

## EXHIBIT 3-A



January 31, 2019  
Project No. 18-0093

Monterey Peninsula Water Management District  
5 Harris Court, Building G  
Monterey, California 93942-0085

Attention: Mrs. Maureen Hamilton, Project Manager

Subject: Request for additional budget;  
Santa Margarita ASR Facilities, Final Design and Construction Support Services

Dear Mrs. Hamilton:

In accordance with your request, Pueblo Water Resources, Inc. (PWR) is pleased to submit herein a formal request for additional budget for implementation of the recently codified Disinfection Station at the Santa Margarita ASR facility at 1910 General Jim Moore Blvd. This request includes additional budget for professional engineering services associated with the final design, plans and specifications, construction support, and startup/testing of the subject Disinfection Station, and redesign of the associated utilities and appurtenances at the site. Presented herein is a detailed scope of work and an estimate of costs for our services associated with the project.

### **BACKGROUND**

The Santa Margarita ASR facility was initially developed in 2001 with the construction of the ASR-1 well as a pilot demonstration of direct recharge of the Santa Margarita Sandstone Aquifer ( $T_{SM}$ ). The success of this initial pilot program led to the interim development of the site as a  $\frac{1}{4}$  acre parcel with a single well and a backflushing pit/percolation pond of approximately 50,000 gallon capacity. Further operational success of the facility led to the construction of a second well (ASR-2) in 2008 and permanent electrical switchgear and piping for both wells in 2010, as well as expansion of the backflushing pit to 245,000 gallons. The work also included construction of an 850 sq ft building to house the electrical switchgear; this building also was designed with an auxiliary room for future use as a chemical storage and disinfection station for the wells.

Since that time, numerous changes have occurred in the local and regional water supply arena, including the construction of a second dual-well ASR facility at Seaside Middle School (SMS), the construction of the Pure Water Monterey (PWM) project, and the pending addition of a third dual-well ASR facility at Fitch Park (F-P) to the north of the SMS ASR site. In addition, Cal-Am staff have provided input to the District suggesting that additional chemical injection capacity and the potential addition of corrosion control and/or dechlorination chemicals is

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needed at the site. In response to the above changed conditions, the partially completed design package for facility completion was revised and an intermediate portion of the project is now near completion, including an expansion of the backflush pit to 640,000 gallons (to accommodate all 6 ASR wells). In addition, sufficient space has been graded to site a second building dedicated to chemical storage and dispensing of disinfectant.

A scope of services was approved by the MPWMD Board in 2016 (project 12-0045, Contract Amendment 12) which included engineering services to complete the existing site with paving, drainage, and chemical offloading equipment. The above noted project changes have created the need for substantial additional engineering services to expand and complete the newly proposed facilities at the Santa Margarita site. *The proposed scope of services detailed herein covers only those services needed in addition to the 2016 work scope*; in general this includes the following items:

- Design of a new chemical storage and dispensing building, with associated appurtenances.
- Modification of the site grading, drainage, and paving to accommodate the new facilities.
- Modification of the originally proposed process piping and chemical injection facilities to accommodate the new off-site waters slated for processing at the Santa Margarita facility, and additional features and equipment requested by Cal-Am.
- Ability to implement secondary chemical storage, dispensing, and injection for such options as dechlorination or corrosion inhibitors.

In addition, this proposal includes optional tasks for Bid and Construction Support services.

### **SCOPE OF WORK**

PWR has developed a scope of work for the Santa Margarita ASR Facility Disinfection Station based on our experience with similar ASR projects and our understanding of the specific needs and the historical progression and development of the Santa Margarita site.

A general summary of the work scope for our proposed scope of services is provided below.

#### **Task 1 – ASR Facilities Design and Bid Support**

This task consists of providing professional engineering services for the final project facility designs, plans and specifications for the project, and bidding support.

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**Task 1.1 – 60%, 90% and Final Designs.**

Using the design information and decisions developed in the facilities Preliminary Design report, Pueblo will complete a construction drawing plan set and bid specifications for the facilities. The plan set is envisioned to include a total of 83 drawings, summarized in the table below:

**Facilities Plan Set Summary**

<b>Design Item</b>	<b>Sheet Count</b>
New / modified site grading, paving, drainage (Civil)	11
Building, Architectural and Structural (all new)	26
New/modified underground utilities (piping)	4
New/modified electrical & instrumentation	14
HVAC	5
New and/or revised Piping / Mechanical (aboveground)	9
New/Additional Chemical Injection Piping & Dispensing	11
Landscaping	3
<b>Total Plan Sheet Count for Project Plan Set</b>	<b>83</b>

A summary of the specific elements of the project design are as follows:

- **Civil Design**, consisting of preliminary and final grading, drainage, paving, and fencing.
- **Architectural and Structural**, including the building structure, with all details pertaining to foundation design, building structure and architectural features, building floor plans and elevations, roof plans; and incorporation of mechanical/HVAC, interior electrical, acoustical, and seismic details from team members into the building plan set. No restroom facilities will be included in the building design.
- **Underground Utilities**, including raw and treated water piping, storm water piping, process piping, and applicable instrument conduits to complete the underground work at the site.

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- **Electrical and Instrumentation**, consisting of all power and instrument equipment and wiring. The plans will include One-Line diagrams, motor elementary control diagrams, PLC requirements (PLC design, control loop diagrams, and programming will be by Cal-Am), conduit routing plans, P&IDs, electrical room layout, lighting, and building electrical details.
- **Mechanical and HVAC** design will include HVAC and ducting, heating and ventilation, and all necessary calculations and specifications, and Title 24 compliance calculations where applicable.
- **Piping and Mechanical** design will include all utility and instrument piping and intertie to the existing 30" transmission main piping in GJM Blvd. Design will include sampling ports, chemical injection and mixing elements, and all appurtenant supports, foundations, and accessories.
- **Process Piping for Disinfection System**. This work includes the design of chemical storage and dispensing of 12.5% sodium hypochlorite solution for the disinfection station. The system will be sized and designed to disinfect waters from the Santa Margarita, Seaside Middle School, and the Fitch Park ASR facilities, based on assumed water quality parameters developed by Cal-Am and Pueblo. The design will consist of bulk storage tanks fed from tanker truck deliveries, transfer pumps to day tank systems, and metering pumps for chemical dispensing. Design will address applicable standards for hazardous materials, including double containment for storage and piping, safety appurtenances including eye wash and safety showers, and appropriate design considerations for materials compatibility, heating and ventilation to mitigate chemical degradation, and chemical off gassing issues.
- **Chemical Offloading & Washdown Facilities**. The design will consider daytime offloading only, but will include provisions for a second chemical offloading capability, such as 25% sodium bisulfite.
- **Landscaping design** will address the development of landscape screening of facilities and visual enhancement of the site. Design will include specific plantings, protection of native plants where applicable, erosion protection, and automatic irrigation systems for each site.

**Task 1.2 – Plans, Specifications and Bid Documents.** The design packages will include construction drawings, specifications, and applicable calculations stamped by licensed professionals in their respective fields. Progress design packages will be provided at the approximate 60 and 90 percent completion stages, and draft specifications will be provided at the 75 and 100 percent completion level. An Opinion of Probable Constructed Cost will be provided to assist in the evaluation of bids.

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Specifications and bid sheets will be developed using standard CSI format, and will be provided electronically in WORD format to allow the MPWMD to incorporate these documents into their standard bid package.

**Task 1.3 – Bidding Assistance.** PWR will assist MPWMD as requested throughout the bidding process. This will include responding to Requests for Information (RFIs) that contractors may have during the preparation of bids, preparing and distributing requisite addenda, and communicating other pertinent information to potential bidders. PWR will review the bids for responsiveness to the bid requirements and make a recommendation for award if requested. It is assumed that MPWMD will duplicate and distribute the bid packages and serve as the primary contact for prospective bidders during the bidding process. Pueblo will also attend one pre-bid meeting at the site to familiarize bidders with the work and respond to questions.

**Task 1.4 – Project Management and Meetings.** This task consists of overall project management, including the preparation of routine project correspondence, invoices, monthly budget status updates, and weekly project status conference calls. Effective project communication is critical for the success of this important project. A project e-mail distribution list will be established through which routine project status reports will be provided.

For purposes of this proposal, we have assumed routine PM time would be 2 hours/week on average for the envisioned 6 month project duration, plus one meeting per month in Monterey for project discussions, field meetings, or resolution of project changes.

### **Task 2 – Engineering Services During Construction (OPTIONAL)**

This optional task consists of providing professional engineering services for construction observation and administration, startup testing, and preparation of As-Built Drawings for the project facilities.

**Task 2.1 – Construction Support Services.** Pueblo will serve as the Owners Technical Representative to the contractor throughout construction. PWR will observe and document the work performed, verify contractor adherence to the project plans and specifications, coordinate permit compliance inspections and materials testing work, and witness performance testing and demonstration of equipment performance and operability. Periodic construction observation services to be provided during the various phases of construction include the following:

- Preliminary and final grading
- Foundation and piping excavation and associated compaction testing
- Concrete, grout, and asphalt placement and materials testing

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- General building construction
- Piping installation and testing
- Electrical wiring and electrical equipment installation

Pueblo will review contractor requests for payment, respond to contractor questions, and evaluate contractor value engineering proposals on an “as-requested” basis, and provide final construction completion “punch list” documentation to complete the project. For purposes of budgeting, we have assumed 17 man-hours per week for the anticipated 6-month (25 week) duration of the project for this task.

**Task 2.2 – Start Up Assistance** . Pueblo will oversee the commissioning and start up of the facilities upon completion of construction and document facility performance and optimum operating parameters based on system performance trials. This information will be compiled in a Summary of Operations and Procedures document and will serve to guide Cal-Am operators and maintenance personnel with site specific data and procedures for normal facility operations. Discussions of Injection, Well Backflushing, Aquifer Storage, and Recovery/Production operations will be included. The document will also incorporate the PLC programming and HMI interface information for each site provided by the contractor. For this task we assume that 4 work days (32 hours) of field time will be needed to complete startup operations for the facility; efforts beyond that amount will be billed at Standard Rates in accordance with our Fee Schedule.

**Task 2.3 – Preparation of As-Built Drawings.** Upon completion of construction, Pueblo will prepare Record Drawings of each site, documenting the final facilities conditions and incorporating any plan modifications into the final drawings. The final record drawings will be provided in both Autocad and PDF formats on a CD for MPWMD and Cal-Am use. For purposes of this proposal, we assume that 12 hours of field time and 30 hours of drafting time will be needed to complete this work; efforts beyond that amount will be billed at Standard Rates in accordance with our Fee Schedule.

### **Services Not Included**

Services which are (or may be) necessary for the completion of this project which are not included in our proposal include the following:

- Permit fees;
- Presentations to regulatory or permitting agencies
- Construction of site facilities;
- Cost of water, electricity, or other utilities;
- Pot-holing and/or geotechnical investigations;

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- Water-quality laboratory analyses fees (assumed MPWMD provided);
- Any other items not specifically included in PWR's scope of services.

**ESTIMATED FEES AND SCHEDULE**

Our estimated costs for the project were developed based on the proposed scope of work, our experience with similar projects, and our 2019 fee schedule (attached).

An estimated fee summary worksheet is attached summarizing the estimated man-hours and costs per task/work item for Tasks 1-3. As shown, we estimate the fees for our services for will be approximately \$409,050; with \$261,445 in design engineering services and \$147,605 in optional Construction Support services. These costs will be billed monthly, on a time-plus-expenses basis in accordance with our current Fee Schedule. MPWMD will only be billed for actual time spent on the project, irrespective of the stated budget; however, we will not exceed any task budget without prior written authorization from the District and explanation of the change in work scope or project conditions that caused the additional expense.

Based on our ongoing work on the project, we can commence this work immediately upon your authorization. It is our understanding that construction is planned to start in July 2019. We estimate the total duration of field activities will be approximately 6 months with project completion in early 2020.

We appreciate the opportunity to provide continued assistance to the MPWMD on this important community water-supply project. If you require additional information regarding this or other matters, please contact us.

Sincerely,

PUEBLO WATER RESOURCES, INC.

Stephen P. Tanner, P.E.

Principal Engineer

RCM:SPT

Attachments: Cost Estimation Spreadsheet  
2019 Fee Schedule

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**MONTEREY PENINSULA WATER MANAGEMENT DISTRICT**  
**Professional Services for Santa Margarita Chlorination Station Project**  
 Fiscal Year 2019-2020  
 PWR Project No.: 18-0093



**ESTIMATED FEE SUMMARY**

LABOR		Principal Professional	Senior Professional	Project Professional	Staff Professional	Technician	Drafting	WP	Hours by Task	Estimated Task Cost	
Task No.	Task Description	Hourly Fee	\$210	\$195	\$180	\$150	\$140	\$125	\$105		
1.1	Engineering Design	155		85	110					350	\$68,925
1.2	Specs + Bid Docs	40		54						94	\$18,930
1.3	Bidding Assistance	28								28	\$5,880
1.4	Meetings and Project Mgmt	26								26	\$5,460
2.1	Construction Management	104				320				424	\$69,840
2.2	Startup Assistance	32				32				64	\$11,520
2.3	As-Built Drawings	12						30		42	\$6,270
<b>Hours by Labor Category:</b>		397	139	110	352	0	30	0			
<b>Costs by Labor Category:</b>		\$83,370	\$27,105	\$19,800	\$52,800	\$0	\$3,750	\$0			
									<b>Total Labor Hours:</b>	<b>1028</b>	
									<b>Total Labor Costs:</b>	<b>\$186,825</b>	

OTHER DIRECT COSTS (ODC's)					
Task No.	Item	Units	Unit Price	No. of Units	Fee
1	Vehicle	Daily	\$75	0	\$0
1	Travel Per Diem	Daily	\$150	0	\$0
2	Vehicle	Daily	\$75	5	\$375
2	Travel Per Diem	Daily	\$150	5	\$750
<b>Subtotal ODCs:</b>					<b>\$1,125</b>

OUTSIDE SERVICES					
Task No.	Item	Units	Unit Price	No. of Units	Fee
1.1	Architectural Services (WRD)	1	\$59,700	1	\$59,700
1.1	Electrical Engineering (Kiyoi)	1	\$56,000	1	\$56,000
1.1	HVAC and Structural (A&M + HVS)	1	\$10,800	1	\$10,800
1.1	Grading/Paving/Drainage (MAC)	1	\$21,000	1	\$21,000
2.1	CM - Electrical (Kiyoi)	1	\$31,000	1	\$31,000
2.1	CM - Materials Testing	1	\$22,500	1	\$22,500
					\$0
<b>Subtotal Outside Services:</b>					<b>\$201,000</b>
<b>Subtotal Outside Services w/ Markup (10%):</b>					<b>\$221,100</b>

COST SUMMARY	
Labor	\$186,825
Other Direct Costs	\$1,125
Outside Services	\$221,100
<b>Subtotal:</b>	<b>\$409,050</b>
<b>TOTAL ESTIMATED PROJECT COST:</b>	<b>\$409,050</b>