COUNTY OF SONOMA

575 ADMINISTRATION
DRIVE, ROOM 102A
SANTA ROSA, CA 95403

SUMMARY REPORT

Agenda Date: 2/9/2021

To: Board of Directors, Sonoma County Water Agency
Department or Agency Name(s): Sonoma County Water Agency
Staff Name and Phone Number: Hannah Salafia 707-524-6435
Vote Requirement: 4/5th
Supervisorial District(s): Second

Title:
Penngrove Lift Station Flood Resiliency Project - Contract Award

Recommended Action:

A) Adopt and approve the Project Manual and Drawings ("plans and specifications") entitled "Penngrove Lift Station Flood Resiliency Project". Authorize the Chair to execute the contract with Valentine Corporation for $819,369 for construction of the Penngrove Lift Station Resiliency Project, and delegate authority to the General Manager of Sonoma County Water Agency to execute Agreement and Release of Any and All Claims, if required.

B) Adopt a Resolution Authorizing Adjustments to the Board Adopted Budget for Fiscal Year 2020-2021 for the Sonoma Water General Fund for $117,200, and the Penngrove Sanitation Zone Construction Fund for $250,985 for the Penngrove Lift Station Flood Resiliency Project

(4/5th Vote Required)(Second District)

Executive Summary:
This item requests approval of a contract with Valentine Corporation for $819,369 for construction of the Penngrove Lift Station Flood Resiliency Project (Project) and associated budgetary adjustments recognizing increased available funding. This project would elevate the Lift Station's electrical equipment out of the 500-yr floodplain and would provide standby power to the station to allow operation during a storm.

Discussion:
HISTORY OF ITEM/BACKGROUND
The Penngrove Lift Station (Lift Station) was originally constructed in 1978. In 1995, the Sonoma County Board of Supervisors transferred responsibility for the Penngrove Sanitation Zone, including the Lift Station, to the Sonoma County Water Agency (Sonoma Water). The Lift Station pumps wastewater from the community of Penngrove to the City of Petaluma's wastewater collection system, which ultimately flows to City of Petaluma's treatment facilities. Since the 1990s, the Lift Station has been periodically inundated by floodwaters. The Lift Station has one of the lowest elevations in the surrounding area, making it extremely susceptible to the localized flooding.

Additionally, changes have occurred in the hydrology of the surrounding area which have caused a concurrent change in the flood frequency at the Lift Station. Since 2008 the frequency of flooding at the Lift Station has significantly increased. In the past twelve years there have been at least ten flood events that have impacted the Lift Station, with at least four events requiring emergency protective measures to shut off power in order

to protect the electrical equipment and staff that resulted in Sanitary Sewer Overflows (SSOs).

Several measures have been taken to attempt to mitigate flood vulnerabilities to the system, but these have not adequately protected the Lift Station. Originally, sandbags were used to protect the system by barricading against floodwaters from entering the electrical control room with marginal success. Even with sandbagging, water was still able to seep into the building which caused accessibility and safety issues.

In 2012 Sonoma Water constructed a low wall around the Lift Station to enhance flood protection. This has not proven to be an effective solution. Sonoma Water has also employed the use of vac trucks to pump down the wet well during events where the facility is unable to operate pump due to water intrusion into the electrical panel. The success of these efforts was limited and the solution is non-sustainable as it relies heavily on staff to manually pump down the wet well.

Flooding events continue to threaten the electrical control equipment and come within inches of inundating the electrical equipment. If the electrical control equipment is energized and the floodwaters reach the electrical equipment, this would permanently damage the equipment and present extreme safety issues, including a high risk of electrocution. Therefore, in order to prevent potential hazards to employees and the destruction of the electrical and control system, Sonoma Water continues to shut off power to the Lift Station when floodwaters reach a certain elevation as the measures described above have not been effective in preventing the intrusion of floodwater to the Lift Station, resulting in SSOs.

On October 16, 2018, the Federal Emergency Management Agency (FEMA) approved Sonoma Water's 2018 Local Hazard Mitigation Plan (Plan). Sonoma Water updates this Plan as required by FEMA on a five-year recurring schedule. The Plan identified the Penngrove Lift Station (Project) as one of several mitigation projects that could be implemented to reduce the risk of damage to or failure of the lift station and sanitation system during flood events.

In 2017, Sonoma Water applied for grant funding through the FEMA Hazard Mitigation Grant Program to flood -proof the Lift Station, and in August 2017 Sonoma Water was notified of award. FEMA initially obligated $350,266 in federal share, and in March of 2020 FEMA obligated an additional $305,920, bringing the total federal share to $656,186.

The Grant funded values are incorporated into the expended, budgeted and estimated values in the table below:

	Expended	**Budgeted**	**Estimated**
	Prior Fiscal Years	**FY20-21**	**FY21-22**
Engineering Design Services	$290,402	$120,000	
Sonoma Water Project and Grant Management, Design Review, Environmental Documents, Right-of-Way	$82,786	$29,800	$22,200
Construction		$820,000	
Construction Inspection and Contract Administration		$60,200	$90,917
Total Estimated Costs by Fiscal Year	$373,188	$1,030,000	$113,117

Total Estimated Project Cost	$1,516,305
FEMA Grant Award	$656,186
Sonoma Water Estimated Cost Share	$860,119

The Project consists of modification of the existing Penngrove Lift Station such that the facility can continue to operate during a 500 year flood. Project is located at 25 Ely Road North, Petaluma, CA 94954 in an unincorporated area of Sonoma County. The scope of work for the Project consists of two main components.

The first component of the work includes the relocation and elevation of the electrical equipment to an elevated platform outside of the existing electrical and controls building. The footprint of the existing building does not have the space or height to house the elevated electrical equipment and controls. In order to maintain working clearances and safety around the equipment, the most cost effective option is to relocate all of the electrical and controls equipment to a new elevated platform outside of the existing building. Some of the existing equipment will be reused, but a large portion of the electrical equipment will be replaced-the ratings on the equipment (indoor vs outdoor), physical layout and footprint of the equipment, and impact of the extreme flooding events on the equipment led to the decision to replace a majority of the equipment. The existing underground electrical power service from Pacific Gas and Electric (PG&E) will be relocated and adjusted to an overhead power feed in order to provide power to the equipment on the outdoor platform.

The second component of the Project entails providing an emergency power generator at the Lift Station that will allow it to operate during a power loss event. Providing standby emergency power to the Lift Station that would be controlled by an automatic transfer switch. This will maintain continuous service to the community and minimize the potential for any SSOs that are a result of storm induced power loss events. The automatic transfer switch will start the generator and transfer power without the need for onsite manual operation from staff, which will minimize risks to staff.

COMPETITIVE PROCESS, SELECTION & COST DETAIL

The Project was advertised for bids : October 1, 2020

Bids were opened: December 10, 2020

Bids for construction of said Project were received on December 10, 2020, as follows:

Terracon Constructors, Inc., Healdsburg, California	$862,556.00
Valentine Corporation, San Rafael, California	$819,369.00

The Engineer's Estimate was $800,000

The lowest responsive and responsible bid is from Valentine Corporation and is $19,369 above the Engineer's Estimate. Valentine Corporation is experienced in this type of construction and met the experience requirements.

A contractor must execute a release of claims (Document 00 65 23) before final payment but may except any unresolved claims from the release. The requested action authorizes the General Manager to approve the

release unless the contractor lists unresolved claims. In that case, County Counsel must review Document 00 65 23 prior to General Manager approval.

Construction on the Project is scheduled to begin approximately March 23, 2021, with an estimated completion date of January 12, 2022

Sonoma Water recommends the Board take the following actions:

ACTIONS

1. Adopt and approve the Project Manual and Drawings ("plans and specifications") entitled "Penngrove Lift Station Flood Resiliency Project
2. Award the contract to Valentine Corporation, for the amount of $819,369, and authorize the Chair of the Board to execute the contract.
3. Delegate to the General Manager of Sonoma Water or his designee the authority to approve design changes to the Project as may be necessary or appropriate in connection with change orders within the General Manager's authority pursuant to Resolution No. 20-0092.
4. Adopt a Resolution Authorizing Adjustments to the Board Adopted Budget for Fiscal Year 2020-2021 for the Sonoma Water General Fund for $117,200, and the Penngrove Sanitation Zone Construction Fund for $250,985 for the Penngrove Lift Station Flood Resiliency Project (4/5th Vote)

ALTERNATIVES

If this construction project is not implemented the Lift Station would not provide consistent and safe service to the community and sanitary sewer overflows during power outages or extreme flooding events would result in costly fines and potentially detrimental impacts to public health and the natural environment.

Prior Board Actions:

10/09/2018: Adopt Sonoma County Water Agency 2018 Local Hazard Mitigation Plan.

06/20/2017: Adopted Board resolution designating Sonoma Water's General Manager, Assistant General Managers, and Chief Engineer as authorized agents of the Board to apply for, accept awards, and enter into agreements for Federal and/or State disaster funds.

04/06/2017: Notice of Exemption for this project was filed

12/11/2012: Adopt Sonoma County Water Agency 2012 Local Hazard Mitigation Plan.

FISCAL SUMMARY

Expenditures	**FY 20-21 Adopted**	**FY21-22 Projected**	**FY 22-23 Projected**
Budgeted Expenses	779,015	113,117	
Additional Appropriation Requested	250,985		
Total Expenditures	**1,030,000**	**113,117**	
Funding Sources			
General Fund/WA GF	117,200		
State/Federal	590,337		
Fees/Other	322,463	113,117	

Use of Fund Balance			
Contingencies			
Total Sources	**$1,030,000**	**$113,117**	

Narrative Explanation of Fiscal Impacts:
Total project costs are estimated to be $1,516,305 with $656,186 in offsetting FEMA grant funds, and $860,119 in Sonoma Water cost share. Budgeted amount of $779,015 for remaining design, project and grant management, environmental, right-of-way, construction, and inspection during construction is available from FY2020/2021 appropriations for the Penngrove Sanitation Zone Construction Fund.

Additional appropriation of $250,985 is required, with $117,200 transferred from the Sonoma Water General Fund.

Appropriations for ongoing staff costs for project and grant management, and inspection during construction activities will be budgeted in FY2021/2022. All appropriations will be budgeted in the Penngrove Sanitation Zone Construction Fund.

Staffing Impacts:			
Position Title (Payroll Classification)	**Monthly Salary Range (A-I Step)**	**Additions (Number)**	**Deletions (Number)**

Narrative Explanation of Staffing Impacts (If Required):
None

Attachments:
Resolution

Related Items "On File" with the Clerk of the Board:
Project Manual and Drawings