REQUEST FOR PROPOSAL
FOR REPLACEMENT OF SWITCHGEAR AND MOTOR CONTROL CENTER AT CAJALCO INTAKE PLANT

Issue Date: June 20, 2017

Submission Deadline: July 12, 2017, 2:00 PM
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Introduction
Western is requesting proposals from qualified firms to provide engineering services for design for the replacement of the switchgear and motor control center for Western’s CajaIco Intake Plant. This will include preliminary design, final design, and preparation of Contract Documents, bidding support and engineering services during construction.

The minimum information required in the Proposal includes:

- General statement of the understanding of the scope;
- An approach to the work;
- The firm’s experience in providing requested services for projects of similar size and scope;
- The experience of the proposed project manager and key individuals;
- A proposed task list and level of effort for each task;
- Approach to managing and completing the project; and
- Approach to communicating with Western.

Proposals will be accepted by Western until 2:00 p.m. on July 12, 2017. Any changes to this Request for Proposal (RFP) are invalid unless specifically modified by Western and issued as a separate addendum document. Should there be any question as to changes to the content of this document, the Western copy shall prevail. The submission should be prepared simply and economically, providing straightforward, concise description of your firm’s capabilities to satisfy the requirement of this RFP. Emphasis should be on organization, completeness, and clarity.

To ensure consideration, all proposals shall follow the required elements provided in this RFP or as directed. To facilitate the evaluation process, please provide one (1) original copy of the proposal, AND email an electronic copy of the proposal in PDF format.

All proposals shall be printed on 8 ½ “x 11” paper, 12 point Arial font, single spaced, with 1” margins on all sides. Proposals are limited to ten (10) pages not including: Cover Letter of Transmittal, Western Standard Forms, Table of Contents, dividers, and resumes.

Delivered proposals shall be enclosed in a sealed envelope or container plainly marked in the upper left hand corner with the name and address of the bidder and bear the following:

“WMWD Proposal for CajaIco Switchgear and Motor Control Center Replacement”
The fee proposal shall be in a separate sealed envelope and be plainly marked in the upper left hand corner with the name and address of the bidder and bear the following:

“WMWD Cajalco Switchgear and Motor Control Center Replacement Fee Proposal”

Proposals may be hand delivered or sent via U.S. Postal Service, UPS, FedEx, or other common carrier, as well as emailed to:

Western Municipal Water District
Attn: Sonia S. Huff, PE
14205 Meridian Parkway
Riverside, CA 92518
shuff@wmwd.com

Questions concerning this solicitation should be directed electronically to Sonia Huff at shuff@wmwd.com
Background

Western was established in 1954 to provide water to agencies and residents of western Riverside County. Western’s mission is to provide water supply reliability, wastewater and water resource management to the public in a safe, reliable, environmentally sensitive and financially responsible manner.

Western has the distinction of being both a wholesale and retail water provider. The wholesale division provides water and leadership to 13 wholesale customers in a 527-square mile area of Riverside County. Nine of the wholesale customers receive imported water from Metropolitan Water District, as well as local water from the Arlington and Chino Desalters.

Western’s retail division provides water to businesses, industrial users, and more than 86,000 residents to three retail areas:

- Riverside service area: includes a portion of the city of Riverside and unincorporated portions of Riverside County;
- Murrieta service area: 6.5 square miles within the city of Murrieta; and
- Rainbow service area: an area south of the city of Temecula in an unincorporated part of Riverside County.

WMWD’s potable and recycled water system includes 128 pumps, 621 miles of pipeline ranging from 4 to 60 inches, and 38 water storage reservoirs. WMWD’s wastewater system includes approximately 8,000 service connections, 24 lift stations and two wastewater treatment plants.

There are three sets of pumps at the Cajalco Plant. The Intake Pumps which consists of two (2) 350 HP pumps and four (4) 150 HP pumps draw water from the Colorado River Aqueduct, Booster Station No. 1 which consists of one (1) 350 HP pump, one (1) 100 HP pump and one (1) 40 HP pump has been decommissioned and Booster Station No. 2 which consists of one (1) 200 HP, one (1) 350 HP, and two (2) 75 HP pumps. In addition, there a 4160V feeder from a circuit at the switchgear that serves the Cajalco Plant facility and the Hillside Irrigation pumps and Hillside Domestic Tank and Booster Pumps via an overhead power lines.

The majority of the electrical equipment at Cajalco Plant are the original installation and has reached its useful life. The Plant is served by SCE with a 4160V, 3-phase, 1200 amp overhead service. The District wishes to replace the electrical equipment which consists of main service equipment including the meter and main, 4160V and 480V motor control centers, 2000 KVA step-down transformer, feeder circuits, control panel and feeders to
local equipment. A schematic single line diagram and a site plan of the Cajalco Intake Plant is provided in Exhibits “A” and “B” respectively.

This project would require plans, specifications and construction cost estimates, bid support and construction support for the replacement of the electrical equipment.

Scope of Work

Description of Work:
The selected firm/s shall provide the District with the following services as described herein.

Task 1. Project Administration and Multi-Agency Coordination

Kick-Off Meeting
Upon receipt of a Purchase Order from the District, the Consultant shall conduct a kickoff meeting with the District’s staff to review the Scope of Services, develop an overall Project Schedule and confirm the deliverables. The Project schedule should include each task, milestones, critical path designation and a schedule for progress meetings.

Multi-Agency Coordination
It is important to coordinate all work with involved agencies to obtain their input and include them in all critical decision making. The Consultant will be required to coordinate their activities with third party agencies including, but not limited to, the Western Municipal Water District, utility companies, Regional Water Quality Control Board and adjacent property owners.

The Consultant shall be responsible for organization of all meetings including preparation of agendas, meeting minutes and distribution of all documentation to all attending parties or as required.

Project Milestone/Monthly Meetings
The Consultant shall be prepared to present regular Project progress report(s) to District staff each month or as otherwise agreed upon with the Project Manager. The Consultant shall make sure District staff is included in all regularly scheduled progress meetings. The Consultant is responsible for organizing these meetings including preparing agenda(s), compiling meeting minutes, and distributing the minutes to all attending or as required.
**Task 2. Replacement of Equipment at Cajalco Intake Complex and New Service to Hillside Domestic and Irrigation Pump Stations.**

Replacement of 4160-volt switchgear including service entrance meter and main circuit breaker sections, motor control sections, feeder breaker section and the section that connects the existing solar voltaic system; excluding components that serve the decommissioned Booster Pump Station 1. The Consultant investigate the feasibility of converting all 4160 VAC motor controller to 480 VAC equipment. This equipment includes but is not limited to circuit protection, transformer, starter sections and motors. The service shall remain at 4160V.

Replacement of a 2000 KVA 4160-480V transformer. If all equipment is converted to 480 VAC, the load rating of the transformer will need to be sized accordingly.

Replacement of 480-volt motor control center excluding components that connect to decommissioned Booster Pump Station 1.

Switchgear and motor control center shall be equipped with infrared inspection window. All IR windows must fulfill the strength, rigidity and environmental requirements of the type of equipment into which it is installed. It must also be compatible with the infrared equipment being used.

Potable (Pump Stations 1 and 2) and non-potable (Intake Pumps) pump station shall have individual power monitor.

Eliminate feed to the Hillside Domestic and Irrigation Pump Stations.

Replacement of control panel with programmable logic controller that will be integrated with the existing SCADA system.

Provision of a new service to the Hillside Domestic and Irrigation Pump Stations. Evaluate and make recommendations for the service voltage, 4160V or 480V service.
Task 3. Civil & Operational Project Design Standard and Criteria
The Consultant shall work with District staff to determine the applicable design standards and criteria. The Consultant shall consider other possible agency design criteria and/or standards as necessary. A maximum of two (2) workshop sessions shall be conducted with the Project Manager, District Operations staff and the Consultant design team. The Consultant shall be responsible for organizing the meeting, including obtaining background information for discussion, preparing the agenda, compiling meeting minutes and action items, as well as distribute the minutes as required. Elements to be discussed shall include, but not be limited to, operational parameters, ideal control conditions, and operator experience.

Task 4. Basis of Design
Upon completion of Tasks 2 and 3 above, the Consultant shall prepare a Basis of Design Report including elements and findings. The Basis of Design Report shall summarize the alternatives and outline the agreed upon alternative including reasons why the alternative was chosen. The Basis of Design includes 30% drawings of the chosen alternative including all proposed improvements. The Basis of Design Report shall be stamped and signed by a California Registered Electrical Engineer. Prior to completion of the final Basis of Design Report, the Consultant shall prepare and submit for review a draft Basis of Design Report to District staff.

The Basis of Design will include, but not be limited to, such issues as:

1. An overall evaluation of the existing switchgear, MCC and control panel configuration including short circuit calculations and arc fault study.

2. Recommendations for location of new switchgear with consideration for distance from pumping stations and utility service. Note that there is a utility pole for one of the pumping stations. Is that the best option? Currently, bus duct is the primary connection between the utility service and the 4160-volt switchgear. What are the options with the replacement? Consideration must be provided for coordination of outages so that systems are restored to operation as quickly as possible.

3. Prepare preliminary electrical design plans for the motor control centers, Pump Station RTU control panel and related appurtenances.
4. Prepare preliminary short circuit analysis based on the description below. Detailed short circuit analysis will be performed at the 60% submittal up to final submittal. The short-circuit fault analysis shall be performed and submitted in 2 phases:
   a. Initial short-circuit fault analysis:
      - Based on the Contract Documents, field data, and Electric Utility information.
      - The initial short-circuit fault analysis report shall indicate the estimated available short-circuit current at the line side terminals of each piece of equipment covered by the scope of the study.
      - Provide a list of assumptions used in the initial study.
   b. Final short-circuit analysis shall be performed by the Contractor and submit to Consultant for review:
      - The final short-circuit fault analysis shall modify the initial analysis as follows:
        - Utilize the actual equipment provided on the project.
        - Utilize conductor lengths based on installation.
   c. Calculate 3-phase bolted fault, line-to-line fault, line-to-ground fault, double line-to-ground fault, short-circuit 1/2 cycle momentary symmetrical and asymmetrical RMS, 1-1/2 and 4-cycle, interrupting symmetrical RMS, and 30 cycle steady state short circuit current values at each piece of equipment in the distribution system.
   d. Evaluate bus bracing, short circuit ratings, fuse interrupting capacity and circuit breaker adjusted interrupting capacities against the fault currents, and calculate X/R values:
      - Identify and document all devices and equipment as either inadequate or acceptable.
   e. Calculate line-to-ground and double line-to-ground momentary short circuit values at all buses having ground fault devices.
   f. Provide calculation methods, assumptions, one-line diagrams, and source impedance data, including Utility X/R ratios, typical values, recommendations, and areas of concern.
5 Prepare preliminary protective device coordination study based on the description below. Detailed protective device coordination study will be performed at the 60% submittal up to final submittal.

a. Furnish protective device settings for all functions indicated on the Drawings, including, but not limited to:
   - Current.
   - Voltage:
     Provide settings for all voltage relays based upon actual Utility and generator tolerances and specifications.
   - Frequency:
     Provide settings for all frequency relays based upon actual Utility and generator tolerances and specifications.
   - Negative sequence.
   - Reverse power.
   - Machine protection functions:
     Provide settings for all motor and generator protective relays based on the manufacturer's recommended protection requirements.

b. Provide log-log form time-current curves (TCCs) graphically indicating the coordination proposed for the system:
   - Include with each TCC a complete title and one-line diagram with legend identifying the specific portion of the system covered by the particular TCC. Typical time-current curves for identical portions of the system, such as motor circuits, are acceptable as allowed by the ENGINEER.
   - Include a detailed description of each protective device identifying its type, function, manufacturer, and time-current characteristics. These details can be included on the TCC.
   - Include a detailed description of each protective device tap, time dial, pickup, instantaneous, and time delay settings. These details can be included in the TCC.

c. TCCs shall include all equipment in the power distribution system where required to demonstrate coordination.
   Include the following:
   - Utility relay and fuse characteristics,
   - medium voltage equipment protective relay and fuse characteristics,
   - low-voltage equipment circuit breaker trip device characteristics,
• transformer characteristics, motor and generator characteristics, and

Characteristics of other system load protective devices:
- Include all devices down to the largest branch circuit and largest feeder circuit breaker in each motor control center, main breaker in branch panelboards and fused disconnect switches.
- Provide ground fault TCCs with all adjustable settings for ground fault protective devices.
- Include manufacturing tolerances and damage bands in plotted fuse and circuit breaker characteristics.
- On the TCCs show transformer full load currents, transformer magnetizing inrush, ANSI transformer withstand parameters and transformer damage curves.
- Cable damage curves.
- Terminate device characteristic curves at a point reflecting the maximum symmetrical or asymmetrical fault current to which the device is exposed based on the short-circuit fault analysis study.
- Coordinate time interval medium-voltage relay characteristics with upstream and downstream device to avoid nuisance tripping.

d. Site Generation - When site generation (including cogeneration, standby, and emergency generators) is part of the electrical system, include phase and ground coordination of the generator protective devices:
  • Show the generator decrement curve and damage curve along with the operating characteristic of the protective devices.

e. Suggest modifications or additions to equipment rating or settings in a tabulated form.
6. Prepare preliminary arc-flash analysis on equipment based on the
description below. Detailed arc-flash analysis will be performed at the 60% submittal
up to final submittal. Provide recommendation for warning label shall contain but
not limited to the following information: Flash hazard boundary, incident energy,
PPE level and shock protection boundaries.

   a. Include the calculated arc-flash boundary and incident energy
   (calories/square centimeter) at each piece of equipment in the distribution
   system:
      • Perform Arc-flash calculations for both the line side and load side of
        switchgear, switchboard, motor control center, and panelboard main
        breakers.
      • Perform arc-flash calculations for all short-circuit scenarios with all
        motors on for 3 to 5 cycles and with all motors off.
      • Protective device clearing time shall be limited to 2 seconds, maximum.

   b. Provide executive summary of the study results.

   c. Provide a detailed written discussion and explanation of the tabulated
   outputs.

   d. Provide alternative device settings to allow the OWNER to select the
   desired functionality of the system:
      • Minimize the arc-flash energy by selective trip and time settings for
        equipment maintenance purposes.
      • Identify the arc-flash energy based upon the criteria of maintaining
        coordination and selectivity of the protective devices.

   e. Perform the arc flash study calculations using both IEEE 1584 and NFPA
   70E. Provide both studies in the final report. Provide summary based upon worst
   case results between IEEE 1584 and NFPA 70E.

7. Prepare plans communications between the control panel and the SCADA
server. Identify all requirements and options described including maintenance and
operation related constraints.
8. Preparation of preliminary staging for construction.

9. Outline the preparation and submittal process of all required permits associated with getting the project approved and ready for construction. This includes estimated time frames for processing said permits.

10. Evaluate methods to prevent access to conduit and equipment by rodents or other creatures in the area.

11. Prepare required documents and assist in Environmental approvals. In the event that an Environmental Impact Report (EIR) is deemed necessary, the Consultant shall prepare all necessary documentation as required by CEQA. The Consultant shall include an initial study and mitigated negative declaration in their proposal fee. A fee for an EIR shall be an optional item in the event that an EIR is required.

12. Upon receiving comments from the Project Manager, the Consultant shall incorporate all appropriate and agreed upon comments and submit the final Basis of Design Report. The final submittal of the Basis of Design Report shall include five (5) hard copies and one bound accordingly and one (1) electronic copy and shall be delivered to the Project Manager.

**Task 5. 60% Construction Document (PS&E) Submittal**

The Consultant shall prepare 60% design plans, specifications and estimate of probable costs (PS&E’s) in accordance with the approved criteria as outlined in the Final Basis of Design as prepared in Task 10 above. The 60% PS&E’s shall be prepared using current District Standards, other agency standards where applicable, and good engineering practice. The 60% PS&E’s shall be submitted to the District for review. Other agency review may be required if noted in the Final Basis of Design Report. Two (2) hard copies of full size (36x24) plan sets, four (4) hard copies of half size (11 X 17) plan sets and one (1) electronic PDF copy of the 50% PS&E’s to the Project Manager.

The 60% PS&E submittal should include plans of all disciplines for the switchgear, MCC and control panel replacement including all civil, electrical, geotechnical, structural, and any other design required, overall outline of the specifications with some detail included and an engineer's estimate of probable costs with preliminary quantities and unit costs. The 60% PS&E submittal shall also include 60% drawings and specifications related to system integration for the District SCADA network as described in Task 6 below.
Task 6. PLC Panel Design and Control Strategies

The Consultant shall conduct "Site Audit" work sessions with the District Water Production Team to identify, inspect and evaluate existing hardware and controls equipment for the Pump Station. The Consultant shall catalogue all existing controls hardware and provide recommendations for replacement and standardization of hardware where applicable based on currently available technologies and industry best practices. Make recommendations for additional items to be monitored to enhance operations and maintenance. All enhancements shall match the requirements from the SCADA Master Plan which will be provided to the Proposer.

Existing Conditions

1. The Consultant shall evaluate the condition of existing PLC racks, I/O modules, field wiring and backup power supplies. Provide a summary of assessment findings and recommendations for enhancement. Enhancements shall comply with the District’s SCADA master plan.

2. The Consultant shall prepare an "Instrument Database" (master equipment list) cataloging all existing hardware and configuration details for the site. The format and fields of this database shall be developed in collaboration with the District Water Production Team.

3. The Consultant shall create an I/O database to catalogue all system I/O and communications, which shall include summaries of the use and function of each. The database shall be provided in a form easily integrated with an SQL database. The format and fields shall be developed in collaboration with the District Water Production Team. The type of I/O captured in this database shall include, but not be limited to, PLCS, local and remote HMIs, remote I/O modules, radio transmitter modems, backup power, wiring and termination blocks.

4. The Consultant shall provide recommendations for control hardware upgrades and standardization. These recommendations will be used for the new panel designs.

5. The Consultant shall verify existing field wiring to determine where re-integration with the new main RTU panel at the Pump Station needs to occur. Extent of field investigation shall be sufficient to design the new RTU panel and understand all existing field wiring and circuitry.
6. The Consultant shall conduct "Site Operations" work sessions with the District Water Production Team to develop standard automated operating procedures for the Pump Stations. The Consultant shall enhance existing operational practices based upon new capabilities or functionality of technology, recommend corrections to current deficiencies, recommend improvements, as well as enhance reporting, monitoring and system controls capabilities. The Consultant shall plan for work sessions with District Staff to develop these procedures and panel design.

7. The Consultant is expected to develop a detailed understanding of the facilities' operational function including all equipment, controls, instrumentation, and communication systems. Consultant shall research as necessary to fully understand the capabilities and limitation of the station in its current operational configuration.

8. Consultant shall provide a “Site Operations” summary of current operating procedures based upon findings/results of these work sessions.

The Consultant shall develop control panel drawings for the Pump Stations that will be replaced. Each panel drawing shall fully specify all system equipment in the panel, including but not limited to, PLCs, HMI's, Radios, input/output cards, timers, fuses, switches, panel dimensions, backup power supplies and relays. Panel drawings shall be detailed and precise for construction and fabrication purposes. Panel design submittals shall correspond with the 60%, 100% and final design set time frames.

**Drawings shall include, but not be limited to:**

1. All wiring diagrams for each panel including analog inputs, analog outputs, discrete inputs, discrete outputs, terminal blocks, etc. This design shall be provided to the Contractor for fabrication.

2. The loop diagrams shall include content required by ANSI/ISA S5.4 - Instrument Loop Diagrams.

3. Each control panel drawing shall also have Factory Acceptance Test (FAT) requirements and Site Acceptance Test (SAT) requirements. Acceptance testing requirements will be developed based on all operational and audit workshops conducted and be individually created based on the applied site. Clear definitions of acceptance criteria will be required.
4. In the event of a failed FAT or SAT, procedures for correction and retesting shall be defined.

5. Drawings shall include all standard field wire labeling requirements, wire termination, color coding of wiring and devices as well as nameplates

The Consultant shall develop standardized functional specifications for the site. These specifications shall be used by the Contractor to program all logic controllers. Testing requirements of the programmable logic controllers shall be included in the FAT and/or SAT requirements defined above. These site standardized specifications shall also be intended for use as the Operational Site Manual for the Pump Station Operators.

These specifications shall include, but not be limited to, the following:

1. Narrative overview of the function and operation of the Pump Station.

2. Identification of all components of the station (i.e., equipment, instrumentation, etc.).

3. Narrative description of the functionality of each component of the station (e.g., pumps, tanks, VFDs, valves, meters, sensors/transmitters, monitors, etc.).

4. Description of the process control strategies for the station, as follows

5. Narrative description of each process control strategy;
   a. Identification of the specific I/O, set points, commands, and communications associated with each strategy
   b. Detailed description of the control logic for each component/strategy, including permissives, interlocks, PID controls, etc.

6. Description of the SCADA interfaces. The District’s SCADA Network will be upgraded in the very near future. Design of new RTU shall be similar to the planned upgrade.

7. Narrative and detailed description of system alarms and other functionality.

Based upon the Consultant's detailed understanding of the Pump Stations functionality and operations, the Consultant shall develop comprehensive Factory Acceptance Test (FAT) Criteria and Site Acceptance Test (SAT) criteria. The Consultant will be tasked with providing recommendations for test protocols, acceptance parameters and other control
system submittals associated with the planned improvements to ensure that all Contractor programming requirements are being executed in compliance with the specifications.

1. Provide a witnessed FAT Checklist for the Contractor’s Programmer.

2. Provide a witnessed SAT Checklist for the Contractor’s Programmer.

3. Provide a specification that documents how FAT and SAT testing will be conducted, how discrepancies will be noted, and how the Contractor is expected to note and correct all deficiencies.

The Consultant shall act as the District’s agent during factory and on-site functional and performance acceptance testing. The Consultant shall document and identify all functional and performance discrepancies and coordinate corrective actions to resolve identified discrepancies prior to District Acceptance.

On an as-needed basis, the Consultant shall provide on-site support for commissioning (start-up) activities, in close coordination with the replacements Contractor and PCS Integrator. The Consultant shall be present during system commissioning to verify all aspects of the control system and associated process equipment are exercised and to ensure deficiencies are corrected by the Contractor/PCS Integrator as they are found. Commissioning will not be considered complete until the Consultant has determined that all of the system requirements have been met.

Key Deliverables (independent of the 30%, 60%, 100% and final design set submittals) under this task are as follows:

1. Site Audit Technical Memorandum:
   The "Site Audit" work sessions shall follow with a summary of hardware assessment findings. This TM will provide recommendations associated with hardware upgrades and standardization.

2. Instrument Database:
   A list of all existing hardware and configuration details shall be submitted for review and comment by the District. A separate list of any proposed hardware shall also be included (this list shall identify which piece of hardware that it will be superseding). The format and proposed fields shall be approved by the District prior to development/submittal of this database.
3. I/O Database:
   A list of all system I/O and communications interfaces shall be submitted for review
   and comment by the District. The format and proposed fields shall be approved by
   the District prior to development/submittal of this database.

4. Site Operations Technical Memorandum:
   The "Site Operations" work sessions shall follow with a field summary for review
   and comment by the District. The memorandum will include an organized summary
   of existing operating procedures. The TM shall also include recommendations for
   improvements to system practices and procedures.

5. Functional Specification:
   A functional specification, as described in the scope above, shall be submitted for
   review and comment by the District. The format and content outline shall be
   approved by the District prior to final development/submittal.

6. FAT/SAT Protocols:
   Acceptance testing protocols and criteria for all control system and criteria for all
   control system submittals will be submitted to the District for review and comment.

7. FAT/SAT Results Report(s):
   Acceptance testing results, including required corrective action plans to address
   any performance/functional deficiencies, shall be submitted to the District for review
   and comment.

8. Commissioning/Start-up Report:
   Acceptance testing results, including required corrective action plans to address
   any performance/functional deficiencies, shall be submitted to the District for review
   and comment.

Task 7. 100% Construction Document (PS&E) Submittal

Utilizing comments received from the various reviewers, the Consultant shall prepare the
100% PS&E's in accordance with the approved Basis of Design Report as prepared in
Task 4. The Consultant shall be required to compile in a matrix format all 60% comments
received and responses made by the Consultant for review by the Project Manager. A
column in the matrix will outline any action taken by the Consultant in resolving the
comment. This spreadsheet will be submitted to all reviewers as part of the 100% PS&E
submittal. If needed, the Consultant shall schedule review meetings with key reviewers to clarify any comments and resolve any conflicting comments.

All comments from the 60% review must be addressed and incorporated into the 100% PS&E’s as stated in the response matrix. The 100% PS&E submittal shall include a complete set of replacement plans including all applicable disciplines and all detail sheets. The 100% Specifications/Bid Documents shall be a complete package with all bid items included. The 100% engineer's estimate of probable costs shall be complete including updated quantities, unit prices, and carried totals for each bid item and a grand total for the Project. Two (2) hard copies of full size (36x24) plan sets, four (4) hard copies of half size (11 x 17) plan sets, one (1) electronic PDF copy of the 100% PS&E’s shall be delivered to the Project Manager. Design files, e.g., digital terrain model and alignment files in In-Roads may be submitted to expedite the review process.

**Task 8. Final Construction Document (PS&E) Submittal**

After receiving any comments on the 100% submittal from the various reviewers, the Consultant shall prepare Final PS&E’s ready for bidding. The Consultant shall be required to compile in a matrix format all 100% comments received and responses by the Consultant for review by the Project Manager. A column in the matrix will outline any action taken by the Consultant in resolving the comments. This spreadsheet will be submitted to all reviewers prior to and as part of the Final PS&E submittal. If needed, the Consultant shall schedule review meetings with key reviewers to clarify any comments and resolve any conflicting comments.

All comments from the 100% review will be addressed and where required will be incorporated into the Final PS&E’s. The Final PS&E submittal shall include a complete set of improvement plans including all applicable disciplines, all detail sheets and shall be signed by a registered engineer in the State of California for each discipline. The Final Specifications/Bid Documents submittal shall be a complete package with all sections of the standard District bid documents included and will have listed all bid items in the standard form. The Final Engineer's estimate of Probable Costs shall be complete including final quantities, unit prices, carried totals for each bid item, a grand total for the Project. Two (2) hard copies of full size (36x24) plan sets, four (4) hard copies of half size (11 x 17) plan sets, one (1) electronic copy of the final PS&E’s shall be delivered to the Project Manager.
The Consultant shall be responsible for addressing any final comments to the plans, specifications and engineer’s estimate of probable costs based on input from the Project Manager prior to going to bid.

**Task 9. Bidding & Construction Phase Services**

Throughout the bidding and construction process, the Consultant shall be required to assist the Project Manager in the following items:

1. Assist in responding to questions raised during the bidding process including preparation of any addenda.

2. Attend the pre-construction meeting and construction kick-off meeting.

3. Respond in writing to any contractor’s questions (RFI's) during construction. Assume a total of twenty (20) RFI's for purposes of this proposal. Assume that ten (10) will require design sketches or exhibits.

4. Attend site visits to clarify design issues in the field as required by District staff. Assume a total of twenty (20) hours for site visits and construction meetings.

5. Collect and compile all equipment and product information provided by the Contractor and incorporate into an Operations and Maintenance manual. The manual will include the specifications, maintenance recommendations and warranty information.

6. Assist the District with start-up of the facility upon commissioning of the replacements. Assume a total of forty (40) hours for the purposes of this proposal.

7. Evaluate and respond to the Contractor’s requests for change orders. Assume a maximum of six (6) requests that will need attention.

8. Factory and Site Acceptance Testing as required and described in Task 5.

9. Review shop drawings, samples, equipment specifications and other submittals. Assume thirty (30) submittal reviews for purposes of this proposal.
The Consultant will review REI's and shop drawings during construction when forwarded by the District’s Construction Project Manager. Consultant may be required to visit the construction site to resolve construction issues.

**Task 10. Operations and Maintenance Manual**

After construction has been completed and the site has been commissioned, the Consultant shall finalize an operational site manual that fully defines how the site functions. Care shall be taken to address the separate pumping stations. In addition, all Operator duties shall be defined and procedures for field checking common errors shall be established. The intent of this site manual is to define standard operating procedures for field operations.

**Task 11. Record Drawings**

At the conclusion of the construction, the District will provide the Consultant with a single, consolidated set of red-lined as-built drawings. The Consultant shall prepare the final record drawings based on the same. Record drawings shall be prepared in AutoCAD and submitted to the District in AutoCAD and PDF formats.

**Additional Work**

The Consultant is encouraged in its proposal to identify any additional work that is not specified in this Scope of Work that would be, in its opinion necessary or of benefit to complete the Project as defined herein. If identified, this Additional Work must be included and separated out in the Consultant's Proposal and Fee Schedule.

**Value Added Work**

The Consultant is encouraged to identify any additional work, not identified in this Scope of Work that would be of benefit to complete the Project as defined and can be provided as part of the proposal at no additional cost to the District.
Fee Proposal:

In addition to Section IV.B.3 (Submittal Requirements: Fee Proposal) fee schedule shall be structured as follows:

The fee proposal shall include the firm’s standard hourly fee schedule, and/or project fee schedule where applicable and as outlined in this document.

The fee should include optional services such as the environmental CEQA Preparation.

Proposal Submission

Award of the contract resulting from this RFP will be based upon the most responsive, responsible firm whose offer will be the most beneficial to Western in terms of cost, functionality, and other factors as specified elsewhere in this RFP.

An original signature must be included on the document submitted with each copy. The form is included at the end of this RFP.

Western reserves the right to:

- Reject any or all offers and discontinue this RFP process without obligation or liability to any potential consultant.
- Accept other than lowest price offered.
- Award a contract on the basis of initial offers received, without discussions or requests for best and final offers.

Each firm’s proposal must be submitted in several parts as set forth in section, “Required Elements for Response.” Each firm will confine its submission to those matters sufficient to define its proposal and to provide an adequate basis for Western’s evaluation of the firm’s proposal.
Selection Process

Proposals will be evaluated by a selection committee comprised Western’s staff. The proposal shall be of such scope and depth to sufficiently describe and demonstrate the consultant’s understanding of approach to the project. Submittal of incomplete or vague responses to any section of this RFP may result in rejection of the proposal.

Proposals will be evaluated and ranked based on criteria including understanding of the purpose of the work, project approach, relevant project, scope-of-work, experience, project team members' qualifications, and project schedule. This is not a competitive bid process. The most highly ranked proposals may be interviewed and rated by the selection committee. After selection of the prospective Consultant deemed most qualified, Western will initiate negotiations. If an acceptable contract cannot be reached with the prospective Consultant deemed most qualified, Western may then negotiate with the next highest-rated proposer. Once negotiation with a proposer are terminated, the District will not renegotiate with that proposer.

Western reserves the right, after opening the proposals, to reject any or all proposals, or to accept proposal(s) that in its sole judgement are in the best interest for Western.

Prospective Consultant are responsible for ensuring that proposals are received **at the specified location by the specified time.**

Questions Regarding RFP

Any questions or requests for interpretation or clarification, either administrative or technical, about this RFP must be submitted via email to Sonia Huff, shuff@wmwd.com prior to 3:00 pm on July 6, 2017. Western will compile all questions and requests, and provide responses in electronic format to all firms on July 10, 2017.

Oral statements concerning the meaning or intent of the contents of this RFP by any person other than the persons identified herein are unauthorized and invalid. Western will not be responsible for any other explanation or interpretation of this RFP, or for any oral instructions. Any contact with Western personnel other than identified above regarding this RFP may disqualify a proposer.
Clarification Statements
For clarification purposes, the words “Contractor”, “Company”, “Proposer”, “Vendor”, and “Bidder” shall be read to be one and the same. The words “Contract” and “Agreement” shall be read to be one and the same. The words “Bid” and “Proposal” shall be read to be one and the same. “Western Municipal Water District”, “Western”, and “District” shall be read to be one and the same. “Request for Proposal” and “RFP” shall be read to be one and the same.

Required Elements for Response
Consulting firms responding to this RFP will provide the following information in their proposals:

Proposal Format: Letter Proposal, limited to 10 pages.

Proposal sections shall include
1. Cover Letter (not included in the page count)
2. Introduction and Project Understanding
3. Scope of Work
4. RFP Signature Page (not included in the page count)
5. Project Personnel Organizational Chart and Team Qualifications (not included in the page count)
6. Schedule
7. Estimated Level of Effort per Scope Task, itemized by labor classification.
8. Company standard schedule of charges. (not included in the page count)
9. Include resumes of any proposed team members and relevant project descriptions (as an appendix-not included in the page count).
10. Fee estimate, including labor, sub consultants and projected reimbursable costs to be submitted in a separate sealed envelope (not included in the page count).
Sealed Fee Schedule
The fee portion of the proposal shall include costs and fees for the proposed services based on hourly rates of staff. A clear breakdown of these costs by task including staff hours shall be provided and include a listing all professional services expenses anticipated including insurance, printing, communications and travel. Cost should be based hourly rates of staff, including clerical positions. Such hourly rates should be fully burdened or loaded, including full compensation for all overhead and profit. Billing rates shall include provision for normal supplies and materials, in-house reproduction services and local travel costs.

Separate costs shall be provided for the audit of each facility noted above under Background as well as a cost for project management including meetings.

Costs and fees are to be submitted in a separate sealed envelope marked as noted above.

RFP Signature Page
The RFP signature page is included at the end of this document and must be included in each proposal.

Exclusions
Any noted exclusions not included in scope

Addenda to Proposal
Western may modify this RFP, any of its key actions, dates, or any of its attachments, prior to the date fixed for submission of proposals by issuance of an electronic Addendum to all proposers. Such Addendum will also be posted on Western’s website. Proposer will acknowledge receipt of all Addenda in their proposal. Any Addenda issued during the time for submission of proposals will be made part of the Agreement.

Withdrawal of Proposal
A proposal may be withdrawn after its submission by written request signed by the proposer or authorized representative prior to the time and date specified for proposal submission. Proposals may be withdrawn and resubmitted in the same manner if done so
before the proposal submission deadline. Withdrawal or modification offered in any other manner will not be considered.

Late Responses
While late responses are usually rejected, Western retains the right to accept or reject late responses for any reason.

Evaluation of Proposals
Western staff will evaluate and rate proposals based on best value to Western, not based on price alone. All proposals will be reviewed to verify that the proposer has met the minimum requirements as stated in this RFP. Proposals that have not followed the rules, do not meet minimum content or quality standards, do not provide references, or take unacceptable exceptions to the RFP, will be rejected as non-responsive. Proposals will be evaluated on the following criteria, not necessarily in order of priority:

- Understanding of the work to be performed
- Strength of key personnel
- Experience and Technical Competence of firm and subcontractors
- Approach to the Project, including technical and management considerations
- Evaluation of the cost effectiveness in relation to team qualifications and proposed project methodology

The most qualified firm(s) may be asked to participate in an oral interview to discuss in greater detail the content of their proposals. Western will notify finalists, if interviews are conducted, of the date and time of such interview(s).

Rejection of Proposals
Western may reject any or all proposals and may waive any immaterial deviation in a proposal. Western’s waiver of an immaterial defect shall no way modify this RFP or excuse the proposer from full compliance with this RFP and/or the Contract documents if awarded the contract. Proposals that include terms and conditions other than Western’s terms and conditions may be rejected as non-responsive. Western may make investigations as deemed necessary to determine the ability of the proposer to perform the services, and the proposer shall furnish to Western all such information and data for the purpose as requested by Western. Western reserves the right to reject any proposal if the evidence
submitted by, or investigation of, such proposer fails to satisfy Western that the proposer is properly qualified to carry out the obligations of the agreement and to complete the work described therein.

Award of Contract
Award of Contract or rejection of proposals will be made by Western within fourteen (14) calendar days following the proposal due date. Western reserves the right to modify the Award of Contract or rejection date to best meet the needs of the District. Western reserves the right to reject any or all proposals in response to this RFP in the best interest of the District. Western further reserves the right to waive any informalities or irregularities in the proposals. Western shall not be liable for any cost incurred in connection with the preparation and submittal of any proposals. Award, if any, will be to the proposer whose proposal best complies with all of the requirements of this RFP.

Western may choose to award all or part of the project to one or more consultant.

Contract Documents
In submitting a proposal, the firm agrees to enter into an agreement with Western utilizing a Purchase Order. A sample contract is provided in Attachment A. The firm’s proposal in response to this RFP will be incorporated into the final agreement between Western Municipal Water District and the selected firm. The agreement to be executed by the successful proposer will generally conform to the terms of the Purchase Order, however, Western reserves the right to update the agreement to its current standards at the time Western makes an award. Proposers are advised that the indemnification and insurance provisions are mandatory and not subject to revision. Properly executed policies or Certificates of Insurance for:

- Commercial General Liability Insurance*
- Automobile Liability Insurance*
- Workers’ Compensation / Employer’s Liability Insurance
- Professional Errors and Omissions Insurance

After contract award, and receipt of the below documents, a Purchase Order will be issued to the awarded proposer.

Failure to execute the Terms of the Purchase Order and furnish the required documentation and insurance within the required time period shall be just cause for the
disqualification of the award. If the successful proposer refuses or fails to execute the Terms of the Purchase Order, Western may award the project to the next qualified proposer.

*Including an Additional Insured Endorsement for each policy

Cancellation
Western retains the right to cancel the RFP at any time should it be deemed to be in the best interest of the District. No obligation, either expressed or implied, exists on the part of Western to make an award based on the submission of any proposal.
Signature Sheet

My signature certifies that the Proposal, as submitted, complies with all terms and conditions as set forth in this RFP.

My signature certifies that this firm has no business or personal relationships with any other companies or persons that could be considered a conflict of interest or potential conflict of interest to Western Municipal Water District, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with Western.

The Proposer hereby certifies that it has: Read each and every clause of this RFP. Included all costs necessary to complete the specified services/work in its proposed prices. Agreed that, if it is awarded the Contract, it will make no claim against Western based upon ignorance of local conditions or misunderstanding of any provision of the contract. Should conditions turn out otherwise than anticipated by it, the Proposer agrees to assume all risks incident thereto.

I hereby certify that I am authorized to sign as a Representative for the firm:

Name of Firm: ________________________________________________
Address: ______________________________________________________
Fed ID No.: ____________________________________________________

Signature: _____________________________________________________
Name (type/print): ______________________________________________
Title: __________________________________________________________
Telephone (___) _________________________________________________
Email: _________________________________________________________
Fax No. (___) ___________________________________________________
Date: __________________________________________________________

To receive consideration for award, this signature sheet must be returned as part of the Proposal.