



WEST VALLEY WATER DISTRICT
855 W. Base Line Road, Rialto, CA 92376
PH: (909) 875-1804 FAX: (909) 875-1849

**ENGINEERING, OPERATIONS AND PLANNING COMMITTEE MEETING
AGENDA**

SATURDAY, FEBRUARY 17, 2024 - 8:30 AM

NOTICE IS HEREBY GIVEN that West Valley Water District has called a meeting of the Engineering, Operations and Planning Committee to meet in the Administrative Conference Room, 855 W. Base Line Road, Rialto, CA 92376.

BOARD OF DIRECTORS

**President Gregory Young, Chair
Director Angela Garcia**

Members of the public may attend the meeting in person at 855 W. Base Line Road, Rialto, CA 92376, or you may join the meeting using Zoom by clicking this link: <https://us02web.zoom.us/j/8402937790>. Public comment may be submitted via Zoom, by telephone by calling the following number and access code: Dial: (888) 475-4499, Access Code: 840-293-7790, or via email to administration@wvwd.org.

If you require additional assistance, please contact administration@wvwd.org.

I. CALL TO ORDER

II. PUBLIC PARTICIPATION

The public may address the Board on matters within its jurisdiction. Speakers are requested to keep their comments to no more than three (3) minutes. However, the Board of Directors is prohibited by State Law to take action on items not included on the printed agenda.

III. DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee
2. I-10 Fwy and Cedar Avenue Interchange Improvement Project Utility Agreement No. 24573 with San Bernardino County Transportation Authority.
3. Approve Professional Engineering Services Amendment for the I-10 Fwy and Cedar Avenue Interchange Improvement Project with Michael Baker International.
4. Rialto Well 6 Rehabilitation.
5. Roemer Facility Tour

IV. ADJOURN

DECLARATION OF POSTING:

I declare under penalty of perjury, that I am employed by the West Valley Water District and posted the foregoing Engineering, Operations and Planning Committee Agenda at the District Offices on February 13, 2024.

Elvia Dominguez

Elvia Dominguez, Board Secretary



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: February 17, 2024
TO: Engineering, Operations and Planning Committee
FROM: Linda Jadeski, Assistant General Manager
SUBJECT: I-10 FWY AND CEDAR AVENUE INTERCHANGE IMPROVEMENT
 PROJECT UTILITY AGREEMENT NO. 24573 WITH SAN BERNARDINO
 COUNTY TRANSPORTATION AUTHORITY

MEETING HISTORY:

02/17/24 Engineering, Operations and Planning Committee

BACKGROUND:

The I-10 Fwy/Cedar Avenue Interchange Improvement Project is required by the San Bernardino County Transportation Authority (“SBCTA”) and San Bernardino County, in cooperation with the California Department of Transportation and the Federal Highway Administration, to reduce traffic congestion and improve the I-10 Fwy/Cedar Avenue interchange in the unincorporated community of Bloomington. The Project limits are on Cedar Avenue between Bloomington Avenue and Orange Street. The proposed Project will widen the Cedar Avenue Overcrossing Bridge, Union Pacific Railroad/Cedar Avenue Overhead Bridge, Cedar Avenue, and modify the existing entrance and exit ramps to improve the turning maneuverability and storage capacity. West Valley Water District (“District”) has waterlines within the project area that will be affected and need to be relocated. The District has prior rights and has an existing agreement with the State of California. Attached as **Exhibit A** is the I-10 Fwy/Cedar Avenue Interchange Improvement Project Exhibit.

On March 10, 2021, the District entered into Utility Agreement No. 24753 (“Utility Agreement”) with SBCTA for the I-10 Fwy/Cedar Avenue Interchange Improvement Project. This agreement specifies the terms and conditions under which the project is to be constructed, operated, and maintained as well as the financial obligations between SBCTA and the District.

DISCUSSION:

As we move into the construction phase of the I-10 Cedar Avenue Interchange Improvement Project, it is now time for Phases II and III of the Project to proceed. The Utility Agreement, that was executed by both parties, takes into account the improvements and betterment work in Phases II and III which will benefit the District. The improvements and betterment Work for Phases II and III include the waterline design plans and specifications, construction management, inspection services, removal of asbestos pipes, and construction of pipelines and appurtenances. SBCTA is the contracting entity for the entire I-10 Fwy/Cedar Avenue Interchange Improvement Project for

which the District's betterment improvements are included. Therefore, now is the time to seek Board approval for funding to reimburse SBCTA for the work to be done in Phases II and III.

FISCAL IMPACT:

The cost for the improvements and betterment work of the District facilities is \$292,139.00. This item is included in the Fiscal Year 2023/24 Capital Improvement Budget under W19055 I-10 Cedar Avenue Interchange Project. Sufficient funds are available.

STAFF RECOMMENDATION:

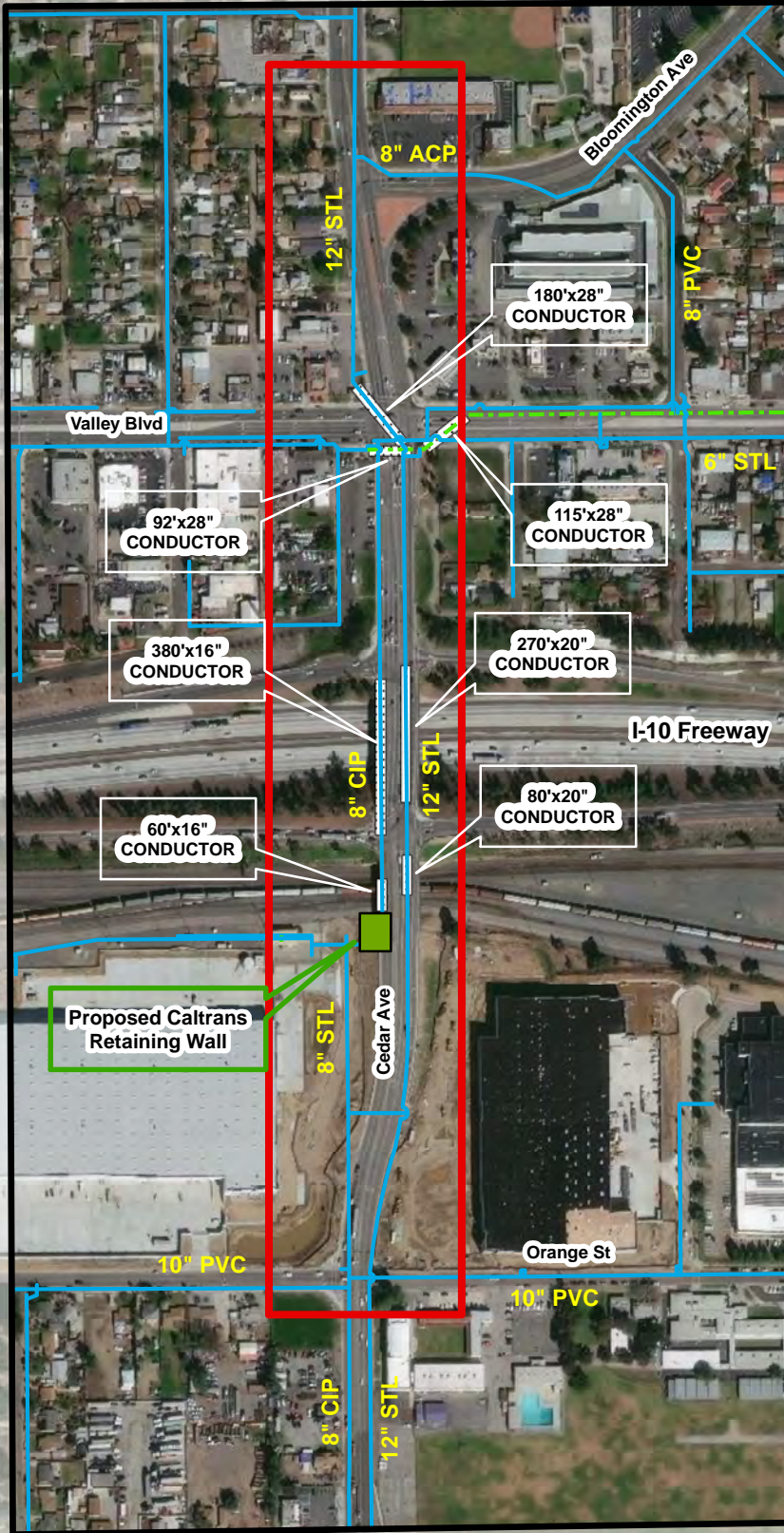
Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve the funds to cover the improvements and betterment work in the amount of \$292,139.00 for the I-10 Fwy/Cedar Avenue Interchange Improvement Project; and
2. Authorize the General Manager to execute the necessary documents.

ATTACHMENT(S):

1. Exhibit A - I-10 Cedar Avenue Interchange Improvement Project Exhibit

EXHIBIT A



Legend

- Distribution Main
- - - Transmission Main
- Conductor
- Project Location
- Project Zone
- WWWD Boundary

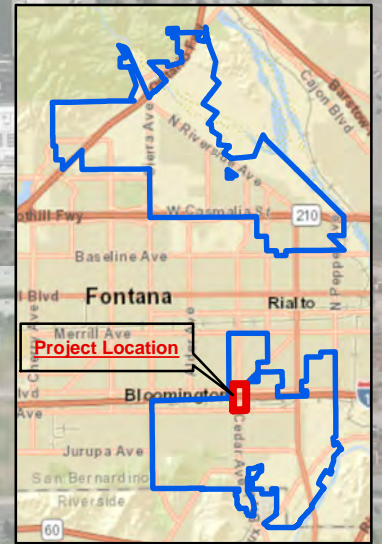


Exhibit A Project # W19055



I-10 Cedar Avenue Interchange Improvement Project

0 200 400



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: February 17, 2024
TO: Engineering, Operations and Planning Committee
FROM: Linda Jadeski, Assistant General Manager
SUBJECT: APPROVE PROFESSIONAL ENGINEERING SERVICES AMENDMENT FOR THE I-10 FWY AND CEDAR AVENUE INTERCHANGE IMPROVEMENT PROJECT WITH MICHAEL BAKER INTERNATIONAL

MEETING HISTORY:

02/17/24 Engineering, Operations and Planning Committee

BACKGROUND:

The I-10 Fwy/Cedar Avenue Interchange Improvement Project is required by the San Bernardino County Transportation Authority (“SBCTA”) and San Bernardino County, in cooperation with the California Department of Transportation and the Federal Highway Administration, to reduce traffic congestion and improve the I-10/Cedar Avenue interchange in the unincorporated community of Bloomington. The Project limits are on Cedar Avenue between Bloomington Avenue and Orange Street. The proposed Project will widen the Cedar Avenue Overcrossing Bridge, Union Pacific Railroad/Cedar Avenue Overhead Bridge, Cedar Avenue, and modify the existing entrance and exit ramps to improve the turning maneuverability and storage capacity. West Valley Water District (“District”) has waterlines within the project area that will be affected and need to be relocated. The District has prior rights and has an existing agreement with the State of California.

On October 15, 2020, the District entered into an Agreement with Michael Baker International (“MBI”) for the Development of Construction Bid Documents for Water Main Replacement, Construction Management, and Inspection Services for the I-10 Fwy/Cedar Avenue Interchange Improvement Project. Since their contract was established, MBI has successfully conducted the scope of work and provided deliverables as stated in the contract.

DISCUSSION:

On December 18, 2023, MBI submitted a proposal for additional services and rate increase related to the I-10 Fwy/Cedar Avenue Interchange Improvement Project. The additional design services for Phases I, II, and III include additional construction management support due to SBCTA extended schedule, additional engineering support during construction request for information, and an increase in labor rates. The construction start date was delayed approximately two (2) years and as a result, the rates provided in the original proposal did not include efforts that were far beyond the

timeframe suggested in the Request for Proposal. Attached as **Exhibit A** is a copy of the proposal received by MBI to cover the cost of the additional work.

FISCAL IMPACT:

The cost to perform the additional services for the I-10 Fwy/Cedar Avenue Interchange Improvement Project as proposed by MBI is \$169,190.50. Of this amount, SBCTA will reimburse the District \$138,118.50 for Phase I and Phase II and the District will fund \$31,702.00 for Phase III. This item is included in the Fiscal Year 2023/24 Capital Improvement Budget under the W19055 I-10 Cedar Avenue Interchange Project. Sufficient funds are available.

STAFF RECOMMENDATION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve the proposal with MBI in the amount of \$169,190.50 for the I-10 Fwy/Cedar Avenue Interchange Improvement Project; and
2. Authorize the General Manager to execute the necessary documents.

ATTACHMENT(S):

1. Exhibit A - Proposal with Michael Baker International

EXHIBIT A

Michael Baker*We Make a Difference***I N T E R N A T I O N A L**

December 18, 2023

Rosa M. Gutierrez, P.E.
Senior Engineer
WEST VALLEY WATER DISTRICT

VIA E-MAIL

Subject: Subject: Amendment No. 4 for Task Order No. 1, I-10 Cedar Avenue Interchange Improvements, Project No. W19055

Dear Ms. Gutierrez:

The focus of this letter is for your approval of Amendment No. 4 for Michael Baker's additional services and rate increases relating to the Cedar Avenue Interchange Improvements. These represent work items that are beyond the original scope and fee provided in the original project proposal submitted to the District on October 1st, 2020.

Mr. Patrick Hanify and Mr. Aaron Singer will continue their roles on this important assignment. We have requested \$169,190.50 based upon the effort described. The scope of effort has been provided in Exhibit 'A' and estimated fee has been provided in Exhibit 'B'.

The detailed breakdown of each task including hourly rates is provided in the attached Fee Table. Should you have any questions, please contact Patrick Hanify by phone at: (760) 267-6389; or via e-mail: phanify@mbakerintl.com

We appreciate this opportunity to continue to provide services for this critical project.

Sincerely,



Patrick Hanify, PE, QSD/P, CCM
Construction Services
phanify@mbakerintl.com
760-267-6389

EXHIBIT “A” SCOPE

Amendment No. 4 for Task Order No. 1, I-10 Cedar Avenue Interchange Improvements, Project No. W19055

SCOPE OF SERVICES:

Task 4-1: Additional Construction Management Support Due to Extended Schedule

The RFP released in September of 2020, indicated that construction was to begin in August of 2021 and occur for 180 days. The RFP also noted to assume fourteen (14) bi-weekly progress meetings. The Construction Manager (CM) for SBCTA is holding weekly progress meetings and it has become apparent that attending these meetings is the only way we can obtain information related to the pipeline work and to relay any information about the project to the prime contractor, SBCTA or their consultants. We have assumed the attendance to a total of fifty (50) such meetings combined for all Michael Baker Staff including the Supervision staff through our Construction Management team. Additionally, the coordination effort with SBCTA's Consultant CM firm has been much more involved than we anticipated. Also updated with this request is additional hours for inspection and Supervision through our Construction Management team for Phase III. While we estimate that there are enough hours between the three phases combined, we have already exhausted the 40 estimated hours with the initial piping already installed and the potholing. We have estimated an additional 120 hours of remaining inspection effort as it is unclear at this time what the potential schedule is and their progress to date would suggest that shutdowns, testing, and appurtenances will not be as efficient as previously estimated. For Construction Management we are estimating, up to 3 separate meetings (1 for each connection), coordination with WVWD Staff for this work and supervision of the inspector and assisting with issues in the field as they arise. Work will be billed at T&M until the work in this phase is completed, or the budget has been expended. Including transferring labor between contract tasks for this phase as needed.

The estimated effort has been divided among the three phases. Nearly all work to date have been performed in Phase 2 and nearly all meetings to date have focused on Phase I or II. Standard Progress meetings are assumed to be part of Phase I and II as they are conducted by the Prime and SBCTA's consultant. Non-progress meetings have been added for Phase III as noted above.

Task 4-2: Additional Engineering Support During Construction - Submittals

The contractor has submitted 26 submittals to date and have yet to receive all the materials needed to complete the pipeline work and or material impacts as a result of any modifications needed as a result of previously performed or yet to be completed potholing. The proposal this project stated the assumed submittal total was 15 submittals. Not only has the volume of submittals exceeded our estimate but the time needed to provided responses to multiple submittals, including phone calls with WSP staff, prime contractor staff, and the pipeline subcontractor staff. The contractor has also submitted several unlisted deviations and/or “or equals” for the work which increase the estimated effort to complete these reviews. Additionally, the contractor's procuring materials and proceeding with work prior to completing potholing has further complicated material reviews and leading to review of materials that may not be incorporated into the work cause resubmittal and rereviews. Also impacting this effort has been jurisdictional agencies reaching out to Michael Baker staff to provide services outside of the scope of work and the project communication protocols.

We anticipate another 4 submittals for the remaining materials and have included estimates for this effort. Please note, this effort does not include Submittals that will require any revision efforts or separate meetings. As noted above, due to the lack of completed potholing on the part of the Contractor or their pipeline subcontractor and the quality of the data received to date, any future revision efforts or special meetings related to design will need to be evaluated and may require additional costs.

The estimated effort has been divided among the three phases. We are only expecting 2 submittals for Phase III based upon how the contractor has currently chosen to provide submittals. No submittals to date have been for materials exclusively for Phase III. If Michael Baker determines that additional costs are necessary, a separate request will be provided and written approval will be required prior to proceeding.

Task 4-3: Additional Engineering Support During Construction - RFI's

The contractor has submitted 8 RFI's to date and while our proposal assumed 10, similar the submittals, the time needed to provided responses to multiple RFI's has exceeded the proposed effort of 1 hour per RFI, this additional effort has included separate and special meetings, phone calls and other communications with WSP staff, prime contractor staff, and the pipeline subcontractor staff and design modifications. Once the revision efforts are completed for RFI 98.1, there will be no additional hours available for any future RFI's and in order to try and not impact construction we have assumed another three (5) RFI's at two (2) hours per RFI (One for each Phase I and II and three for Phase III).

Please note, this effort does not include RFI's that will require any revision efforts or meetings. As noted above due to the lack of completed potholing on the part of the Contractor or their pipeline subcontractor and the quality of the data received to date, any future revision efforts or meetings will need to be evaluated and may require additional costs. If Michael Baker determines that additional costs are necessary, a separate request will be provided, and written approval will be required prior to proceeding.

The estimated effort has been divided among the three phases as noted above.

Task 4-4: Increase in Labor Rates (All)

The RFP released in September of 2020, indicated that construction was to begin in August of 2021. The work is now not scheduled to begin until summer of 2023 and extend into 2025. As a result, the rates provided in the proposal did not include efforts that far beyond the timeframe suggested in the RFP and we respectfully request an increase to those rates for the Construction Management and Inspection tasks of the contract.

The hours have been divided among the three phases.

ASSUMPTIONS:

- Work will be billed at T&M until the project is completed, or the budget has been expended. Including transferring labor between contract tasks as needed, no labor or costs will be transferred to any other phase without authorization from WVWD.
- Fees related to Permits and Material/Compaction Testing/Inspection will be provided by others.
- Other Direct Costs (ODC's) to be billed at cost +10% which includes mileage at the current IRS rates, printing and other project related direct costs, any unutilized ODC costs can be transferred to labor costs should it become necessary.
- It is not anticipated however, if needed, overtime rates will be at the rates shown above x 1.5 and double time x 2.0
- If special shift work is incorporated into the work the Construction inspector will be billed at an additional \$15/hr.
- For personnel types not shown, if needed, will be billed at the rates on the standard rate sheet for the year in which the agreement is executed, it is understood that additional personnel will need to be authorized by GSWC prior to their engagement.
- If work should extend beyond June 30, 2025. We will increase the rates provided by 10% per year.
- Partial approval of this request could impact effort on other tasks and Michael Baker reserves the right to seek additional compensation should scope be reduced or changed leading to increased effort in other tasks.

EXCLUSIONS:

- Material/Compaction Testing Services
- Source Inspection/Witness Testing
- Utility potholing
- Additional Design
- Permit Procurement and/or Fees
- Hazardous waste investigations and management
- All other work not specifically in this scope of services



EXHIBIT B COMPENSATION

**West Valley Water District
Amendment No. 4 for Task Order No. 1, I-10 Cedar Avenue Interchange Improvements,
Project No. W19055**

Michael Baker

INTERNATIONAL

TASKS	Approximate Person Hours								Total Est. Hours	Michael Baker Labor Cost	Direct Cost	Total Estimated Fee	
	Structural Manager	Structural Engineer	Senior Engineer	Project Engineer	CM / PM	Civil Inspector	Field Engineer	Admin Support					
Rates	\$ 265.00	\$ 245.00	\$ 215.00	\$ 165.00	\$ 225.00	\$ 165.00	\$ 165.00	\$ 95.00					
Task 4.1 - Additional Construction Management Support													
Construction Management Ph I						20		40		60	\$ 11,100	\$ -	\$ 11,100
Construction Management Ph II							100	160		260	\$ 48,900	\$ -	\$ 48,900
Construction Management Ph III						16	120	16		152	\$ 26,040	\$ 750	\$ 26,790
Subtotal Task 4.1 Amount:	0	0	0	0	0	136	120	216	0	472	\$ 86,040	\$ 750	\$ 86,790
Task 4.2 - Additional Engineering Support During Construction - Submittals													
Engineering Support Ph I	1.5			20	16			18		55.5	\$ 10,268	\$ -	\$ 10,268
Engineering Support Ph II				5	10			8		23	\$ 4,395	\$ -	\$ 4,395
Engineering Support Ph III					2			2		4	\$ 780	\$ -	\$ 780
Subtotal Task 4.2 Amount:	1.5	0	0	25	28	0	0	28	0	82.5	\$ 15,443	\$ -	\$ 15,443
Task 4.3 - Additional Engineering Support During Construction - RFI's													
Engineering Support Ph I					2					2	\$ 450	\$ -	\$ 450
Engineering Support Ph II					2					2	\$ 450	\$ -	\$ 450
Engineering Support Ph III					3			3		6	\$ 1,170	\$ -	\$ 1,170
Subtotal Task 4.3 Amount:	0	0	0	0	2	0	0	0	0	10	\$ 2,070	\$ -	\$ 2,070
TOTAL FOR PH I TASKS 4.1-4.3 Hours Only	1.5	0	0	20	38	0	0	58	0	117.5			
TOTAL FOR PH II TASKS 4.1-4.3 Hours Only	0	0	0	5	112	0	0	168	0	285			
TOTAL FOR PH III TASKS 4.1-4.3 Hours Only	0	0	0	0	21	120	0	21	0	162			
TOTAL FOR TASKS 4.1-4.3 Hours Only	1.5	0	0	25	166	120	0	244	0	556.5			
TASKS	Approximate Person Hours								Total Est. Hours	Michael Baker Labor Cost	Direct Cost	Total Estimated Fee	
	Structural Manager	Structural Engineer	Senior Engineer	Project Engineer	CM / PM	Civil Inspector	Field Engineer	Admin Support					
Rates (Increase Only)	\$ 20.00	\$ 20.00	\$ 20.00	\$ 165.00	\$ 47.00	\$ 50.00	\$ 40.00	\$ 25.00					
Task 4.4 - Increase In Labor Rates for Original Task 2 an 3 Scopes													
Rate Adjustments Ph I	0	10		0	113	624	0	34		781	\$ 37,561	\$ -	\$ 37,561
Rate Adjustments Ph II		6			75	416		22		519	\$ 24,995	\$ -	\$ 24,995
Rate Adjustments Ph III					6	40		2		48	\$ 2,332	\$ -	\$ 2,332
Subtotal Task 4.4 Amount:	0	16	0	0	194	1080	0	58	0	1348	\$ 64,888	\$ -	\$ 64,888
TOTAL FOR PH I TASKS 4.1-4.4 \$ Only											\$ 59,378.50		
TOTAL FOR PH II TASKS 4.1-4.4 \$ Only											\$ 78,740.00		
TOTAL FOR PH III TASKS 4.1-4.4 \$ Only											\$ 31,072.00		
TOTAL FOR TASKS 4.1-4.4 \$ Only											\$ 168,440.50	\$ 750.00	\$ 169,190.50



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: February 17, 2024
TO: Engineering, Operations and Planning Committee
FROM: Joanne Chan, Director of Operations
SUBJECT: RIALTO WELL 6 REHABILITATION

MEETING HISTORY:

02/17/24 Engineering, Operations and Planning Committee REFERRED TO BOARD

BACKGROUND:

An agreement between the West Valley Water District (District) and Goodrich/Raytheon Technologies (RTX) was executed on January 1, 2014, for Rockets, Fireworks and Flares Superfund Site Remediation. Subject to the terms of this agreement, RTX pays the District for operation and maintenance costs of the Fluidized Bed Biological Reactor Groundwater Treatment (FBR) Plant. Beginning in 2016, the FBR Plant began treating contaminated perchlorate-laden water from Rialto Well 6 to produce up to 3 million gallons per day (MGD) of quality drinking water that meets all the Safe Drinking Water Act requirements.

Rialto Well 6 was pulled for inspection due to loud noises generated by the pump motor and vibrations observed from the pump shaft. As the well components were disassembled, it was discovered that the pump bowl assembly requires repairs due to wear and tear, approximately 460 feet of corroded column pipe needs replacement, and the motor needs to be rebuilt. The well casing shows heavy plugging with both physical and microbial materials. Attached as **Exhibit A** is the Well Survey Report. The project consists of using high-energy pressure pulses to aggressively break up mineral scales and biofilms from well screen and surrounding gravel pack, performing dual air swab to airlift debris to the surface, repairing the pump bowl assembly, rebuilding the motor, performing post-rehabilitation video survey, and disposing of all debris. District staff evaluated RTX's recommendation to incorporate acid treatment and added it to the project, which would help dissolve mineral deposits in the well.

DISCUSSION:

On March 8, 2021, a Request for Proposal (RFP) was issued and publicly advertised on PlanetBids to solicit a qualified, experienced contractor to provide as-needed pump maintenance services. Four (4) firms – General Pump Company, Inc., Layne Christensen Company, Weber Water Resources CA LLC and Well Tec Services – submitted proposals for as-need maintenance and repair services. The District awarded the contract to General Pump and executed the agreement on May 6, 2021.

General Pump has the entire well pump assembly and motor in their shop and has assembled a quote totaling \$264,900.35 for the Rialto Well 6 rehabilitation project. Attached as **Exhibit B** is the quote. RTX has requested that the project be completed as quickly as possible and has no objection to the cost. Going forward and completing the repair and replacement with General Pump would ensure the well is back in service in the shortest possible timeline.

FISCAL IMPACT:

This is a reimbursable cost where there is no financial impact to the District.

Funds are being advanced by the District to perform the required scope of work. Upon completion and acceptance, the District will be reimbursed. Due to a potential timing difference, it is anticipated that reimbursement may not be received until early next fiscal year. In order to maintain the existing District CIP budget funding level, project W24000 - Reservoir 5-2 Rehabilitation has been reduced by \$270,000, as work will not be commenced until next fiscal year. The scope and funding of project W24000 - Reservoir 5-2 Rehabilitation will be reassessed as part of the Fiscal Year 2024-25 Annual Budget.

STAFF RECOMMENDATION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve the Rialto Well 6 rehabilitation project with General Pump in the amount of \$264,900.35; and
2. Authorize the General Manager to execute all necessary documents.

ATTACHMENT(S):

1. Exhibit A - Quote
2. Exhibit B - Inspection Report

EXHIBIT A



159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952

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January 25, 2024

Job # 16044

West Valley Water District
855 West Baseline Road
Rialto, California 92337
Attn: Brian Grubert

Subject: Rialto Well 6 – Rev. 2

General Pump Company is pleased to provide our quote to repair your turbine pump equipment and provide cleaning recommendations for the plugged louvers that are impacted with biological and physical plugging. In review of the video, the louvers are 70-80% plugged causing additional entrance velocities that will carry sands and entrained air. An acid blend is included in the quote, the chemistry will be mixed in an above ground poly tank and injected through a 10" dual swab, this work will occur directly after phase 3. The quote does not include any pipe or tube coatings and it is our recommendation to install the column with .365" wall as quoted here without coatings. The motor megs low, a rewind cost with (2) two-year warranty is included in the quote. All labor rates are current with the Master Services Agreement.

Engineering Inspection Notes

- The bowl castings are becoming semi brittle around the flange area. The bowls will need SS washers to increase surface contact between the bowls and bolt head. The seal rings are worn/ oversized. The bowl bearings are worn. The bowl diffuser vanes are in fair condition. The bowls are repairable following conditioning which include, removing the worn seal ring from the bowl/ impellers, removing and replace worn bearings, steam cleaning bowls and suction, removing the cut pipe from pump discharge case, replacing the carbon steel lock collets, touch up the bowls with white epoxy coating, wire brushing all machined surfaces of the bowls and clean all bolt holes.
- 10" SS cone strainer is in good condition, the 10"x 8" is pitted and corroded. A new TOE nipple suction pipe is required 10"x 60" in length, the new nipple need to be welded to the cone strainer.
- All the 10"x10' coated (ID) column pipe was cut out. The 10-foot column pipe will be replaced with 10" x 20' coated (ID) column pipe.
- All 10"x3" BWS centralizers will be replaced.
- All the 1-15/16 carbon steel shafts have been cut. new 1-15/16" shaft are required. The bowls shaft is in good condition and could be reused after reconditioning, which includes polishing the shaft and checking for straightness. The head shaft is worn and requires replacement. The head shaft will need to be longer because of the extra 12" added to the landing nipple.
- The 10" top pipe has damaged threads. The pipe is going to be replaced with a 10"x 36" coated TBE nipple. The 10" top flange is in fair condition and will be reconditioned for reuse.
- The 14" Flowserve head is not exhibiting any significant wear or damage. The head is reusable following reconditioning which includes steam cleaning the entire assembly, tapping all the bolt holes, wire brushing all machined surfaces, paint, and prep for installation.
- The 3"x 1-15/16" tube tension assembly bearing is worn, a new bearing with grooves and proper clearances will be installed, the tension assembly will be steamed cleaned and reconditioned with all the proper fittings and lip seal prior to assembly.
- The 350 HP, US Motor megs low and any repairs will be quoted separately after tear down and inspection.
- No airline was originally equipped, the head will need to be modified to properly install an airline assembly. The airline will be set to 460 feet (top of bowls) if optioned.



Engineering Inspection Notes – (Cont.)

- The FlowServe style oil pot is in fair condition, reuseable after reconditioning which includes steam cleaning and replacing all fittings.

Cost Proposal

Shop Labor

	<u>Hours</u>
• Unload and stage new pump materials; quality assurance	3
• Cut old suction pipe from stainer and weld new nipple, test fit	2
• Steam-clean bowl assembly; wire brush mating faces	5.5
• Sandblast impellers and bolting for bowls	3.5
• Heat, quench, and remove worn seal rings from impellers and bowls	5
• Machine and install new seal rings into bowl castings	5
• Machine and install new impeller seal rings	5
• Deliver impellers to Balancer; Load-up, trave time, and unloading	1
• Pick-up impellers from Balancer; travel time, load-up, and unloading	1
• Touch up the bowls with white epoxy	2
• Measure new bearings for bowls, suction, and discharge case	4
• Press-out old bearings, polish housings, and install new bearings	4
• Retap bolt holes, and assemble bowls; prep for installation	8
• Check proper fit of new column pipe; steam-clean and tighten couplings	4
•	3
• Set-up and stab tube and shafting assemblies in column pipe; stage equipment	
• Remove top column flange and nipple from discharge head	1
• Steam-clean top column flange and wire brush mating areas	3
• Machine new top column pipe and install flange	3
•	2
• Make top flange gasket and install top nipple/flange assembly on discharge head	
• Retap holes on discharge head, paint and prepare for installation	2
• Rebuild existing tube tension assembly to manufacturer's standards	4
• Machine new head shaft: install nut & key and prepare for installation	6
• Handle client's motor: load, unload, stage, and prepare for installation	1
• Machine head for airline access	4.5
• Check proper fit of new Airline assembly; gather bracket & fittings and prep for installation	1
• Clean and recondition components in parts bucket and clean oil pot	2.5
• Gather necessary gaskets, fittings, and bolting to accommodate pump installation	2
• Dispose leftover junk materials	2
• Pressure-wash and prepare bowls for disassembly	2
• Tear down and inspect bowls; provide report and recommendations	6
• Engineering inspection and report	<i>(Included)</i>

Est. 98 Hrs. @ \$90/Hr. **\$ 8,820.00**



Materials

• 10" X 5' X .279" TOE NPT Suction Pipe	\$ 442.00	
• Materials to Rebuild 14" Bowls – 6 Stage	7,945.00	
• SS 14M160 lock collets	1,328.00	
• 3"x 1-15/16"x20' Oil Lube tube and shaft	30,768.00	
• 10"x20'x 365" wall thickness, TNC butt pipe	38,780.00	
• 3"x5' Oil lube pipe sch 80	240.00	
• 10"x5'x 500" wall thickness TOE nipple	980.00	
• 10" BWS Centralizer	290.00	
• Top Column Flange Gasket & Bolt Kit	128.00	
• Materials to Refurbish 14" Discharge Head	265.00	
• Stainless-Steel Material for CAL-OSHA Screens	120.00	
• Materials to Rebuild 3" Stretch Assembly	260.00	
• 1-15/16" 416SS Head Shaft w/ Nut & Key	1,240.00	
• 1/4" SS Tubing w/ PVC Jacket	1,740.00	
• 1/4" SS Airline Assembly w/ Gauge, Bracket, and Fittings	160.00	
• Banding and Buckles for Airline Assembly	320.00	
• 14", 150# Discharge Gasket w/ Nut & Bolt Kit GRD 5	120.00	
• J-Box Electrical Connection Kit	320.00	
• ISO Oil for Electric Motor	72.00	
• NSF-61 Epoxy Touch-up Kit	225.00	
• Consumables (Grease, Sealer, Solvent, Etc...)	220.00	
• Shipping & Handling	980.00	
• Sales Tax @ 8.75%	<u>7,607.51</u>	\$ 94,550.51

Motor Repair

Delta Motor Scope of Work

- Disassemble, inspect, testing and measurements.
- Rewind stator windings with class H inverter duty insulation, 1-VPI process, double dip and bake new stator windings.
- Install new overload protection klixons (Qty. 3).
- Clean and bake rotor assembly.
- Dynamically balance rotor assembly.
- Reseal oil level stand pipe.
- Install new Skf bearings (2-7322).
- Install new ceramic insulated ball bearing (1-6215).
- Install new 115-volt space heaters (Qty. 2).
- Install new oil level sight glass and oil fill plug.
- Clean, prime and paint all parts.
- Reassemble and preform a full voltage no load test.

Labor	\$ 8,922.00	
Materials	7,576.00	
Sales Tax @ 7.75%	<u>587.14</u>	\$ 17,085.14

Outside Services

- Dynamic Balance Impellers **\$ 1,480.00**

General Pump Pulling & Installation

- Mobilization & Demobilization **\$ 200.00**



Phase 1 – Wire Brush

- Mob to site, conduct brief tailgate safety meeting.
- Rig up equipment.
- Wire brush well with stiff wire brush, use two (2) brushes to ensure proper brushing.
- Use brush with chlorine basket during brushing.
- Bail accumulated fill into roll-off bin.
- Prep well for video

Well Rehabilitation

- Mobilization & Demobilization 200.00
- Two Men Combo Rig
 - Est.* 30 Hrs. @ \$260/Hr. 7,800.00
 - Est.* OT – 6 Hrs. @ \$130/Hr. 780.00

Outside Service

- Video log well 1,000.00

Shop Labor

- Load / unload brushes/bailor
- Fabricate two (2) wire brushes.
 - Est.* 20 Hrs. @ \$90/Hr. 1,800.00

Materials

- Well & pipe renew preblend. (Acid Blend, 10% working solution) 22,245.00
- HTH granular chlorine 228.00
- Freight 575.00
- Sales Tax @ 8.75% 2,016.70

Rentals

- NPDES Compliance. 2,500.00
- Steel wire brushes (2) with chlorine chambers
 - Est.* 15 Hrs. @ \$260/Hr. (x2) 7,800.00
- (1) 21,000 Gal closed top tank, booster pump, suction hose, discharge hose, reducers, flange, elbow, NB kit 3,400.00/wk. **\$ 50,344.70**

Phase 2 (Airburst)

- Airburst Technician & Equipment
 - (2) 10 Hr./day **1st day @ \$12,800 / 2nd day @ \$6,800** 19,600.00
- Support equipment
 - Two Men Combo Rig
 - Est.* 20 Hrs. @ \$260/Hr. 5,200.00



Est. OT 4 Hrs. @ \$130/Hr. 520.00 \$ 25,320.00

Phase 3 Acid Injection

- Mix above ground in poly tank with water and Well-Renew acid pre-blend. Perforations from 436'-968' to remove detached tubercle and biological growth.

Two Men & Combo Rig @ \$260/Hr.
One Man & Rotary Crane @ \$170/Hr.
Est. 30 Hrs. \$430/Hr. 12,900.00
Est. OT 6 Hrs. @ \$195/Hr. \$1,170.00

Pump and Piping Connections with Tank (set p and tear down)

- One Man & Welding Truck @ \$140/Hr.
- One Man & Service Truck @ \$140/Hr.
Est. 20 Hrs. @ \$280/Hr. 5,600.00
Est. OT 4 Hrs. @ \$130/Hr. 520.00 \$ 20,190.00

Phase 4 Dual Swab Airlift

- Airlift perforations from 436'-968' to remove detached tubercle and biological growth.

Two Men & Combo Rig @ \$260/Hr.
One Man & Rotary Crane @ \$170/Hr.
Est. 50 Hrs. @ \$430/Hr. 21,500.00
Est. OT 12 Hrs. @ \$195/Hr. 2,340.00

Outside Service

- Video log 1,000.00

Rentals

- Air compressor & fuel
Est. 50 Hrs. @ \$21/Hr. 1,050.00 \$ 25,890.00

Phase 5 – Pump Installation

- Confirm lockout, tagout of electrical service.
- Install complete pump and motor.
- Wire motor, check rotation.
- Clean site and demobilize.

Two Man & Combo Rig @ \$260/Hr.
One Main & Rotary Crane @ \$170/Hr.
Est. 40 Hrs. @ \$430/Hr. 17,200.00

Start up:

Start up and record data.
Service Truck & Electrician
Est. 8 Hrs. @ \$140/Hr. 1,120.00 \$ 18,320.00



Brian Grubert
West Valley Water District
January 25, 2024
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Performance and Payment Bonds (If required)

\$ 2,700.00

Estimated Grand Total

\$ 264,900.35

Should you have any questions or need additional information regarding the above summary and associated costs, please do not hesitate to contact us. Thank you for the opportunity to provide a quote for our services and we look forward to working with you on this important project.

GENERAL PUMP COMPANY, INC.

Tom Nanchy

Tom Nanchy
Senior Project Manager

EXHIBIT B



COMPANY NAME: General Pump
 WELL INSPECTED: WVWD Well 6
 FIELD NAME: Rialto
 STATE: California

DATE: 12/21/2023
 RUN NO: One
 JOB TICKET: 231221
 TOTAL DEPTH: 995.6 ft.
 WATER LEVEL: 379.0 ft.
 OIL ON WATER: No AMT: None
 OPERATOR: Nelson
 GUIDE SET: 17.00 in.
 CHRIS NELSON @ (909) 809-9815

WELL ADDRESS: W. Etiwanda Ave
 GPS LOCATION: N34o6'53"
 W117o22'22"

Superior Well Surveys

DEPTH	OBSERVATIONS	PERFORATION	FROM SURVEY
0.0 ft.	Start survey at top of casing.		
379.0ft	SWL; water clear, visibility good.	Ful-Flo Louvers	436.0 ft. to 827.7 ft.
436.0ft	Top of louvers; material on lips. End is at 827.7 ft.		929.5 ft. to 967.9 ft.
500.0ft	Louvers appear to have small openings.		
600.0ft	Louvers appear fairly plugged.		
650.0ft	Louvers appear plugged.		
717.0ft	Scale build-up on louvers.		
780.0ft	Louvers appear plugged.		
915.1ft	Large nodules.	20.00 in	0.0 ft. to 995.6 ft.
929.5ft	Top of louvers; appear plugged. End is at 967.9 ft.		
955.0ft	No visible opening in louvers.		
995.6ft	Fill; end survey.		

