY	50	$64.00	$3,200.00
15d	Select Fill	CY	250	$7.50	$1,875.00
16	**PAVEMENT (Water)**				
16a	4-Inch Temporary Trench Pavement	SY	2,250	$35.00	$78,750.00
16b	6-Inch Intermediate Trench Pavement	SY	2,250	$60.00	$135,000.00
16c	2-Inch Milling	SY	8,250	$8.00	$66,000.00
16d	2-Inch Overlay	SY	8,250	$20.00	$165,000.00
16e	Miscellaneous Bituminous Concrete	TONS	125	$58.00	$7,250.00
17	**RESTORATION (Water)**				
17a	Bituminous Concrete Sidewalk	SY	40	$15.00	$600.00
17b	Bituminous Concrete Curb	LF	90	$25.00	$2,250.00
17d	Remove and Reset Granite Curb	LF	180	$70.00	$12,600.00
17e	Restoration of Growth	SY	109	$106.00	$11,545.52
17f	Remove and Replace Guardrail	LF	10	$200.00	$2,000.00
17g	Remove and Replace Chain Link Fence	LF	10	$100.00	$1,000.00
18	**TRAFFIC MANAGEMENT**				
18a	Uniformed Police Officer Allowance	ALLOW	0.4	$380,000.00	$152,000.00
18b	Traffic Management	LS	0.5	$150,000.00	$75,000.00
18c	Variable Message Boards	BOARD-WEEKS	50	$225.00	$11,250.00
19	**MISCELLANEOUS**				
19b	Utility Support and Coordination	ALLOW	0.5	$50,000.00	$25,000.00
19c	Abutter Relocation	ALLOW	0.5	$10,000.00	$5,000.00
19d	For Furnishing and Placing Environmental Protection	LS	0.5	$25,000.00	$12,500.00
19e	Miscellaneous Work and Cleanup	LS	0.5	$50,000.00	$25,000.00
				Water Subtotal	**$2,820,242.80**
				Contingency (15%)	**$423,036.42**
				Engineering Services (20%)	**$564,048.56**
				Water Total (April 2022)	**$3,807,327.77**
				Water Total (October 2023) [1]	**$4,188,060.55**

October 2023

SEWER CONSTRUCTION					
Item No.	**Description**	**Units**	**Bid Quantities**	**Unit Price**	**Extended Amount**
1	Mobilization and Demobilization (5%)	LS	1	$215,855.13	$215,855.13
3	**VALVES AND HYDRANTS**				
3b	10-Inch Gate Valves and Boxes	EA	1	$4,500.00	$4,500.00
3c	8-Inch Gate Valves and Boxes	EA	12	$3,500.00	$42,000.00
7	**GRAVITY SEWER MAINS**				
7a	18-Inch SDR 35 PVC Gravity Sewer Pipe (0-ft to 12-ft Deep)	LF	1,100	$235.00	$258,500.00
7b	18-Inch SDR 35 PVC Gravity Sewer Pipe (12-ft to 18-ft Deep)	LF	50	$250.00	$12,500.00
7c	15-Inch SDR 35 PVC Gravity Sewer Pipe	LF	2,530	$225.00	$569,250.00
7d	8-Inch SDR 35 PVC Gravity Sewer Pipe	LF	50	$175.00	$8,750.00
8	**SEWER FORCE MAINS**				
8a	10-inch SDR 21 PVC Sewer Force Main	LF	1,530	$145.00	$221,850.00
8b	8-inch SDR 21 PVC Sewer Force Main	LF	50	$120.00	$6,000.00
9	**SEWER SERVICE CONNECTIONS**				
9a	6-Inch PVC Gravity Sewer Service	LF	510	$105.00	$53,550.00
10	**SEWER MANHOLES**				
10a	4-foot Diameter Sewer Manhole	VF	160	$1,000.00	$160,000.00
10b	5-foot Diameter Sewer Manhole	VF	30	$1,500.00	$45,000.00
10c	4-foot Diameter Cleanout Manhole	EA	1	$10,000.00	$10,000.00
10d	4-foot Diameter Air Release Valve Manhole	EA	1	$12,000.00	$12,000.00
10e	6-foot Diameter Overflow Manhole	EA	1	$30,000.00	$30,000.00
10f	4-foot Diameter Doghouse Manhole	EA	1	$20,000.00	$20,000.00
10g	Sewer Manhole Frame and Cover	EA	25	$950.00	$23,750.00
10h	Remove and Dispose of Existing Sewer Manhole	EA	4	$570.00	$2,280.00
11	**SEWER REHABILITATION**				
11a	10-inch Cast Iron Gravity Sewer Cleaning, Cement Lining and Access Pits	LF	310	$160.00	$49,600.00
12	**STORMWATER**				
12a	4-foot Diameter Deep Sump Catch Basin	EA	2	$6,000.00	$12,000.00
12b	12-inch HDPE Drain Pipe	LF	30	$160.00	$4,800.00
12c	Removal and Replacement of Storm Water Utilities	IN-FT	900	$15.00	$13,500.00
13	**CONTAMINATED MATERIAL MANAGEMENT**				
13a	AC Pipe Removal and Disposal	LF	170	$55.00	$9,350.00
13b	Management and Disposal of Crushed AC Pipe and AC Impacted Soils	CY	50	$320.00	$16,000.00
13c	Removal and Disposal of Unforeseen Asbestos	ALLOW	0.5	$75,000.00	$37,500.00
13d	Soil Management Plans	LS	0.5	$75,000.00	$37,500.00
13e	Removal and Disposal of Background or Unregulated Soil Materials	TON	50	$20.00	$1,000.00
13f	Removal and Disposal of Impacted Materials	TON	250	$25.00	$6,250.00
13g	Removal and Disposal of Unlined Landfill Materials	TON	375	$45.00	$16,875.00
13h	Removal and Disposal of Lined Landfill Materials	TON	50	$50.00	$2,500.00
14	**REMOVAL/INSPECTION/ABANDONMENT OF UTILITIES**				
14a	Abandon Existing Sewer, Force Main and Water Main with LDCC	CY	550	$3,000.00	$1,650,000.00
14b	Abandon Existing Structure in Place with CDF	VF	140	$150.00	$21,000.00
14c	Cleaning and CCTV Inspection of Existing Sewer Lateral	EA	2	$2,000.00	$4,000.00
14d	Cleaning and CCTV Inspection of Existing Gravity Sewer	LF	340	$10.00	$3,400.00
15	**EARTHWORK**				
15a	Exploratory Excavation	CY	125	$34.00	$4,250.00
15b	Excavation of Unsuitable Materials Below Trench Grade	CY	125	$8.00	$1,000.00
15c	Rock Excavation	CY	50	$64.00	$3,200.00
15d	Select Fill	CY	250	$7.50	$1,875.00
16	**PAVEMENT (Sewer)**				
16a	4-Inch Temporary Trench Pavement	SY	2,845	$35.00	$99,572.36
16b	6-Inch Intermediate Trench Pavement	SY	2,845	$60.00	$170,695.47
16c	2-Inch Milling	SY	8,250	$8.00	$66,000.00
16d	2-Inch Overlay	SY	8,250	$20.00	$165,000.00
16e	Miscellaneous Bituminous Concrete	TONS	125	$58.00	$7,250.00
17	**RESTORATION (Sewer)**				
17a	Bituminous Concrete Sidewalk	SY	30	$15.00	$450.00
17b	Bituminous Concrete Curb	LF	25	$25.00	$625.00
17c	Cement Concrete Wheelchair Ramp	SY	20	$100.00	$2,000.00
17b	Remove and Reset Granite Curb	LF	150	$70.00	$10,500.00
17c	Restoration of Growth	SY	139	$106.00	$14,729.76
17d	Remove and Replace Guardrail	LF	10	$200.00	$2,000.00
17e	Remove and Replace Chain Link Fence	LF	10	$100.00	$1,000.00

18	**TRAFFIC MANAGEMENT**				
18a	Uniformed Police Officer Allowance	ALLOW	0.6	$380,000.00	$228,000.00
18b	Traffic Management	LS	0.5	$150,000.00	$75,000.00
18c	Variable Message Boards	DARD-WEEI	50	$225.00	$11,250.00
19	**MISCELLANEOUS**				
19a	Clearing for Overflow Sewer	LS	1.0	$20,000.00	$20,000.00
19b	Utility Support and Coordination	ALLOW	0.5	$50,000.00	$25,000.00
19c	Abutter Relocation	ALLOW	0.5	$10,000.00	$5,000.00
19d	For Furnishing and Placing Environmental Protection	LS	0.5	$25,000.00	$12,500.00
19e	Miscellaneous Work and Cleanup	LS	0.5	$50,000.00	$25,000.00

Sewer Subtotal	**$4,532,957.71**
Contingency (15%)	**$679,943.66**
Engineering Services (20%)	**$906,591.54**
Sewer Total (April 2022)	**$6,119,492.91**
Sewer Total (October 2023) [1]	**$6,731,442.20**

Notes:

(1) Cost increase from April 2022 to October 2023 is based on 10% cost escalation.

Pleasant Street Pump Station Downstream Utility Replacement
City of Framingham, MA
254-2001
90% Design Opinion of Probable Construction Cost - Combined Water and Sewer Construction

Item No.	Description	Units	Bid Quantities	Unit Price	Extended Amount
1	Mobilization and Demobilization (5%)	LS	1	$352,254.91	$352,254.91
2	**WATER MAINS**				
2a	12-Inch DI Water Main	LF	5,020	$250.00	$1,255,000.00
2b	10-Inch DI Water Main	LF	10	$230.00	$2,300.00
2c	8-Inch DI Water Main	LF	260	$200.00	$52,000.00
2d	6-Inch DI Water Main	LF	130	$200.00	$26,000.00
2e	Additional Fittings [1]	LB	2,000	$5.00	$10,000.00
3	**VALVES AND HYDRANTS**				
3a	12-Inch Gate Valves and Boxes	EA	26	$5,000.00	$130,000.00
3b	10-Inch Gate Valves and Boxes	EA	1	$4,500.00	$4,500.00
3c	8-Inch Gate Valves and Boxes	EA	12	$3,500.00	$42,000.00
3d	6-Inch Gate Valves and Boxes	EA	11	$1,800.00	$19,800.00
3e	Hydrant Assemblies	EA	11	$7,500.00	$82,500.00
4	**WATER SERVICE TAPS AND CURB BOXES**				
4a	1-Inch Water Service Taps and Curb Boxes	EA	30	$1,000.00	$30,000.00
4b	1.5-Inch Water Service Taps and Curb Boxes	EA	2	$1,200.00	$2,400.00
4c	2-Inch Water Service Taps and Curb Boxes	EA	1	$1,400.00	$1,400.00
5	**WATER SERVICES**				
5a	1-Inch Water Services	LF	600	$100.00	$60,000.00
5b	1.5-Inch Water Services	LF	70	$120.00	$8,400.00
5c	2-Inch Water Services	LF	40	$140.00	$5,600.00
6	**TEMPORARY WATER BYPASS SYSTEM**				
6	6-Inch Temporary Water Bypass Piping	LF	440	$150.00	$66,000.00
7	**GRAVITY SEWER MAINS**				
7a	18-Inch SDR 35 PVC Gravity Sewer Pipe (0-ft to 12-ft Deep)	LF	1,030	$235.00	$242,050.00
7b	18-Inch SDR 35 PVC Gravity Sewer Pipe (12-ft to 18-ft Deep)	LF	20	$250.00	$5,000.00
7c	15-Inch SDR 35 PVC Gravity Sewer Pipe	LF	2,530	$225.00	$569,250.00
7d	8-Inch SDR 35 PVC Gravity Sewer Pipe	LF	50	$175.00	$8,750.00
8	**SEWER FORCE MAINS**				
8a	10-inch SDR 21 PVC Sewer Force Main	LF	1,530	$145.00	$221,850.00
8b	8-inch SDR 21 PVC Sewer Force Main	LF	75	$120.00	$9,000.00
8c	10-inch Epoxy Lined DI Sewer Force Main	LF	190	$200.00	$38,000.00
9	**SEWER SERVICE CONNECTIONS**				
9a	6-Inch PVC Gravity Sewer Service	LF	510	$105.00	$53,550.00
10	**SEWER MANHOLES**				
10a	4-foot Diameter Sewer Manhole	VF	170	$1,000.00	$170,000.00
10b	5-foot Diameter Sewer Manhole	VF	40	$1,500.00	$60,000.00
10c	4-foot Diameter Cleanout Manhole	EA	1	$10,000.00	$10,000.00
10d	4-foot Diameter Air Release Valve Manhole	EA	1	$12,000.00	$12,000.00
10e	6-foot Diameter Overflow Manhole	EA	1	$30,000.00	$30,000.00
10f	4-foot Diameter Doghouse Manhole	EA	1	$20,000.00	$20,000.00
10g	Sewer Manhole Frame and Cover	EA	25	$950.00	$23,750.00
10h	Remove and Dispose of Existing Sewer Manhole	EA	4	$570.00	$2,280.00
11	**SEWER REHABILITATION**				
11a	Cleaning and Structural CIPP Lining – 10-inch Sewer	LF	310	$160.00	$49,600.00
12	**STORMWATER**				
12a	4-foot Diameter Deep Sump Catch Basin	EA	2	$6,000.00	$12,000.00
12b	12-inch HDPE Drain Pipe	LF	30	$160.00	$4,800.00
12c	Removal and Replacement of Storm Water Utilities [1]	IN-FT	900	$15.00	$13,500.00
13	**CONTAMINATED MATERIAL MANAGEMENT**				
13a	AC Pipe Removal and Disposal	LF	340	$55.00	$18,700.00
13b	Management and Disposal of Crushed AC Pipe and AC Impacted Soils [1]	CY	100	$320.00	$32,000.00
13c	Removal and Disposal of Unforeseen Asbestos [1]	ALLOW	1	$75,000.00	$75,000.00
13d	Soil Management Plans	LS	1	$75,000.00	$75,000.00
13e	Removal and Disposal of Background or Unregulated Soil Materials [1]	TON	100	$20.00	$2,000.00
13f	Removal and Disposal of Impacted Materials [1]	TON	500	$25.00	$12,500.00
13g	Removal and Disposal of Unlined Landfill Materials [1]	TON	750	$45.00	$33,750.00
13h	Removal and Disposal of Lined Landfill Materials [1]	TON	100	$50.00	$5,000.00

ENVIRONMENTAL PARTNERS
An Apex Company

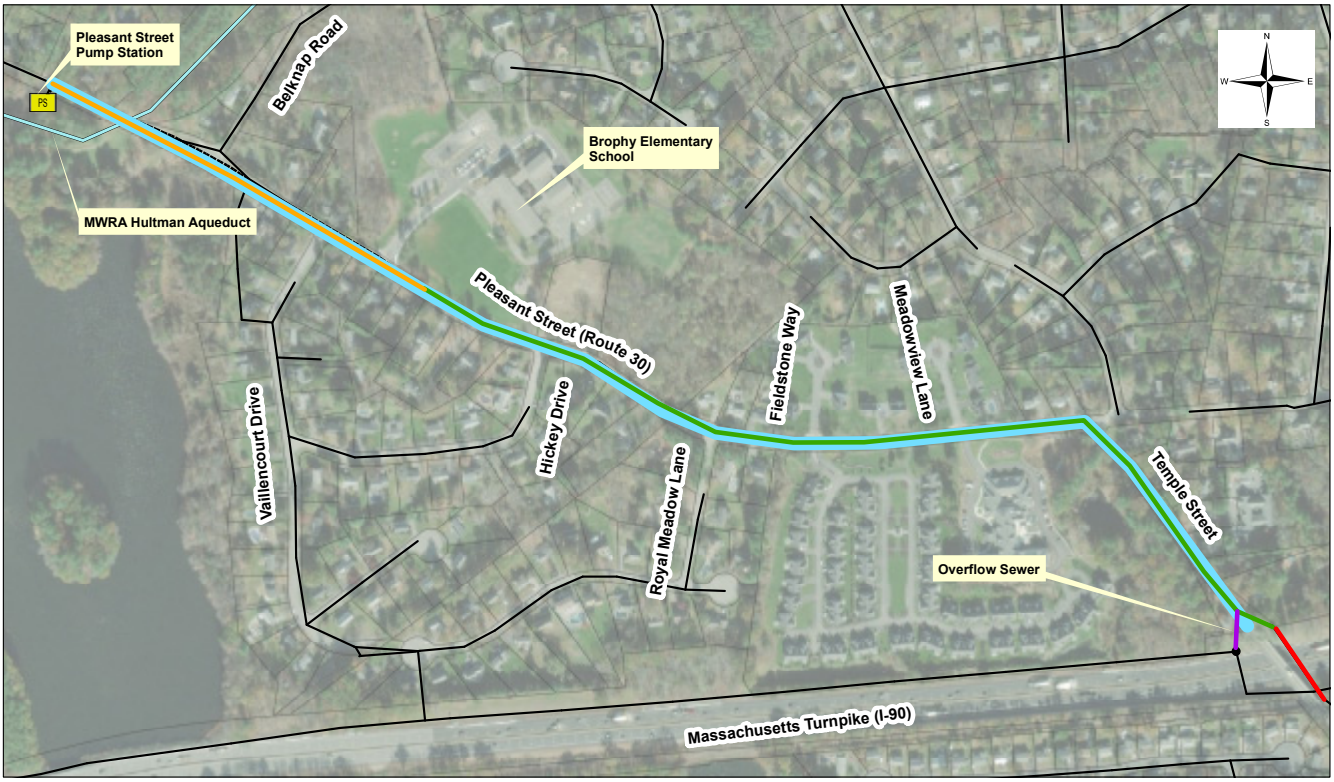
Pleasant Street Pump Station Downstream Utility Replacement
City of Framingham, MA
254-2001
90% Design Opinion of Probable Construction Cost - Combined Water and Sewer Construction

Item No.	Description	Units	Bid Quantities	Unit Price	Extended Amount
14	**REMOVAL/INSPECTION/ABANDONMENT OF UTILITIES**				
14a	Abandon Existing Sewer, Force Main and Water Main with LDCC	CY	550	$3,000.00	$1,650,000.00
14b	Abandon Existing Structure in Place with CDF	VF	140	$150.00	$21,000.00
14c	Cleaning and CCTV Inspection of Existing Sewer Lateral	EA	2	$2,000.00	$4,000.00
14d	Cleaning and CCTV Inspection of Existing Gravity Sewer	LF	340	$10.00	$3,400.00
14e	Remove and Dispose of Existing Cast Iron Water Main	LF	190	$50.00	$9,500.00
15	**EARTHWORK**				
15a	Exploratory Excavation	CY	250	$34.00	$8,500.00
15b	Excavation of Unsuitable Materials Below Trench Grade [(1)]	CY	250	$8.00	$2,000.00
15c	Rock Excavation [(1)]	CY	100	$64.00	$6,400.00
15d	Select Fill [(1)]	CY	500	$7.50	$3,750.00
16	**PAVEMENT**				
16a	4-Inch Temporary Trench Pavement	SY	5,095	$35.00	$178,322.36
16b	6-Inch Intermediate Trench Pavement	SY	5,095	$60.00	$305,695.47
16c	2-Inch Milling	SY	16,500	$8.00	$132,000.00
16d	2-Inch Overlay	SY	16,500	$20.00	$330,000.00
16e	Miscellaneous Bituminous Concrete [(1)]	TONS	250	$58.00	$14,500.00
17	**RESTORATION**				
17a	Bituminous Concrete Sidewalk	SY	70	$15.00	$1,050.00
17b	Bituminous Concrete Curb	LF	115	$25.00	$2,875.00
17c	Cement Concrete Wheelchair Ramp	SY	20	$100.00	$2,000.00
17d	Remove and Reset Granite Curb	LF	330	$70.00	$23,100.00
17e	Restoration of Growth	SY	248	$106.00	$26,275.28
17f	Remove and Replace Guardrail	LF	20	$200.00	$4,000.00
17g	Remove and Replace Chain Link Fence	LF	20	$100.00	$2,000.00
18	**TRAFFIC MANAGEMENT**				
18a	Uniformed Police Officer Allowance[(2)]	ALLOW	1	$380,000.00	$380,000.00
18b	Traffic Management	LS	1	$150,000.00	$150,000.00
18c	Variable Message Boards	BOARD-WEEKS	100	$225.00	$22,500.00
19	**MISCELLANEOUS**				
19a	Clearing for Overflow Sewer	LS	1	$20,000.00	$20,000.00
19b	Utility Support and Coordination	ALLOW	1	$50,000.00	$50,000.00
19c	Abutter Relocation	ALLOW	1	$10,000.00	$10,000.00
19d	For Furnishing and Placing Environmental Protection	LS	1	$25,000.00	$25,000.00
19e	Miscellaneous Work and Cleanup	LS	1	$50,000.00	$50,000.00
				Subtotal	**$7,397,353.01**
				Contingency (15%)	**$1,109,602.95**
				Engineering Services (20%)	**$1,479,470.60**
				Total (April 2022)	**$9,986,426.56**
				Total (October 2023)[1]	**$10,985,069.22**

Notes

1) Cost increase from April 2022 to October 2023 is based on 10% cost escalation.

ENVIRONMENTAL PARTNERS
An Apex Company



ENVIRONMENTAL PARTNERS

Legend

- Pump Station
- Parcels
- Existing Sewer
- Force Main Replacement Limits
- Water Main Replacement Limits
- Gravity Replacement Sewer Limits
- New Gravity Sewer Limits
- Gravity Sewer Rehabilitation Limits

Pleasant Street Water and Sewer Replacement - Phase I
Project Area Locus Map
Framingham, MA
June 2021

CITY OF FRAMINGHAM
CAPITAL PROJECT/EQUIPMENT REQUEST - FY2025-2034 CIP

DEPARTMENT: Z Water Enterprise **DEPARTMENT PRIORITY:** 1

(1) PROJECT NAME: Consolidated Vehicle/Equipment - Water
PROJECT STATUS: Existing in Edmunds

(2) PROJECT DESCRIPTION AND JUSTIFICATION:

Vehicle and equipment per Public Work's vehicle management and replacement schedule. The procurement and upkeep of equipment is a significant factor in providing cost-effective and reliable service for systems operation, maintenance, repair, rehabilitation and replacements. All vehicles and equipment are managed through the Fleet Department and included within a replacement schedule according to specific criteria, such as age, mileage, and major repairs needed for continued reliable service. Industry and Framingham DPW experience indicates that above those thresholds maintenance increases substantially to assure service reliability, as do major repairs, none of which provide a return on investment, and they are not sustainable with the current DPW facility and staffing. In addition to daily service for the various Divisions, nearly all vehicles and equipment are used for the Department's snow and ice management program which is particularly destructive to vehicles.

PROJECT ADDITIONS/CHANGES JUSTIFICATION:
Updated cost estimates for FY25

(3) PURPOSE OF PROJECT:

	Replace existing infrastructure
	Replace existing capital asset
X	Replace existing vehicle
X	Replace equipment
	New infrastructure
	New capital asset
	New vehicle
	New equipment
	Strategic/Comprehensive/Master plan

(4) BUDGET REQUEST BY YEAR:

		FY 25	FY 26	FY 27	FY 28	FY 29	FY 30-34
a.	Land Acquisition						
b.	Planning / Feasibility						
c.	Design						
d.	Construction						
e.	Equipment/Vehicles	754,000	445,000	445,000	225,000	265,000	
f.	Contingency						
g.	Other						
	TOTAL	754,000	445,000	445,000	225,000	265,000	-

(5) PRIORITY:

a.	X	**health and safety**	safety concern, hazardous condition, agency compliance, non-functional, etc
b.	X	**level service maintenance**	maintains City desired level of service
c.		**economic development**	adds to the City's economic vibrancy
d.		**service improvement**	new or improved service to meet demand

(6) EFFECTS ON ANNUAL OPERATING BUDGET:

	FY 25	FY 26	FY 27	FY 28	FY 29	FY30	YEARS 30-34
Personnel							
Operating							

(7) PROPOSED FUNDING SOURCE(S):
1) **Bond**
2)
3)

(10) PROJECT OR EQUIPMENT LOCATION:
N/A

(11) ASSET TYPE:
Vehicles and Equipment

(7a) POTENTIAL GRANT FUNDING SOURCE IF APPLICABLE: (List source and matching requirements)

(8) PROJECT LEAD NAME & CONTACT INFO: (ADDITIONAL PROJECT INFO AS NEEDED)

	Robert A. Lewis
(9)	**FINANCE DEPARTMENT NOTES:**

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Public Works - Fleet Replacement Program

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UNIT #	Division Assignment	IN SERVICE	YEAR	CURRENT	VIN	DESCRIPTION	AGE 2023	LIFE YRS	REPLACE DUE	2023	2024	2025	2026	2027	2028	2029
1	Admin.	Lewis, R.	2014	FORD	1FAHP2H81EG107230	FORD TAURUS	11	15	2024		$50,000					
8	Admin.	Sedewitz, W.	2015	FORD	1FAHP2H82FG112096	FORD TAURUS	8	15	2030							
64	Engineering	Norsworthy, J.	2013	FORD	1FM5K8AR2DGB28647	FORD EXPLORER	10	15	2028						$49,000.00	
74	Engineering	Tomassini, J.	2015	FORD	1FM5K8AR9FGA78512	FORD EXPLORER	8	15	2030							
80	Engineering	Johnson, E.	2011	FORD	1FAHP2FW3BG113284	FORD TAURUS	12	15	2026				$29,000.00			
801	Engineering	Marchesseault, R.	2015	NISSAN	1N4AZ0CP2FC331873	NISSAN LEAF	8	10	2025			$45,000.00				
802	Engineering - DNR	Alexandrovich, S.	2013	FORD	1FM5K8AR4DGB28648	FORD EXPLORER	10	15	2028						$49,000.00	
803	Engineering - DNR	Curran, T. & Surveyor	2013	FORD	1FM5K8B89DGB86034	FORD EXPLORER	10	15	2028						$49,000.00	
804	Engineering	Eliot, A. & Dir Permits	2013	FORD	1FAHP2H89DG216954	FORD TAURUS	10	15	2028						$29,000.00	
805	Engineering	Sheldon, R.	2015	FORD	1FMCU9G99FUB65309	FORD ESCAPE	8	15	2030							
808	Engineering	Kovar, LoCasto, Nuygen	2011	FORD		FORD ESCAPE		15	2026				$29,000.00			
812	Engineering	Hayes M.	2015	NISSAN	1N4AZ0CP9FC331966	NISSAN LEAF	8	10	2025			$45,000.00				
3	Fleet	Rousseau, J.	2014	FORD	1FM5K8D87EGB54570	FORD EXPLORER	9	15	2029							
301	Fleet		2006	FORD	1FDAF57P75EA34641	15,000 GVW 4 WD C&C W/UTILITY BODY	17	15	2021				$140,000.00			
302	Fleet		2015	FORD	1FDUF5HT0FEA89894	17,500 GVW 4WD C & C W/ SERVICE BODY	8	15	2030							
303	Fleet		2013	FORD	1FTFX1ET4DFA07924	9,200 GVW 4WD PICKUP TRK	10	15	2028						$55,000.00	
304	Fleet		2002	CAT	AT29B50137	12,000# FORK LIFT	21	25	2027						$90,000.00	
4	Highway	Ronconi, K.	2014	FORD	1FM5K8AR6EGB69025	EXPLORER-4WD UTILITY VEHICLE	9	15	2029							$60,000.00
40	Highway		2016	FORD	1FTFX1EF3GFA21439	F150-7,700 GVW 4WD P/U TRK	7	12	2028						$55,000.00	
41	Highway	Greenwood, D.	2016	FORD	1FTX1EF5GFD21340	F150 4WD P/U WITH PLOW	7	12	2028						$55,000.00	
42	Highway	Dallamora, J.	2017	FORD	1FT7X2B6BHEB49617	F250-10,000 GVW 4WD P/U TRK&PLOW	6	12	2029							$60,000.00
43	Highway	Neto, J.	2017	FORD	1FT7X2B64HEB49615	F250-10,000 GVW 4WD P/U TRK&PLOW	6	12	2029							$60,000.00
44	Highway		2019	FORD	1FDUF4HY2KEE44578	F250-10,000 GVW 4WD P/U TRK&PLOW	4	12	2031							
45	Highway	Bruce, N.	2017	FORD	1FT7X2B66HEB49616	F250-10,000 GVW 4WD P/U TRK & PLOW	6	12	2029							$60,000.00
46	Highway		2016	FORD	1FDRF3F61GEB08204	F350-11,000 GVW 4 WD C&C W/UTL BODY & PLOW	7	12	2028						$75,000.00	
48	Highway		2011	FORD	1FTFX1EF0BFB67788	F150-7,700 GVW 4WD P/U TRK	12	12	2023		$55,000.00					
401	Highway		2015	FORD	1FT7X2B6XFEB440950	F250-10,000 GVW 4WD P/U TRK & PLOW	8	12	2027			$55,000.00				
403	Highway		2012	FORD	1FT7X2B60CEC47064	F250-10,00 GVW 4WD P/U TRK & PLOW	11	12	2024				$55,000.00			
404	Highway		2012	FORD	1FT7X2B62CEA48792	F250-10,00 GVW 4WD P/U TRK & PLOW	11	12	2024			$55,000.00				
405	Highway		2012	FORD	1FT7X2B60CEA48791	F250-10,00 GVW 4WD P/U TRK & PLOW	11	12	2024				$55,000.00			
406	Highway	DeFlumere, W.	2016	FORD	1FT7W2B6XGED29652	F250-11,000 GVW 4WD P/U TRK QUAD CAB	7	12	2028						$55,000.00	
408	Highway		2019	FORD	1FDUF5HY4KDA25935	F550-15,000 GVW 4 WD C&C W/RACK BODY&PLOW	4	15	2034							
409	Highway		2008	FORD	1FDAF57R78EC18855	F550-15,000 GVW 4 WD C&C W/RACK BODY&PLOW	15	15	2023		$75,000.00					
410	Highway		2022	FORD		F550-19,500 GVW 4WD C&C W/DUMP BODY&PLOW	1	15	2037							
411	Highway		2015	FORD	1FDUF5HT2FEA89895	F550-19,500 GVW 4WD C&C W/DUMP BODY&PLOW	8	12	2027					$75,000.00		
412	Highway		2012	FORD	1FDUF5HT8CEA26618	F550-15,000 GVW 4WD C&C W/DUMP BODY&PLOW	11	12	2024		$75,000.00					
413	Highway		2017	FORD	1FDUF5HY0HEB70859	F550-15,000 GVW 4WD C&C W/DUMP BODY&PLOW	6	12	2029							$85,000.00
415	Highway		2012	FORD	1FDUF5HTXCEA26619	F550-15,000 GVW 4WD C&C W/DUMP BODY&PLOW	11	12	2024			$75,000.00				
416	Highway	Schiloski, Z.	2012	FORD	1FDUF5HT5CEC47061	F550-15,000 GVW 4WD C&C W/DUMP BODY&PLOW	11	12	2024				$75,000.00			
417	Highway		2022	FORD		F350-11,000 GVW 4 WD C&C W/UTL BODY	1	15	2037							
418	Highway	Fabricio, F.	2012	FORD	1FDRF3F62CEC47056	F350-11,000 GVW 4 WD C&C W/UTL BODY & PLOW	11	12	2024		$75,000.00					
419	Highway - Auctioned, DNR															
420	Snow & Ice		2008	MACK	1M2AX04078M003272	GU713-72,000 GVW C&C W/ SANDER&PLOW	15	20	2028						$250,000.00	
420A	Snow & Ice		2006	TARCO		6 CY MATERIAL SPREADER	17	20	2026							
421	Snow & Ice		2016	MACK	1M2AX02C8GM002276	GU712-40,000 GVW C&C W/ DUMP BODY&PLOW	7	20	2036							
421A	Snow & Ice		2015	TARCO		6 CY MATERIAL SPREADER	8	20	2035							
422	Snow & Ice		2008	MACK	1M2AX02C88M001081	GU712-40,000 GVW C&C W/ DUMP BODY&PLOW	15	20	2028							
422A	Snow & Ice		2015	TARCO		6 CY MATERIAL SPREADER	8	20	2035							
423	Snow & Ice		2011	OSHKOSH	10TBRAF30BS133446	MPT-40,000 GVW C&C W/DUMP-SAND BODY&PLOW	12	20	2031							
424	Snow & Ice		2011	OSHKOSH	10TBRAF30BS131180	MPT-40,000 GVW C&C W/DUMP-SAND BODY&PLOW	12	20	2031							
425	Snow & Ice		2008	MACK	1M2AX02C68M001080	GU712-40,000 GVW C&C W/ DUMP BODY&PLOW	15	20	2028							
425A	Snow & Ice		2008	TARCO		6 CY MATERIAL SPREADER	15	20	2028							
426	Snow & Ice		2009	MACK	1M2AX02C49M001161	GU712-40,000 GVW C&C W/ DUMP BODY&PLOW	14	20	2029							$235,000.00
426A	Snow & Ice		2015	HIGHWAY		6 CY MATERIAL SPREADER	8	20	2035							
427	Snow & Ice		2008	MACK	1M2AX02CX8M001082	GU712-40,000 GVW C&C W/ DUMP BODY&PLOW	15	20	2028							
427A	Snow & Ice		2008	TARCO		6 CY MATERIAL SPREADER	15	20	2028							
428	Snow & Ice		1997	VOLVO	4VHJAKFE1VN859417	WG42-35,000 GVW C&C W/SANDER&PLOW	26	20	2017	in progress						
428A	Snow & Ice		2004	HIGHLANDER		6 CY MATERIAL SPREADER	19	20	2024							
429	Snow & Ice		2001	VOLVO	4V5SC8JF31N310312	ACL-65,000 GVW C&C W/SANDER&PLOW	22	20	2021		$250,000.00					
430	Snow & Ice		2001	STERLING	2FZAAWBS41AJ22890	L8500-35,000 GVW C&C W/SANDER&PLOW	22	20	2021			$250,000.00				
430A	Snow & Ice		1995	HIGHWAY		6 CY MATERIAL SPREADER	28	20	2015							
431	Snow & Ice		2008	MACK	1M2AX04C68M003330	GU713-72,000 GVW C&C W/SANDER&PLOW	15	20	2028						$250,000.00	
432	Snow & Ice		2009	MACK	1M2AX04C89M006487	GU713-72,000 GVW C&C W/SANDER&PLOW	14	20	2029							

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Public Works - Fleet Replacement Program

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UNIT #	Division Assignment	IN SERVICE	YEAR	CURRENT	VIN	DESCRIPTION	AGE 2023	LIFE YRS	REPLACE DUE	2023	2024	2025	2026	2027	2028	2029
433	Snow & Ice		2005	MACK	1M2AG11C05M024681	GU713-72,000 GVW C&C W/SANDER&PLOW	18	20	2025					$250,000.00		
434	Snow & Ice		2010	MACK	1M2AX04C1AM008649	GU713-72,000 GVW C&C W/SANDER&PLOW	13	20	2030							
435	Snow & Ice		2004	MACK	1M2AG11C64M010654	GU713-72,000 GVW C&C W/SANDER&PLOW	19	20	2024				$250,000.00			
436	Snow & Ice		2004	STERLING	2FZHAZCY24AM85289	L9500-70,000 GVW C&C W/SANDER&PLOW	19	20	2024				$250,000.00			
437	Snow & Ice		2019	MACK	1M2GR3GC5KM011220	GU713-72,000 GVW C&C W/ DUMP BODY&PLOW	4	20	2039							
437A	Snow & Ice		1999	TARRANT		10 CY MATERIAL SPREADER	24	20	2019							
438	Snow & Ice		2020	MACK		GU713-70,000 GVW C&C W/ DUMP BODY&PLOW	3	15	2035							
439	Snow & Ice		2009	MACK		GU713-72,000 GVW C&C W/SANDER&PLOW	14	20	2029							$250,000.00
440	Highway / Lg. Specialty		2008	MACK		GU713-35,000 GVW C&C W/AERIAL LIFT	15	15	2023							
441	Highway / Lg. Specialty		2017	MACK		GU713-72,000 GVW C&C	6	15	2032							
441A	Highway / Lg. Specialty		1996	PRENTICE		HYDRAULIC LOG LOADER	27	20	2016							
442	Highway / Lg. Specialty		2004	STERLING		L8500-35,000 GVW C & C W/ DUMP BODY	19	15	2019							
443	Highway / Lg. Specialty		2015	MACK		72,000 GVW C&C	8	20	2035							
443A	Highway / Lg. Specialty		2015	ROTOBEC		HYDRAULIC LOG LOADER	8	20	2035							
444	Highway / Lg. Specialty		2006	MACK		GU712-40,000 GVW C&C	15	18	2024							
444A	Highway / Lg. Specialty		2019	STETCO		CATCH BASIN										
445	Highway / Lg. Specialty - Auction		2004	MACK		CH613-65,000 GVW TANDEM AXLE TRACTOR	19	20	2024							
449	Highway / Lg. Specialty		2012	MACK		VACTOR 2200	11	15	2027							
446	Highway / Sweeper		2020	BUCHER		FOUR WHEEL SWEEPER	3	6	2026				$280,000.00			
447	Highway / Sweeper		2020	ELGIN		PELICAN-THREE WHEEL SWEEPER	6	6	2026					$280,000.00		
457	Highway / Sweeper - DNR		2017	ELGIN		PELICAN-THREE WHEEL SWEEPER	6	6	2023							
450	Highway / Lg. Specialty - Auction		2016	CAT		M314-WHEELED EXCAVATOR	7	15	2031							
450A	Highway / Specialty Equip					Mini-excavator (replacement for 450)						$90,000.00				
451	Highway / Lg. Specialty		2012	VOLVO		L120-4.5 CY FRONT END LOADER & PLOW	11	15	2027							
452	Highway / Lg. Specialty		2013	VOLVO		L90-3.5 CY FRONT END LOADER & PLOW	10	15	2028							
453	Highway / Lg. Specialty		2012	BOBCAT		S770-SKID STEER W/ATTACHMENTS&PLOW	11	15	2027							
454	Highway / Lg. Specialty		2008	JOHN DEERE		L90-3.5 CY FRONT END LOADER & PLOW	15	15	2023				$300,000.00			
456	Highway / Lg. Specialty		2003	BOBCAT		S770-SKIDSTEER LOADER W/PLOW	20	15	2018			$130,000.00				
460	S & I Sidewalk		2010	CAMELION		SIDEWALK TRACTOR - TRACKED	13	15	2025					$205,000.00		
461	S & I Sidewalk		2016	VENTRAC		SIDEWALK TRACTOR - WHEELED	7	15	2031							
462	S & I Sidewalk		2019	TRACKLESS		SIDEWALK TRACTOR - TRACKLESS	4	15	2034							
463	S & I Sidewalk		2013	MULTIHOG		MULTI QUIP TRACTOR - W/ATTACHMENTS	10	15	2028						$180,000.00	
464	S & I Sidewalk		2013	CAMELEON		SIDEWALK TRACTOR - TRACKED	10	15	2028						$180,000.00	
465	S & I Sidewalk - Auction, DNR		1996	TRACKLESS		SIDEWALK TRACTOR - WHEELED	27	15	2011							
466	S & I Sidewalk		2010	BOMBARDIER		SIDEWALK TRACTOR - TRACKED	13	15	2025				$205,000.00			
467	S & I Sidewalk		2006	HOLDER		SIDEWALK TRACTOR - WHEELED	17	15	2021		$205,000.00					
468	S & I Sidewalk		2018	CAMELEON		SIDEWALK TRACTOR - TRACKED	5	15	2033							
469	S & I Sidewalk		2008	BOMBARDIER		SIDEWALK TRACTOR - TRACKED	15	15	2023			$205,000.00				
470	Highway / Specialty Equip		2019	KUBOTA		MS6 TRACTOR W/FLAIL MOWER	4	15	2034							
471	Highway / Specialty Equip		2013	WACKER		RD16-ROLLER	10	20	2033							
476	Highway / Specialty Equip		2018	ASV		RT30 TRACKED-SKID STEER		15	2033							
477	Highway / Specialty Equip		2017	ASV		RT30 TRACKED-SKID STEER		15	2032							
478	Highway / Specialty Equip		2011	DOOSAN		FORKLIFT TRUCK	12	20	2031							
479	Highway / Specialty Equip		2016	LEEBOY		ASPHALT PAVER	7	15	2031							
480	Highway / Specialty Equip		2001	MORBARK		BRUSH CHIPPER	22	15	2016							
481	Highway / Specialty Equip		2011	VEERMEER		BRUSH CHIPPER	12	15	2026							
482	Highway / Specialty Equip		2005	LEEBOY		ASPHALT PAVER	18	15	2023							
483	Highway / Specialty Equip		1994	INGERSOL		PORTABLE AIR COMPRESSOR	29	20	2014							
486	Highway / Specialty Equip		1994	INGERSOL		DD24 ROLLER	29	20	2014							
496	Highway / Specialty Equip		1989	INGERSOL		PORTABLE AIR COMPRESSOR	34	20	2009		$30,000.00					
497	Highway / Specialty Equip		1998	OSHKOSH		4 WHEEL SNOWBLOWER	25	35	2033							
499	Highway / Specialty Equip		1991	OSHKOSH		4 WHEEL SNOWBLOWER	32	35	2026							
T443	Highway / Specialty Equip -		2021	MAC		80,000 GVW 36FT TRAILER DUMP	2	20	2041							
T444	Highway / Specialty Equip -		2006	BENSON		80,000 GVW 26' DUMP TRAILER	17	20	2026							
11	Lighting & Signals	Keefe, P.	2013	FORD	1FM5H8AR6DGB28649	EXP-AWD UTILITY VEHICLE	10	15	2028						$55,000.00	
20	Lighting & Signals	Sipple, P.	2019	FORD	1FT7X2B60KEE24663	F350-10,000GVW 4WD P/U TRK&PLOW	4	15	2034							
21	Lighting & Signals		2016	FORD	1FDRF3F64CEA26607	11,000 4 WD UTILITY VEHICLE W/PLOW	7	15	2031							
22	Lighting & Signals		2015	FORD	1FD7X2B68FEB07151	11,000 4 WD UTILITY VEHICLE	8	15	2030							
230	Lighting & Signals		1995	IHC	1HTSCABN2SH680974	40' AERIAL LIFT W/SERVICE BODY	28	15	2010			$320,000.00				
232	Lighting & Signals		2015	FREIGHTLINER	1FVACXDTSFHGC4771	38' AERIAL LIFT W/SERVICE BODY	8	15	2030							
810	Engineering-DNR Auction	Cox,J	2009	FORD		FORD TAURUS										
5	Sanitation		2016	FORD	1FM5K8D80GGB13183	EXPLORER AWD-UTILITY VEHICLE	7	15	2031							
50	Sanitation		2016	FORD		F150-7,700 GVW 4WD P/U TRK	7	10	2026				$55,000.00			
51	Sanitation		2015	FORD		F250-8,800 GVW 4WD P/U TRK&PLOW	8	10	2025				$55,000.00			
52	Sanitation		2015	FORD	1FT7X2B63FEB40949	F250-8,800 GVW 4WD P/U TRK&PLOW	8	10	2025				$55,000.00			

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UNIT #	Division Assignment	IN SERVICE	YEAR	CURRENT	VIN	DESCRIPTION	AGE 2023	LIFE YRS	REPLACE DUE	2023	2024	2025	2026	2027	2028	2029
501	Sanitation		2012	FORD	1FTFX1EF8CFC41802	F150-7,700 GVW 4WD P/U TRK	11	10	2022		$55,000.00					
502	Sanitation		2012	FORD	1FT7X2B69CEA48790	F250-8,800 GVW4WD P/U TRK&PLOW	11	10	2022			$60,000.00				
505	Sanitation		2008	FORD	1FDAF56R28ED11574	15,000 GVW 4WD C&C W/RACK BODY & PLOW	15	15	2023			$70,000.00				
510	Sanitation		2015	PETERBILT	3BPZL7EX0FF294054	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023	DONE						
510-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
511	Sanitation		2015	PETERBILT	3BPZL7EX2FF294055	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023	DONE						
511-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
512	Sanitation		2015	PETERBILT	3BPZL7EX6FF294060	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023	in progress						
512-1	Sanitation		2016	NEW WAY		33CY SIDE LOAD PACKER	7	8	2024							
513	Sanitation		2016	PETERBILT	3BPZLEX7GF107300	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	7	8	2024						$465,000.00	
513-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
514	Sanitation		2015	PETERBILT	3BPZL7EX4FF294056	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023			$465,000.00				
514-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
515	Sanitation		2015	PETERBILT	3BPZL7EX6FF294057	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023				$465,000.00			
515-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
516	Sanitation		2015	PETERBILT	3BPZL7EX8FF294058	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023					$465,000.00		
516-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
517	Sanitation		2015	PETERBILT	3BPZL7EXXFF294059	72,000 GVW C & C W/SIDE LOADER PACKER & PLOW	8	8	2023		$410,000.00					
517-1	Sanitation		2015	NEW WAY		33CY SIDE LOAD PACKER	8	8	2023							
518	Sanitation		2021	LR MACK	1M2LR1GC0MM005038	33yd LABRIE AUTOMIZER ASL	2	8	2029							
519	Sanitation		2022	LR MACK	1M2LR1GC7NM005796	33yd LABRIE AUTOMIZER ASL	1	8	2030							
520	Sanitation		2022	LR MACK	1M2LR1GC7NM005797	33yd LABRIE AUTOMIZER ASL	1	8	2030							
523	Sanitation		1999	VOLVO	4VHSCLCF6XN519796	68,000 GVW C & C W/ROLLOFF FRAME	24	15	2014			$225,000.00				
523-1	Sanitation		2008	AMERICAN		30,000 GVW C & C W/ROLLOFF FRAME	15	15	2023							
521	Sanitation		2014	MACK	1M2AX04C5EM021099	72,000 GVW C & C W/ROLLOFF FRAME	9	15	2029							$250,000.00
532	Sanitation		2006	MACK	1M2AG11C06M045922	72,000 GVW REAR LOAD PACKER W/PLOW	17	15	2021							
533	Sanitation		2007	MACK	1M2AG11C97M066477	72,000 GVW REAR LOAD PACKER W/PLOW	16	15	2022							
526	Sanitation		2013	JOHN DEERE		0315-SKID STEER	10	20	2033							
551	Sanitation		2012	VOLVO	VCE0L90GE00003467	3.5 CY FRONT END LOADER & PLOW	11	15	2027					$310,000.00		
522	Sanitation		2002	KOMATSU		FORKLIFT TRUCK	21	20	2022						$70,000.00	
7	Sewer		2014	FORD	1FM5K8D80EGC26726	EXPLORER AWD-UTILITY VEHICLE	9	15	2029							$60,000.00
70	Sewer		2016	FORD	1FTFX1EF8GFD00613	F150-7,700 GVW 4WD PICKUP TRK	7	10	2026				$55,000.00			
71	Sewer		2012	FORD	1FTFX1EFXCFC41803	F150-7,700 GVW 4WD PICKUP TRK	11	10	2022		$55,000.00					
72	Sewer - DNR		2012	FORD	1FDRF3F66CEC47058	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	11	10	2022		$75,000.00					
73	Sewer	Barter	2010	FORD	1FDAF5GR0AEA92621	38' AERIAL LIFT W/SERVICE BODY	13	15	2025				$225,000.00			
75	Sewer	Bannon, T.	2019	FORD	1FDRF3F68KEG24908	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	4	10	2029							$75,000.00
76	Sewer	Kuzzi	2016	FORD	1FDRF3F63GEB08205	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	7	10	2026				$75,000.00			
77	Sewer	Patruno, J.	2016	FORD	1FDRF3F6XGEB08203	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	7	10	2026				$75,000.00			
702	Sewer - DNR		2012	FORD	1FDRF3F68CEA26612	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	11	10	2022							
703	Sewer		2012	FORD	1FTFX1EF0BFC60097	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	11	10	2022							
704	Sewer		2008	FORD	1FDSF35Y58ED97500	F350-11,000 GVW 4WD C&C UTL BODY W/PLOW	15	10	2018		$75,000.00					
706	Sewer		2019	FORD	1FDUF5HY3KDA25943	F550-15,000 GVW 4 WD C&C UTL BODY & PLOW	3	10	2029						$85,000.00	
720	Sewer		2006	FORD	1FDAF57P46EA28832	F550-17,500 GVW 2WD C&C W/RODDER&DUMP	17	20	2026				$98,000.00			
721	Sewer	Pump Stations	2012	FORD	1FDRF3F64CEC47057	F350-11,000 GVW 4 WD C&C UTL BODY & PLOW	11	10	2022			$75,000.00				
722	Sewer	Pump Stations	2012	FORD	1FDRF3F60CEC47055	F350-11,000 GVW 4 WD C&C UTL BODY & PLOW	11	10	2022			$75,000.00				
725	Sewer	Meters	2008	FORD	1FDRF3F69BEA32451	F350-11,000 GVW 4 WD C&C UTL BODY & PLOW	15	10	2018		$75,000.00					
726	Sewer		2017	FORD	1FDUF5HY1HEB49549	15,000 GVW 4WD C & C W/DUMP BODY & PLOW	6	10	2027					$85,000.00		
727	Sewer		2012	FORD	1FDUF5HT6CEA26617	15,000 GVW 4 WD C&C W/RACK BODY & PLOW	11	10	2022				$85,000.00			
728	Sewer	Pump Stations				Awaiting delivery										
732	Sewer / Lg. Specialty		2012	MACK	1M2AX02C8DM001754	40,000 GVW C & C W/ DUMP BODY & PLOW	11	15	2027					$220,000.00		
732A	Sewer / Lg. Specialty		2012	TARCO		6 CY MATERIAL SPREADER	11	15	2027							
733	Sewer / Lg. Specialty		2017	MACK	1M2AX04C0HM036226	72,000 GVW C & C W/ DUMP BODY & PLOW	6	15	2032							
733A	Sewer / Lg. Specialty		2017	TARRANT		10CY MATERIAL SPREADER	21	20	2022							
734	Sewer		2005	MACK		72,000 GVW C+C W/DUMP BODY		15	?							
738	Sewer / Lg. Specialty		2015	MACK	1M2AX04C1GM031874	72,000 C & C W/VACTOR	8	10	2025			$550,000.00				
740	Sewer / Lg. Specialty		2015	MACK	1M2AX13C5GM032520	72,000 GVW C & C W/FLUSHER	8	12	2027							
741	Sewer / Lg. Specialty		2019	MACK	1M2GR4GC5KM012552	72,000 C & C W/VACTOR	4	10	2029							$550,000.00
742	Sewer / Lg. Specialty		2017	FREIGHTLINER	4UZAARDT9HCHW2245	18,000 GVW C & C W/ CLOSED CAMERA BODY	6	15	2032							
743	Sewer / Lg. Specialty		2010	FREIGHTLINER	4UZACYDT3ACAR3612	PIPELINE INSPECTION UNIT	13	15	2025				insert quote here			
744	Sewer / Lg. Specialty		2017	MACK	1M2AX34C9HM010774	35,000 GVW C & C W/CONSTRUCTION BODY	6	10	2027					$275,000.00		
750	Sewer/Lg specialty		2022	JOHN DEERE		410L Backhoe	1	12	2034							
752	Sewer/Lg specialty - Transfer P&R		2010	JOHN DEERE		410 Backhoe	13	12	2022							

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UNIT #	Division Assignment	IN SERVICE	YEAR	CURRENT	VIN	DESCRIPTION	AGE 2023	LIFE YRS	REPLACE DUE	2023	2024	2025	2026	2027	2028	2029
777	Sewer / Sm. Specialty		2021	KUBOTA	A5KB2FDBKMG068387	RTVX900-OFFROAD UTV	2	20	2041							
785	Sewer / Sm. Specialty		2014		5FTGE1622E1002502	185KW GENERATOR	9	20	2034							
786	Sewer / Sm. Specialty		2014		5FTGE1626E1002938	185KW GENERATOR	9	20	2034							
790	Sewer / Sm. Specialty		2009	INGERSOL	4FVCABAA99U406574	PORTABLE COMPRESSOR	14	20	2029							$35,000.00
791	Sewer / Sm. Specialty - DNR		1993	INGERSOL	234880UFD328	PORTABLE COMPRESSOR	30	20	2013							
792	Sewer / Sm. Specialty		2005	STOW	SBH752265	CEMENT MIXER										
795	Sewer / Sm. Specialty		2003	GODWIN	16MPF06143D033523	6" GODWIN PUMP	20	20	2023				$110,000.00			
797	Sewer / Sm. Specialty		2003	CAT	1E9GF1522AR153926	AC GENERATOR	20	20	2023				$150,000.00			
798	Sewer / Sm. Specialty		2006	CAT		300 KW GENERATOR	17	20	2026				$150,000.00			
6	Water		2015	FORD	1FM5K8D82FGB52341	EXPLORER AWD-UTILITY VEHICLE	8	15	2030							
9	Transfer - Assessors		2014	FORD	1FAHP2H89EG156403	TAURUS-4DR SEDAN	9	15	2024							
60	Water	Norton	2022	FORD	1FTFX1EF9BFC60096	F350 PICKUP W PLOW	1	10	2032	in progress						
61	Water	Ricchiazzi	2011	FORD	1FTFX1EF9BFC60096	7,700 GVW 4WD PICKUP TRK	12	10	2021			$60,000.00				
62	Water	Marini, D.	2017	FORD	1FDRF3F6XHEB49528	11,000 GVW 4 WD C&C W/UTILITY BODY & PLOW	6	10	2027					$75,000.00		
63	Water	Shutt, W.	2017	FORD	1FDRF3F68HEB49527	11,000 GVW 4 WD C&C W/UTILITY BODY & PLOW	6	10	2027					$75,000.00		
65	Water	Lavin, J.	2017	FORD	1FDRF3F61HEB49529	11,000 GVW 4 WD C&C W/UTILITY BODY & PLOW	6	10	2027					$75,000.00		
66	Water	Danese, M.	2018	FORD	1FDRF3F68JEC83671	11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	5	10	2028						$75,000.00	
67	Water	Dunham, M.	2020	FORD	1FTBR2CG3LKB30477	TRANSIT UTILITY VAN	3	15	2035							
612	Water	Meter Ops Mgr	2019	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	4	10	2029							$80,000.00
68	Water	Gleason	2018	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	5	10	2028						$75,000.00	
601	Water		2012	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	11	10	2022		$75,000.00					
606	Water		2016	FORD		15,000 GVW 2 WD C&C W/SERVICE BODY	7	10	2026				$75,000.00			
608	Water		2012	FORD		15,000 GVW 4 WD C&C W/GATE TURNER	11	10	2022		$200,000.00					
609	Water		2016	FORD		15,000 GVW 2 WD C&C W/SERVICE BODY	7	10	2026				$75,000.00			
615	Water		2008	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	15	10	2018	in progress						
616	Water		2005	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	18	10	2015	in progress						
617	Water	Meters	2012	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	11	10	2022		$75,000.00					
618	Water		2012	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	11	10	2022				$75,000.00			
619	Water	Pump Stations	2012	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	11	10	2022		$75,000*verify received					
622	Water	Meters	2015	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	8	10	2025			$75,000.00				
623	Water		2015	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	8	10	2025			$75,000.00				
624	Water	Pump Stations	2015	FORD		11,000 GVW 4 WD C&C W/SERVICE BODY & PLOW	8	10	2025			$75,000.00				
625	Water		2015	FORD		19,500 GVW 4WD C&C W/DUMP BODY & PLOW	8	10	2025			$75,000.00				
626	Water		2018	FORD		15,000 GVW 4WD C & C W/DUMP BODY & PLOW	5	10	2028						$75,000.00	
630	Water		2017	MACK	1M2AX02CXHM002880	40,000 GVW C & C W/ DUMP BODY & PLOW	6	15	2032							
630A	Water		2003	TARRANT		6CY MATERIAL SPREADER	20	19	2022							
631	Water - Reuse as sander		2012	MACK	1M2AX04C9CM014377	72,000 GVW C & C W/ DUMP BODY & PLOW	11	15	2027					$250,000.00		
634	Water		2005	MACK	1M2AG11C95M026414	72,000 GVW C & C W/ DUMP BODY W/PLOW	18	15	2020		$250,000.00					
635	Water		2021	MACK	1M2GR3GC4MM019800	70,000 GVW C & C W/ DUMP BODY W/PLOW	2	15	2036							
639	Water - DNR		2005	MACK	1M2AG11C25M024682	70,000 GVW C & C W/ CRANE BODY	18	20	2025							
643	Water		2016	MACK	1M2AX34C5GM010432	35,000 GVW C & C W/CONSTRUCTION BODY	7	10	2026				$220,000.00			
644	Water		2011	FREIGHTLINER	1FVACXDT6BDJ56853	35,000 GVW C & C W/CONSTRUCTION BODY	12	10	2021		$220,000.00					
650	Wtr. Lg. Specialty		2014	CAT	CAT0308ETFJX01984	308E-MINI EXCAVATOR	9	15	2029							$120,000.00
651	Wtr. Lg. Specialty		2021	JOHN DEERE	1T0410LXKMF398982	410L-BACKHOE/LOADER & PLOW	2	12	2033							
653	Wtr. Lg. Specialty		2005	CAT	CJC01616	315CL-18 TON EXCAVATOR	18	20	2025			$265,000.00				
670	Wtr. Sm. Specialty		2019	WACKER	5XFLN0513CN000416	LIGHT TOWER	11	20	2039							
671	Wtr. Sm. Specialty		2019	WACKER	5XFLN0519FN005950	LIGHT TOWER	8	20	2039							
673	Wtr. Sm. Specialty		2018	TRAFFIX	4T9TA715H1M70019	TRAILER	5	20	2038							
684	Wtr. Sm. Specialty		2012	THOMPSON		12"-PUMP	11	20	2032							
686	Wtr. Sm. Specialty		2009	WACKER		RD12A-ROLLER	14	20	2029							$30,000.00
687	Wtr. Sm. Specialty		2009	INGERSOL		PORTABLE COMPRESSOR	14	20	2029							$35,000.00
688	Wtr. Sm. Specialty		2004	MAGNUM		LIGHT TOWER	19	20	2024			$19,000.00				
690	Wtr. Sm. Specialty - DNR		1997	INGERSOL		PORTABLE COMPRESSOR	26	20	2017							
693	Wtr. Sm. Specialty		2021	TRAFCON		ARROW BOARD	2	20	2041							
						POTABLE BYPASS PUMP (REPLACES OLD PUMP)						$110,000.00				
695	Wtr. Sm. Specialty		2003	MGS		6" GODWIN PUMP	20	20	2023				$110,000.00			
T682	Wtr. Sm. Specialty		2021	FALCON		PORTABLE ASPHALT HOT BOX	2	20	2041							
									Totals		**$2,380,000.00**	**$3,544,000.00**	**$3,876,000.00**	**$2,640,000.00**	**$2,321,000.00**	**$2,045,000.00**

General	$1,280,000	$2,090,000	$2,298,000	$1,585,000	$2,011,000	$1,060,000
Sewer	$280,000.00	$700,000.00	$1,023,000.00	$580,000.00	$85,000.00	$720,000.00
Water	$820,000.00	$754,000.00	$555,000.00	$475,000.00	$225,000.00	$265,000.00
Total	$2,380,000	$3,544,000	$3,876,000	$2,640,000	$2,321,000	$2,045,000

VEHICLE REPLACEMENTS 2025

WATER ENTERPRISE FUND

1. #61 2011 Ford F250 4wd pickup with plow (upgrade from F150) High hours, corroded. Replacement cost $60,000. Old unit to be auctioned.
2. #653 2005 Cat large specialty 18-ton excavator. Used for deep trench pipe replacement and repairs. Aging machine will need costly undercarriage and tracks rebuild. Reliability is an issue as machine ages. Replacement cost $265,000. Old unit to be auctioned.
3. #623 2015 Ford F350 4wd utility with plow. High hours, increasing corrosion. Used daily for service mark outs and water related issues. Replacement cost $75,000. Old unit to be auctioned.
4. #624 2015 Ford F350 4wd utility with plow. High hours, tired engine, corroded. Replacement cost $75,000. Old unit to be auctioned.
5. 1993 Gorman Rupp water pump. Need potable water pump for bypass construction and emergency drinking water pumping. Cost $110,000. Old unit auctioned.
6. #625 2015 Ford F550 4wd small dump with plow. High hours, corroded. Replacement cost $75,000. Old unit to be auctioned.
7. #622 2015 Ford 4wd F350 utility with plow. Body chassis corrosion, high hours. Replacement cost $75,000. Old unit to be auctioned.
8. #688 2004 magnum light tower. Old patched up unit. Reliability is an issue. (upgrade to LED style) Replacement cost $19,000. Old unit to auction.