

Capital Improvement Plan

'16/'17 thru '20/'21

Town of Yountville, California

Project # WA-0007
Project Name Regulator Pit Relocation Project



Type New Construction **Department** Water Distribution
Useful Life **Contact**
Category Project **Priority** 2 Medium
GL Account
Object Code

Status Active

Description

The regulator pit on Yountville Crossroads is outdated and needs to be upgraded and rebuilt. This pit is the tie in for the water service from The Veterans Home and Town water transmission line via Rector Reservoir. This particular regulator pit manages the northern water distribution system pressures for the town. The current location is in the northbound lane on Yountville Cross Road. This location is a hazard to access because of the location and the design of the pit which has extremely limited access and requires a confined space entry procedure.

The proposed location will be on the south east corner of Finnell at Yountville Cross Road. It will very similar in design and style to the regulator station located near the parking lot at Town Hall. That regulator pit was replaced in FY 2015/16.

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety
 Implement Key Water Related CIP Projects
 Maintain Compliance with Current and Evolving Regulations
 Implement Water Conservation Plan
 Evaluate Emerging Technologies and Methods
 Environmental Sustainability

Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total
Water Capital (60)			15,000	100,000		115,000
Total			15,000	100,000		115,000

Capital Improvement Plan

'16/'17 thru '20/'21

Town of Yountville, California

Project #	WA-0008
Project Name	Yountville Crossroads Water Main Replacement



Type	Improvement	Department	Water Distribution
Useful Life		Contact	
Category	Project	Priority	2 Medium
GL Account	60-4500-5500		
Object Code	5400-Infrastructure		
		Status	Active

Description

The water main line along Yountville Crossroads is reaching the end of its service life cycle. The water line will need to be replaced as a part of the reconstruction of Yountville Crossroad (ST-0015). This will help avoid the need to dig up and replace the water line of a newly constructed street.

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety
 Implement Key Water Related CIP Projects
 Maintain Compliance with Current and Evolving Regulations
 Implement Water Conservation Plan
 Evaluate Emerging Technologies and Methods
 Environmental Sustainability

Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total
Water Capital (60)	160,000					160,000
Total	160,000					160,000

Capital Improvement Plan
Town of Yountville, California

'16/'17 thru '20/'21

Project # WA-0009
Project Name Water Dist. System Improvements and Blow-offs



Type Maintenance **Department** Water Distribution
Useful Life **Contact**
Category Project **Priority** 2 Medium
GL Account 60-4500-5500
Object Code 5500-Utility Systems
Status Active

Description

The water system needs to be periodically flushed as part of an water industry standard best maintenance practice. Last year (FY 2015-16) The Town contracted with No Des Flushing Company. This project was to re-start the process of flushing the system while removing any residual sand from the Veterans Home Treatment Plant inadvertent release several years ago. During the course of that flushing project, staff noticed that there are several blow offs that need to be installed at dead end streets to improve water system operations and maintain water quality. This project will help keep water moving through the system and help avoid stagnation. The new blow offs, and/or hydrants will allow staff to perform low velocity flushing that is performed routinely as prescribed in a best maintenance practices to meet water industry standards.

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety.
 Maintain & Enhance the Appearance of Yountville.
 Implement Key Streets and Sidewalk CIP Projects.
 Complete Accessibility Implementation Plan.

Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total
Water Capital (60)	70,000					70,000
Total	70,000					70,000

Capital Improvement Plan

Town of Yountville, California

'16/'17 thru '20/'21

Project #	WA-2017
Project Name	Water Meter Replacement Program



Type	Maintenance	Department	Water Distribution
Useful Life	15 years	Contact	
Category	Program	Priority	1 High
GL Account	60-4500-5500		
Object Code	5500-Utility Systems		
		Status	Active

Description

This program is to replace the Water Utility system's 770 water meters. Water meters will degrade over time in most cases the meter will under-read. This loss of meter reading efficiency will result in inaccurate reads and billing. The Town has a five to twelve percent difference between the amount of water that is purchased and the amount that is sold. Some of this loss may be a result of water meters not accurately recording use data.

Every year at least 150 meters should be replaced starting with the oldest. All of the meters will be replaced over the next five to six years In FY 14/15 staff replaced 105 meters, of those 85 replaced all the commercial meters in town. The remaining 20 meters were larger meters and also our out of town customers. There were an additional 350 meters purchased that will be replaced this FY 15/16. Over the next two Fiscal years (FY 16/17 and 17/18) the remainder of the meters will be purchased and replaced.

This along with the purchase of our new smart meter reading system and software will position the town to have an efficient and effective meter and meter reading system.

Any meters installed more than 10 years ago should be inspected for accuracy and replaced as needed.

Future Projects Consist of:

Stags View, Vista Ct, and Heritage Way in 2016/17

Washington Park in 2016/17

Vintage Subdivision: FY 2017/18

Old Town Area- (West of Yount Street, heading North to Monroe Street). This was replaced in 2017/18 (review)

Toyon Terrace and Vista Subdivision in review in 2029/30

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety
 Implement Key Water Related CIP Projects
 Maintain Compliance with Current and Evolving Regulations
 Implement Water Conservation Plan
 Evaluate Emerging Technologies and Methods
 Environmental Sustainability

Prior	Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total	Future
80,000	Water Capital (60)	40,590	42,620	20,000	21,000	22,050	146,260	47,462
Total	Total	40,590	42,620	20,000	21,000	22,050	146,260	Total

Capital Improvement Plan

Town of Yountville, California

'16/'17 thru '20/'21

Project # WA-3017
Project Name Main and Service Lateral Replacement Program



Type Improvement **Department** Water Distribution
Useful Life **Contact**
Category Program **Priority** 1 High
GL Account 60-4500-5500
Object Code 5500-Utility Systems
Status Active

Description

The Town operates a Water Utility which distributes water purchased from the Veterans Home and/or produced and distributed from the Town's emergency municipal well. This is the Town's ongoing program for replacing its older water mains and service laterals that connect to individual homes and businesses throughout Town. Main and lateral replacement is based on an anticipated 50 year cycle of useful life. The Town has approximately 56,000 linear feet of water main pipelines. The Town presently has 775 service connections (laterals) in place.

Replacing water mains on a 40 to 50 year cycle allows mains to be replaced before leaks become a serious and catastrophic issue. Replacing over 56,000 feet of pipe every 40-50 years results in an average of approximately 1,260 feet of main needing to be replaced every year. Proactive maintenance and replacement also allows the Town water system to adapt to changing populations and water demands, while at the same time reducing the need for emergency repairs and customer service interruptions due to broken or leaking water mains.

This program does not include upgrading or changing services due to new building construction, changes in building uses, or the need to install fire suppression systems. Such work is paid for by the building owners and/or developers.

Annual selection of which mains and laterals will be replaced is based on the current assessment of pipe and lateral conditions in the field, age of laterals, other concurrent utility projects, local development trends, and coordination with other work such as street resurfacing.

To improve program cost effectiveness, the Town may plan work on an every two (2) year basis and complete a larger or functional replacement as a part of a larger project rather than a smaller project as project design and administration costs are similar.

There is still some Asbestos Cement Piping (ACP) and Ductile Iron Piping (DIP) remaining throughout town. The removal will need to be evaluated in conjunction with any road paving/slurry seal projects.

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety
 Implement Key Water Related CIP Projects
 Maintain Compliance with Current and Evolving Regulations
 Implement Water Conservation Plan
 Evaluate Emerging Technologies and Methods
 Environmental Sustainability

Prior	Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total
90,000	Water Capital (60)	105,000	150,000	150,000	150,000	150,000	705,000
Total	Total	105,000	150,000	150,000	150,000	150,000	705,000

Capital Improvement Plan

Town of Yountville, California

'16/'17 thru '20/'21

Project # WA-4017
Project Name No Des--Hydrant & Main Flushing



Type Improvement **Department** Water Distribution
Useful Life **Contact**
Category Program **Priority** 2 Medium
GL Account 60-4500-5500
Object Code 5500-Utility Systems
Status Active

Description

The Town operates a Water Utility which distributes water purchased from the Veterans Home and/or produced and distributed from the Town's emergency municipal well. It is common practice for water distributors to flush water out of water mains to remove silt that accumulates. This is the Town's annual program to flush water and sand from the water distribution system.

Around 2003, the Veterans Home was working at the Water Treatment Plant at Rector Reservoir and back washed filter sand into the water transmission pipe line. Sand in the transmission lines has resulted in occasional problems where sand gets into the interior plumbing of customers resulting in low or no water pressure and damage to plumbing fixtures which are paid for by the water utility enterprise fund. This company has a system to remove the sand via a truck that has onboard pumps and filters.. This system connects a mounted truck to two fire hydrants to create a closed loop running the water through a series of filters that are attached to the truck. There are pumps and motors on the truck to keep the flow of water at the desired velocity to disturb the particulates so that they could be collected. This process removed all sediment, particulate matter, and bio-film while adding disinfectant at the same time. Since this runs on a closed loop water is not wasted and all NPDES regulations were adhered too.. This was a great option to help us both identify areas where we might still have sand in the sytem. More importantly , it removed the sand while saving water.

The town also installed sand traps at both regulator pits to help catch any additional sand that could be outside of our system in the Veterans Home Transmission line. In future years this will likely be needed every other year at the most, and costs will be reduced as it will take less time to flush the system once we are sure the sand has been entirely removed.

Justification

The following Strategic Plan goals apply:
 Protecting Community Health and Safety
 Implement Key Water Related CIP Projects
 Maintain Compliance with Current and Evolving Regulations

Prior	Funding Sources	'16/'17	'17/'18	'18/'19	'19/'20	'20/'21	Total
85,000	Water Capital (60)		35,000		20,000		55,000
Total	Total		35,000		20,000		55,000