



Legislation Text

File #: 2020-0830, **Version:** 1

To: Board of Directors, Sonoma Valley County Sanitation District
Department or Agency Name(s): Sonoma Valley County Sanitation District
Staff Name and Phone Number: Kent Gylfe 707-547-1977
Vote Requirement: Majority
Supervisory District(s): First

Title:

Engineering and Design Services for Seismic Retrofit of Secondary Treatment Clarifiers at Sonoma Valley County Sanitation District Project

Recommended Action:

Authorize Sonoma County Water Agency's General Manager acting on behalf of Sonoma Valley County Sanitation District to execute an agreement with Water Systems Consulting, Inc., for engineering seismic retrofit design through December 31, 2023, in the not-to-exceed amount of \$253,145. (2/3rd Vote Required) (First District)

Executive Summary:

Sonoma Valley County Sanitation District (District) completed a Natural Hazard Reliability Assessment (NHRA) of its wastewater treatment plant (WWTP) in June of 2015 and identified vulnerabilities associated with existing infrastructure and facilities, including seismic risk to the WWTP secondary clarifiers, which are critical to treatment of wastewater flows. The Seismic Retrofit of Secondary Treatment Clarifiers at Sonoma Valley County Sanitation District WWTP Project (Project) will mitigate the potential failure of the secondary clarifiers due to earthquakes by upgrading and replacing mechanical components and foundation support within the existing concrete clarifier tanks to be able to meet current seismic loading requirements and design guidance.

Discussion:

HISTORY OF ITEM/BACKGROUND

The District's WWTP is located in the unincorporated area of Schellville in Sonoma County, south of the City of Sonoma. The WWTP receives and treats wastewater from a service area of approximately 4,500 acres, covering the City of Sonoma and the unincorporated areas of Glen Ellen, Eldridge, Agua Caliente, Feters Hot Springs, Boyes Hot Springs, El Verano, Temelec, and Vineburg. The WWTP services about 20,500 equivalent single-family dwelling units, and has an average dry weather capacity of 3 million gallons per day.

The District's WWTP has two circular reinforced concrete clarifier tanks that provide a settling function in the biological treatment process. Each clarifier measures 140-feet in diameter. The NHRA has identified a potential vulnerability of the clarifiers to seismic hazards. While the concrete tanks themselves were assessed to be adequate, the NHRA identified the clarifiers' internal mechanisms as being vulnerable to seismic inertial forces and resulting hydrodynamic loading. To reduce the risk of structural failure resulting from a major earthquake, the District's Local Hazard Mitigation Plan identifies seismic retrofit of the clarifiers as a high priority mitigation action. The objective of this Project is to mitigate the potential failure of the secondary

clarifiers at the WWTP by seismic retrofit of the clarifiers' internal components.

In 2018, District applied to the California Governor's Office of Emergency Services (CalOES) for a hazard mitigation grant to design and construct the Project, pursuant to federal funding resulting from the 2017 wildfires. In December 2019, FEMA approved and funded the application as a phased project. Phase I of the Project will include engineering design, environmental impact assessment and permitting, and project management. Phase II will include construction and inspection, as well as continuing project management. In addition, grant administration costs may be reimbursed by FEMA, up to an amount of 5% of the total project costs (application pending). Project expenditures are estimated as follows:

	Budgeted	Estimated	Estimated	Estimated
	FY20-21	FY21-22	FY22-23	FY23-24
Phase I				
Engineering Design Services	\$253,145			
District Project and Grant Management, Design Review, Environmental Documents	\$105,893	\$115,867		
Phase II				
Construction		\$3,190,000		
Construction Inspection and Contract Administration		\$19,392	\$174,528	
Phase I & II				
Grant Management	\$29,238	\$37,347	\$48,190	
Total Estimated Costs by Fiscal Year	\$388,276	\$3,362,606	\$222,718	
Total Estimated Project Cost	\$3,973,600			
FEMA Design Grant Award	\$195,951			
FEMA Estimated Construction Grant Award	\$2,526,305			
FEMA Estimated Grant Management Award	\$105,572			
District Estimated Cost Share	\$1,145,772			

District staff will return to the Board to award the construction contract. The grant period of performance for both phases of the project is 36 months, at which time both design and construction activities are expected to be completed.

SELECTION PROCESS

On January 29, 2020, District issued a Request for Proposals (RFP) to the 33 firms listed in the attached table.

The RFP was also posted on Sonoma County Water Agency and County of Sonoma Purchasing Department websites as well as the Small Business Administration and Minority Business Development Agency websites.

The three firms listed below submitted Proposals.

1. HDR Engineering, Folsom, California
2. MKM and Associates, Rohnert Park, California
3. Water Systems Consulting, Inc., Folsom, California

The following criteria, listed in order of importance, were used to evaluate each firm:

- 1) Professional qualifications and demonstrated ability to perform the work
- 2) Responsiveness to the work requirements
- 3) Exceptions to standard terms in the sample agreement
- 4) Thoroughness of proposal

Water Systems Consulting (Consultant) was selected to perform the work based on demonstrated experience of the firm and key personnel with similar projects and its proposed approach to address the objectives of this Project.

SERVICES TO BE PERFORMED

Under the proposed agreement, Consultant will provide engineering seismic retrofit design services including, but not limited to, design, drafting, specification preparation, furnishing design and bid documents, and assistance during bidding and construction. Seismic retrofit design will address structural and hydrodynamic loading requirements as set forth in applicable codes and design guidance, including, but not limited to, 2019 California Building Code and ASCE 7-16 Minimum Design Loads for Buildings and Other Structures.

The cost of services will not exceed \$253,145; the term end date is December 31, 2023.

The agreement includes two options for District to extend this agreement for a period of one year each by providing written notice to Consultant thirty days in advance of the expiration date of the agreement and of the first extension option.

Prior Board Actions:

05/08/2018: 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.

12/15/2015: Adopt Sonoma Valley County Sanitation District Local Hazard Mitigation Plan.

06/04/2013: Approved agreement between Sonoma Valley County Sanitation District and GHD, Inc. for Natural Hazard Reliability Assessment services. Cost \$225,000; term end December 31, 2014.

FISCAL SUMMARY

Expenditures	FY 20-21 Adopted	FY 21-22 Projected	FY 22-23 Projected
Budgeted Expenses		\$3,362,606	\$222,718
Additional Appropriation Requested	\$388,276		
Total Expenditures	\$388,276	\$3,362,606	\$222,718
Funding Sources			

General Fund/WA GF			
State/Federal	\$222,845	\$2,560,657	\$44,326
Fees/Other	\$165,431	\$801,949	\$178,392
Use of Fund Balance			
Contingencies			
Total Sources	\$388,276	\$3,362,606	\$222,718

Narrative Explanation of Fiscal Impacts:

Additional appropriations of \$388,276 are required for FY 2020/2021. With Board approval, unused appropriations in FY 2019/2020 will be included in the FY 2020/2021 first quarter consolidated budget adjustments for the Sonoma Valley County Sanitation District Construction Fund.

FEMA grant funds will offset \$222,845 in FY 2020/2021. Remaining FY 2020/2021 cost share of \$165,431 will be from the Sonoma Valley County Sanitation District Construction Fund. Figures assume \$26,894 in FEMA funds for the pending grant management award. If funds are not awarded Sonoma Valley County Sanitation District Construction Fund will assume costs.

Appropriations for ongoing staff costs for design, environmental, and grant management activities will be budgeted in FY2021/2022. Appropriations for construction and inspection during construction, and grant management activities will be budgeted in FY 2021/2022 and FY 2022/2023. All appropriations will be budgeted in the Sonoma Valley County Sanitation District 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):

N/A

Attachments:

Attachment 1: Agreement with Water Systems Consulting, Inc.

Attachment 2: List of RFP Recipients

Related Items "On File" with the Clerk of the Board:

None