

Engineering Committee Meeting Minutes
San Juan Water District
January 20, 2023
9:00 a.m.

Committee Members: Dan Rich, Chair
Manuel Zamorano, Member

District Staff: Paul Helliker, General Manager
Tony Barela, Operations Manager
Andrew Pierson, Engineering Services Manager
Adam Larsen, Field Services Manager
Mark Hargrove, Senior Engineer
Teri Grant, Board Secretary/Administrative Assistant

Topics: Hydrant and Valve Maintenance FY 2022/23 (R)
WTP Lime Silo and Clarifier Improvements Project (W)
WTP Filter Backwash Hood Facilities Rehabilitation Project (W)
Other Engineering Matters
Public Comment

1. Hydrant and Valve Maintenance FY 2022/23 (R)

Mr. Larsen provided the committee with a staff report, which will be attached to the meeting minutes. He explained that the contract is for inspection and any repairs are completed by District employees.

The Engineering Committee recommends consideration of a motion under the Consent Calendar to award a professional services contract to Wachs Water Services (WWS) for professional services related to the inspection and maintenance of the District's hydrants and valves for the fiscal year 2022/23.

2. WTP Lime Silo and Clarifier Improvements Project (W)

Mr. Barela provided the committee with a staff report, which will be attached to the meeting minutes. The committee discussed the added safety to employees that a permanent access ladder will provide when working in the Clarifier Tanks.

The Engineering Committee recommends consideration of a motion under the Consent Calendar to award a Professional Services Contract for design services related to improvements at the Water Treatment Plant Lime Silo and Clarifier Tanks

3. WTP Filter Backwash Hood Facilities Rehabilitation Project (W)

Mr. Hargrove provided the committee with a staff report, which will be attached to the meeting minutes. He explained that there are 2 filter backwash hoods per filter basin, and when one is off-line the other takes twice as long to complete the cleaning process. In addition, he informed the committee that this was a planned project. The committee discussed the project, scope of work and contract warranties for the projected work. Mr. Pierson informed the committee that until the evaluation of the filter backwash hoods is complete, it is difficult to

determine the cost of the construction for the project since the water treatment plant is customized for the District and the equipment usually needs to be fabricated.

The Engineering Committee recommends consideration of a motion under the Consent Calendar to award a Professional Services Contract for design services related to improvements at the Water Treatment Plant Filter Backwash Hood Facilities

4. Other Engineering Matters

There were no other matters discussed.

5. Public Comment

There were no public comments.

The meeting was adjourned at 9:36 a.m.

STAFF REPORT

To: Engineering Committee
From: Adam Larsen, Field Services Manager
Date: January 20, 2023
Subject: Hydrant and Valve Maintenance FY 2022/23

RECOMMENDED ACTION

Staff requests a recommendation from the Committee to the Board of Directors for a motion to award a professional services contract to Wachs Water Services (WWS) for professional services related to the inspection and maintenance of the Districts hydrants and valves for the fiscal year 2022/23, in the amount of \$107,658 plus a 10% contingency, for a total authorized amount of \$118,424.

BACKGROUND

On November 30, 2022, the District requested proposals for professional services to complete the hydrant and valve maintenance for fiscal year 2022/23. This project involves the inspection and maintenance of approximately 296 hydrants and their isolation valves, as well as 445 mainline valves in the Districts distribution system.

One proposal was received on January 5, 2023, from the following firm:

- Wachs Water Services

Each proposal submitted included a Technical Proposal and a Cost Proposal. The Technical Proposal was evaluated based on project understanding, work plan, experience and qualifications, and other project-specific criteria. Based on review of the proposals, WWS was the top technical proposal.

Subsequent to the technical ranking, the cost proposals were reviewed. The following table summarizes the proposed costs from each company.

Consultant	Professional Services
Wachs Water Services	\$107,658

The initial Contract duration is for FY 2022/23, with three optional one-year renewals. WWS's will be evaluated to the contract requirements, quality of work, and any proposed cost increases for annual renewals.

Because of WWS's technical qualifications and proposed cost for service, WWS is the best suited for the completion of this project.

FINANCIAL CONSIDERATIONS

This maintenance project is included FY 2022/23 Budget. Project costs are 100% Retail.

STAFF REPORT

To: Engineering Committee
From: Tony Barela, Director of Operations
Date: January 20, 2023
Subject: WTP Lime Silo and Clarifier Improvements Project

RECOMMENDED ACTION

Staff requests a recommendation from the Committee for a Board motion to approve entering into a Professional Services Agreement with Water Systems Consulting, Inc. (WSC) for the WTP Lime Silo and Clarifier Improvements Project in the amount of \$163,590 with a total authorized budget of \$179,950 which includes a 10% contingency.

BACKGROUND

The WTP Lime Silo and Clarifier Improvements Project includes design for two distinct improvements at the water treatment plant:

1. Lime Silo Structural and Coating Improvements
2. Clarifier (Thickener) Access Improvements

The existing lime silo was constructed in 1979/80. The silo stores up to 99 tons of 3/8" Quicklime (calcium oxide). The slurry is added to the treated water from the WTP to adjust the pH, which in turn assists with corrosion protection within the Wholesale and Retail Distribution Systems. In 2020, the District completed a structural evaluation of the silo to determine if there were any issues with the existing facility. The analysis included a review of the coating and possible corrosion and a review of the silo anchor system. The report concluded that the number of anchors around the base of the silo needed to be doubled in order to meet current seismic code, that corrosion along the walls were minimal, and that the tank should be recoated. The proposed project includes the design of additional anchors around the base of the silo and bid documents to recoat the tank. Replacement of aging equipment on the tank and other miscellaneous appearances will also be included in the design.

The second project is the design of access improvements into three (3) clarifiers at the District's WTP. The tanks are part of the WTP solids handling process. Multiple times a year, District staff enter the tanks to conduct inspections, make repairs, etc. Currently, this entry occurs from the side of the tank via a portable ladder that is tied off to railing, etc. The goal of the project is to construct permanent safe access into each tank. This will likely include structural analysis of the overhead rake system bridge to account for the additional load of the ladder system.

STATUS

On December 19, 2022, the District issued an RFP to eight (8) qualified engineering design firms requesting proposals for the planned Project. Two firms attended the mandatory pre-proposal meeting on January 3, 2023, and two (2) proposals were received on January 17, 2023.

The Technical Proposals were discussed and ranked by the review team. Subsequent to the technical ranking, the Cost Proposals were opened and reviewed. The following table summarizes the proposed costs from each firm for the design tasks as outlined in the RFP.

Consulting Firm	Proposed Cost
Water Systems Consulting, Inc.	\$163,590
Kennedy/Jenks Consultants, Inc.	\$161,575

WSC's proposal was ranked highest during the technical review. The cost difference between the two consultant proposals were not enough to change the recommendation from the technical review team. WSC is the recommended consultant to complete the project.

BUDGET IMPACT

The Project was included in the District's approved Wholesale CIP budget for Fiscal Year 2022-2023.

STAFF REPORT

To: Engineering Committee
From: Mark Hargrove, Senior Engineer
Date: January 20, 2023
Subject: WTP Filter Backwash Hood Facilities Rehabilitation, Engineering Services

RECOMMENDED ACTION

Staff requests a recommendation from the Committee for a Board motion to approve a Professional Services Agreement with Kennedy Jenks (KJ) to provide professional engineering services for the Water Treatment Plant (WTP) Filter Backwash Hood Facilities Rehabilitation Project (Project) in the amount of \$359,210 with a total authorized budget of \$395,131 which includes a 10% contingency.

BACKGROUND

The WTP filter basins, which included two filter backwash hood facilities and a track and rail system running along the filter basins, were completed in 1983. Two additional filter backwash hood facilities (one in each basin) were added in 2001. Each filter backwash hood facility includes a backwash hood (including injector assemblies), bridge structure, bridge drive assembly, operations deck, pump house, deck drive assembly, backwash pump and piping, backwash trough, surface wash pump and piping, hydraulic system, exhaust fan and heater, electrical, instrumentation, controls and several other components. The original 1983 filter backwash hoods facilities and filter basin the track and rail system, have reached the end of their useful life and have numerous deficiencies that either require rehabilitation or replacement. Deficiencies include the corrosion of the iron and steel materials (backwash hoods, piping, valves, couplings, track, rails, structural beams, etc.), availability of parts for existing equipment, and insufficient access and working space within pump house.

CURRENT STATUS

On November 10, 2022, the District issued an RFP requesting proposals for professional engineering services for the evaluation and design of improvements to the northwest and southwest filter backwash hoods at the WTP. One (1) firm submitted a proposal on January 18, 2023. The Technical Proposal was reviewed by staff and is in conformance with the requirements of the RFP. Subsequent to the technical ranking, the Cost Proposal was opened and reviewed. The following table list the proposal total amount from KJ.

Consultant	Proposal Total Amount
Kennedy Jenks	\$359,210.00

The total amount proposed by KJ appears reasonable and in line with the requested in the RFP.

FINANCIAL CONSIDERATIONS

The Project was included in the District's approved Wholesale CIP budget in FY 22/23. We anticipate spending \$150,000 this fiscal year, and the remaining engineering services costs will be included in Wholesale CIP budget for FY 23/24.