

DPW Stormwater Enterprise



Town of Tewksbury FY2025-FY2029 Capital Improvements Projects/Equipment

Project Name: Drain/Stormwater System Management

Department: Public Works Dept. **First Year Submission** _____ **Priority:** _____

Description of Project: This program is an annual request to improve the Town's drainage system by repairing failed drainage structures and culverts, and the installation of new drainage facilities where existing drainage problems endanger public safety and/or private property. Staff plan, coordinate, and perform drainage improvements in conjunction with the Transportation Improvement Program to minimize disruptions and inconveniences and to reduce overall program expenditures. Additional drain repairs for incidental/minor upkeep have been included in the Town's operational budget.

The capital construction project identified for this program in Fiscal Year 2025 include improvements to the drainage system in the Van Buren Road neighborhood, BMP Retrofit Project, design of drainage system improvements at Franklin Street, Glenwood Road, School Street, and design of culvert improvements on Pinnacle Street near Dunvegan Road.

Justification/Benefit: Improving failed drainage infrastructure throughout Town eliminates a potential public health and safety hazard while efficiently and effectively managing the stormwater runoff for these areas in Town. In addition, the cost to maintain and repair infrastructure elements is substantially less compared to a complete rebuilding of a failed structure. These improvements help to maintain compliance with EPA's MS4 NPDES Phase 2 Stormwater permit to the maximum extent possible with the budget available. Flooded roadways also impact private property and pose potential safety risks.

Impact if not Completed: Potential fines and penalties from the EPA for failing to comply with the MS4 NPDES Phase 2 Stormwater Permit, loss in function of the drain systems with increased difficulty to minimize and/or eliminate flooding and damage to public and private property, danger to public travel, increased mosquito breeding causing nuisance as well as health hazards, increased exposure for infiltration into sewer collection systems, deterioration of the roadway surface accelerated by the effect of poorly drained roadways and, in some cases, culverts that are in poor condition have a high rate for failure which would cause the roadway to collapse and result in full road closure, delayed travel times, increased emergency vehicle response times, and unsafe conditions for all vehicle travel.

Timeframe: Projects are included on the attached spreadsheet inclusive of Fiscal Years 2025-2029.

Replacement Frequency: 25 years

Operating Budget Impact: Engineering Division and Highway/Forestry Division personnel time will be required to support the projects to be completed. Repairs will eliminate the cost for expensive emergency repairs, formation of potholes, scouring of the roadway edge, all of which result in the loss of production efficiency and increased supply costs.

Funding Source: Stormwater Enterprise Fund



Town of Tewksbury FY2025-FY2029 Capital Improvements Projects/Equipment

Capital Funding Request						
Fiscal Year	2025	2026	2027	2028	2029	Totals
Site Acquisition	\$0	\$0	\$0	\$0	\$0	\$0
Design/Engineer	\$175,000	\$150,000	\$50,000	\$160,000	\$60,000	\$595,000
Construction	\$250,000	\$250,000	\$600,000	\$200,000	\$600,000	\$1,900,000
Equipment	\$0	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$0	\$0	\$0	\$0	\$0
Totals	\$425,000	\$400,000	\$650,000	\$360,000	\$660,000	\$2,495,000

Basis of Cost Projection:

Cost projection based on Engineer's Estimate; does not include cost for MS4 Stormwater permit projects.

Submitted By: Kevin Hardiman, Director of Public Works **Date:** 2/1/2024

**Drain-Stormwater
5-Year Project Cost Estimates**

Budget Cost Elements	FY25	FY26	FY27	FY28	FY29	TOTAL
Site Acquisition	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Design/Eng.	\$175,000.00	\$150,000.00	\$50,000.00	\$160,000.00	\$60,000.00	\$595,000.00
Construction	\$250,000.00	\$250,000.00	\$600,000.00	\$200,000.00	\$600,000.00	\$1,900,000.00
Contingency	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL	\$425,000.00	\$400,000.00	\$650,000.00	\$360,000.00	\$660,000.00	\$2,495,000.00

Fiscal Year	Program	Location	Cost	Fund
FY25	Cal 2024-2025			
Drains				
Drainage System Improvement	Van Buren Road drainage system	Construction	\$250,000.00	SW Enterprise
			\$250,000.00	
Stormwater Compliance				
				\$0.00
Project Development and Permitting				
Drainage System Improvement Design	Franklin, School, Glenwood, and Adams area	Engineering Services	\$75,000.00	SW Enterprise
Culvert Replacement Design	Upper Pinnacle Street Culvert at Dunvegan Road	Engineering Services	\$100,000.00	SW Enterprise
			\$175,000.00	
		Total Cost FY25	\$425,000.00	
FY26	Cal 2025-2026			
Drains				
Drainage System Improvement	Franklin, School, Glenwood, Adams area	Construction	\$250,000.00	SW Enterprise
			\$250,000.00	
Stormwater Compliance				
				\$0.00
Project Development and Permitting				
Drainage System Improvement Design	Florence Avenue drainage system	Engineering Services	\$50,000.00	SW Enterprise
Culvert Replacement Design	Heather Row culvert	Engineering Services	\$100,000.00	SW Enterprise
			\$150,000.00	
		Total Cost FY26	\$400,000.00	
FY27	Cal 2026-2027			
Drains				
Drainage System Improvement	Florence Avenue drainage system	Construction	\$200,000.00	SW Enterprise
Culvert Replacement	Upper Pinnacle Street headwall at Dunvegan Road	Construction	\$400,000.00	SW Enterprise
			\$600,000.00	
Stormwater Compliance				
				\$0.00
Project Development and Permitting				
Drainage System Improvement Design	Hillcrest Road at Chandler Street	Engineering Services	\$50,000.00	SW Enterprise
			\$50,000.00	
		Total Cost FY27	\$650,000.00	
FY28	Cal 2027-2028			
Drains				
Drainage System Improvement	Hillcrest Road at Chandler Street	Construction	\$200,000.00	SW Enterprise
			\$200,000.00	
Stormwater Compliance				
				\$0.00
Project Development and Permitting				
Drainage System Improvement Design	Trull Brook Lane	Engineering Services	\$60,000.00	SW Enterprise
Headwall and Culvert Repair Design	Kendall Road (#242) Culvert Replacement	Engineering Services	\$100,000.00	SW Enterprise
			\$160,000.00	
		Total Cost FY28	\$360,000.00	
FY29	Cal 2028-2029			
Drains				
Drainage System Improvement	Location based on Stormwater Assessment and Resident concerns	Construction	\$200,000.00	SW Enterprise
Headwall and Culvert Repair	Kendall Road (#242) Culvert Replacement	Construction	\$400,000.00	SW Enterprise
			\$600,000.00	
Stormwater Compliance				
				\$0.00
Project Development and Permitting				
Drainage System Improvement Design	Location based on Stormwater Assessment and Resident concerns	Engineering Services	\$60,000.00	SW Enterprise
			\$60,000.00	
		Total Cost FY29	\$660,000.00	

Drainage Projects Spring of 2024-Spring of 2025

Project Type	Location	Description	Budget	Notes
Drainage System Improvement	Franklin, School, Glenwood, and Adams area	Drainage system improvements design	75,000	SW Enterprise Funding
Drainage System Improvement	Van Buren Road drainage system	Install stormwater collection system	250,000	SW Enterprise Funding
Culvert Replacement	Upper Pinnacle Street at Dunvegan Road	Culvert Replacement design	100,000	SW Enterprise Funding