



January 27, 2025

Mr. Eric Del Bosque, P.E.
Director of Engineering and Operations
Sweetwater Authority
505 Garrett Avenue
Chula Vista, CA 91910

SUBJECT: WHEELER RESERVOIR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES

Dear Mr. Oberbauer:

Thank you for the opportunity to provide professional constructability review, construction management and inspection services for the Wheeler Reservoir Project. The project includes constructability review for a new 0.8 MG welded steel reservoir, construction of roadway, waterline and storm drain. The new reservoir is located northeast of the intersection of Proctor Valley Road and San Miguel Road in Bonita.

The project is scheduled for a contract time period of 1.5 year; 469 Calendar days. TKE will be covering the project for 12 months, 365 calendar days per the Authority's request.

SCOPE OF WORK

TKE's scope of services is presented in the following paragraphs:

Task No. 1 - Preconstruction Services

A preconstruction conference will be held for the project. The conference will be attended by Authority staff, TKE's Construction Manager and Construction Inspector, the Contractor, representatives of potentially affected utilities and representatives of any other affected agencies. Prior to the conference, we will prepare a conference agenda. At the meeting, we will discuss communication protocol requirements, safety and health procedures, schedule requirements, procedures for contract submittals, contract administration, job-site access and delivery, and coordination with others. After the meeting, it will be documented with minutes.

Deliverables: Agenda, Minutes, and distribution to all entities

Task No. 2 – Construction Management Services During Construction

TKE will provide the following subtasks related to construction management services:

Task No. 2a – Records Management

TKE utilizes an electronic records management system. Files include:

- Contract Documents, Addenda, and Reports
- All required local, other agencies and state records throughout the project duration and submit copies to the Authority's project manager, including labor compliance.
- Environmental Compliance Documents/Agency Permits
- Material Submittals

- Contractor Correspondence (RFI's and RFC's)
- Authority Correspondence (Responses to RFI's and RFC's and other correspondence)
- Certified Payroll Records
- Employee Interviews
- Change Orders
- Progress Payments
- Materials Testing Reports/Correspondence
- Inspection Field Reports/Accident Reports
- Photo Logs
- Utility/Agency Correspondence
- Operations and Maintenance Manuals
- Project Closeout Records

Deliverables: E-File of All of the Above.

Task No. 2b – Material Submittal Review

TKE will develop a list of all required material submittals and compare the list to the Contractors submittals. TKE will review all project submittals including welding certifications. Each submittal shall be reviewed with Authority staff and design engineer as required to verify compliance. We will maintain a project log for each project and it will include descriptions of submittals, submittal status, date received, and date returned. Once the submittals have been reviewed and accepted, they will be signed, dated, and sent to the Construction Inspector, Authority staff, project Contractor and the file. Submittals will be returned within the time frame specified by the Contract Documents.

In addition to submittals, TKE will review all vendor and lab reports and certifications and material test inspections and correlate all reports with respect to the plans and specifications. TKE will provide a log for reports and certifications and notify the Authority upon any irregularities.

Deliverables: Submittals, Transmittals, and Logs

Task No. 2c – Construction Meetings

TKE will be in constant communication with Authority staff during the projects entirety to ensure that the project is running smoothly and in accordance with the Authority's expectations. TKE will hold meetings with Authority staff, Contractor and Inspector, meetings with utilities/agencies, community members, and affected agencies. Each is discussed below:

Authority Meetings-TKE will meet with Authority staff as required to keep staff fully apprised as to construction progress and potential project issues. We will prepare agendas and minutes for each meeting.

Contractor Meeting-our Construction Manager will meet with the project contractor biweekly. We will prepare agendas and minutes for each meeting. Meeting agenda will typically include background, old business, new business, scope, objectives, traffic control, construction phasing, project schedule, potential issues discussion, payment quantities discussion, and any safety deficiencies observed.

Utilities/Agency Meetings-as mentioned above, TKE will invite utilities and agencies to the preconstruction conference. During that meeting, all potential project impacts will be discussed with each. During construction, should issues develop needing further discussions with utilities/agencies, TKE will meet with each and develop remediation strategies. Again, all meetings will be documented with minutes.

Community Meetings-TKE will meet with members of the community to discuss current project schedule, issues during construction or coordination of private property improvement reconstruction.

In addition, the Authority will receive RFI's and RFC's (including written clarification requests and change-in-plan drawings) regarding the contract documents. TKE will provide any drawings, sketches and written responses in a timely manner to each with direction and will verify compliance with the Contract Documents. All RFI's and RFC's will be logged, including content of inquiry, date relayed and date of response. TKE will review all RFC's for any potential change in scope and notify the Authority if potential change orders may arise from the RFC.

Deliverables: Agendas, Minutes, RFI and RFC Responses

Task No. 2d – Construction Management

TKE is uniquely suited to respond to challenges that may occur during construction. Our manager's consistent communications with the construction inspector will also provide immediate remediation alternative development.

TKE will review the project schedule and construction progress prior to each Contractor meeting to verify compliance with the Contract Documents. In addition, we will prepare weekly statement of working days to be provided to the contractor at each weekly meeting. If the Contractor is failing to meet approved schedule contract obligations, TKE will request a remediation effort to return the project progress to comply with requirements. If the remediation plan requires adjustment to the completion date, TKE will advise the Authority and will not execute any approval of such change without Authority authorization.

Change conditions and time extensions that may warrant a change order will require a complete understanding of the impacts of the change of which TKE will need to consider in determining its resolution. TKE will seek appropriate comments from anyone impacted by the changed conditions and will closely consult with the Authority to develop the most cost-effective remediation alternative. Cost and scheduling impacts will be noted and presented to the Authority in accordance with the cities change order procedures prior to direction being given to the Contractor, including the preparation of Change Order drawings and specifications, if required.

To maintain cost controls, TKE will review project budgets on a weekly basis, or as warranted, by review of change orders, RFC's, and progress payments. In particular, quantities used on the project will be tracked to verify that they will not exceed contract budgeted amounts. Each month, TKE will provide a budget report to the Authority. Should an increase in budget be required, TKE will assist Staff with staff report preparation.

Regarding RFC's, we will review any change order request received to determine if said request is warranted. If the change order request is not warranted, we will reject it in writing; prior to sending rejection letters to the Contractor, we will review it with Authority staff. If the change order request appears justified, we will review it with the Construction Inspector and compare it with field reports for confirmation of materials, equipment and/or labor involved; we will review same with Authority staff and receive Authority staff's approval prior to preparing and processing the contract change order. Change orders will be prepared on standard forms.

Should rejected RFC's require additional consideration, we will negotiate with contractors to establish the impact of change conditions and we will attempt to complete negotiations prior to beginning work. If we fail to reach an agreement and the work must continue, we will direct the Contractor to complete the work. For all disputed work and force account work,

the Construction Inspector will document the labor, materials and equipment used for the extra work for use in future negotiations.

Upon direction from the Authority, TKE will continue negotiating with Contractors to settle all disputes. However, Authority staff will ultimately determine the extent the Authority will go to achieve resolution. TKE will meet with both parties, either independently or together, as warranted until resolution is reached. TKE will complete all necessary calculations to support the Authority's position. TKE utilizes a proactive dispute avoidance program. Once an issue is identified, TKE works diligently to resolve it as timely as possible. The weekly meetings will also be used to avoid or resolve these disputes.

Deliverables: Change Orders, Budget Reports, Staff Report

Task No. 2e – Pay Requests

Each month, TKE will review the construction payment requests submitted by the contractors for work completed and the construction schedule. We will review the work completed and payment requests to ensure that the quantities and amounts requested reflect the actual work completed. After each request has been reviewed (and revised if necessary), we will approve it and forward it to staff for approval and payment along with a written statement of completed review. We will also submit a monthly status report with each payment request that will advise the Authority of compliance with the project schedule.

TKE will track and log any Preliminary and Stop Notices prior to each month's progress payment. If any stop notices have been issued, we will direct the Contractor to rectify the notice and provide proof of the rectification prior to release of payment.

TKE will perform verification of labor compliance for the project with each payment request submitted and will also perform labor compliance interviews. Should deficiencies be noted, corrective action will be requested from the contractors prior to payment release.

TKE will also provide monthly reports highlighting project progress, change orders, cost issues, and schedule.

Deliverables: Payment Requests, Certified Payroll Reporting, Labor Compliance Interviews and Budget Reports

Task No. 2f – Agency Coordination

TKE's Construction Manager will review permitting and coordinate with appropriate County, Authority, and utility agencies affected by the work. We will coordinate project schedules and work progress affecting the project with each appropriate agency. If appropriate, the Construction Manager will invite affected agencies to attend the weekly progress meetings to review the project schedule, summarize project requirements and discuss them at these weekly meetings.

Deliverables: Agency Coordination

Task 3h – Billing and Project Reports

TKE will provide monthly project reporting identifying current activities, future activities, potential change items, concerns, problems, any possible delays, percentage of completion and budget status for construction contractor and consultants. TKE will provide monthly billing to the Authority for consultant work performed during the previous month. All invoices will follow Authority format and include a break down by task and fee.

Deliverables: Monthly Invoices and Summary Reports

Task No. 3 - Construction Inspection Services

TKE will provide daily construction inspection and reporting, to verify that the project is progressing in compliance with the contract documents. We will require strict compliance with the contract documents for all construction activities and for any equipment or materials to be furnished and installed. We already possess the measuring devices and testing equipment normally required for inspecting public works construction projects. Our construction inspection personnel are experienced and knowledgeable in the operation of said devices and equipment, as well as the associated safety equipment.

Quality Assurance: TKE's inspector will continually review plans and specifications throughout construction of features in the project. Verifications of the contractor's compliance with the specifications and manufacturer's technical data sheets will be accomplished by performing the following task as necessary, with the appropriate calibrated instruments for each:

- a. Structural Inspection: Perform visual inspection of welds, including reinspection after repair of defective joints. Review and evaluation of welder's credentials and welding procedures. Check appurtenances are installed in accordance with AWWA, Cal/OSHA, and SWRCB regulations.
- b. Inspector will be on site during all x-ray testing of welds, dye penetrant testing of chime weld and vacuum testing of all bottom welds accomplished by the Contractor.
- c. Conditions of Surfaces Prior to Preparation: The inspector will examine surfaces prior to begin surface preparation to assure that grease and oil have been removed and no sharp edges are present or are removed as specified.
- d. Compressed Air Cleanliness: The inspector will check the air quality when production includes abrasive blast cleaning or substrate blow-down procedures in accordance with ASTM D4285.
- e. Ambient Conditions: The inspector will monitor ambient conditions in accordance with ASTM E337 to assure that final blast cleaning and coating application operations are not completed outside the specified requirements.
- f. Surface Preparation: The inspector will examine the abrasive and equipment used for surface preparation for adequacy to do the work, as specified. Equipment pressures will be monitored. The inspector will verify proper storage and size of abrasives, and that the proper degree of cleaning and surface profile or scarification is obtained.
- g. Coating Preparation and Mixing: The inspector will verify materials used are approved and the pot or shelf lives has not been exceeded. The inspector will observe all components are proportioned correctly, added, and thoroughly mixed and any inductions times are maintained. All batch numbers will be recorded.
- h. Coating Application: The inspector will examine the application equipment for cleanliness and adequacy to work. The inspector will observe application techniques to assure proper coverage without detrimental runs, pinholes, or other visually evident deficiencies. The inspector will make spot checks of the wet film thickness in accordance with ASTM D4414 so that adjustments to the amount of material being applied can be made at the time of application to minimize the amount of rework after the coating has dried.
- i. Dry Film Thickness: The inspector will measure the dry film thickness of each coat to assure that it complies with the specification requirements and manufacturers'

instructions. Film thickness will be monitored using a Type II film gage in accordance with ASTM D1186, SSPC-PA2, or as required (i.e. every 100SqFt).

- j. Cure Evaluation: The inspector will evaluate the final cure of the applied lining in accordance with the Manufacturer's recommended procedures, and or ASTM D5402, as required.
- k. Holiday Detection: Inspector will provide holiday detection equipment and perform 100 percent holiday detection in accordance with NACE International's "Recommended Practice for Discontinuity (Holiday) Testing of Protective Coatings," (RP 0188-99), AWWA D102, and the specified requirements.
- l. SHOP INSPECTION: Inspection of the surface preparation and application of the prime coat will be accomplished per the above noted scope Items C. through J. above. except at the Contractor's selected shop location. Daily inspection reports will be prepared for the days of inspection at the shop. The fees are based on two weeks of shop inspection including travel time and subsistence.

Throughout the project, TKE's inspector will maintain a set of record drawings which reflect conditions encountered and constructed in the field. Upon substantial project completion, these drawings will be submitted to the construction manager.

As a part of the project, TKE's inspector will assist the construction manager with monthly pay estimates. TKE's inspector will utilize load tickets, testing results, and inspection reports to reconcile pay requests. The inspector will keep records of extra work performed, minor changes, revisions to the plans and specifications, and develop estimates for changer orders if determined necessary. All extra work invoices will be reviewed by the inspector for accuracy.

All materials will be reviewed against approved material submittals as they arrive on-site. Batch tickets or weigh certificates will be collected upon material arrival.

Our Construction Inspector will verify SWPPP and safety provisions have been implemented at the start of each work day, at the construction site. Any deviations will be documented. All system service interruptions, connections and abandonments will be coordinated with staff. In addition, he will coordinate and schedule materials testing and survey requirements with appropriate Agency's parties to ensure there is no delay to the project construction and to minimize costly down periods for anyone onsite.

We will digitally photograph the activities and maintain copies in the project files and our Construction Inspector will prepare daily field reports, which will document all observed project activity, including location of the activity, number of workers present, construction equipment used, quantities constructed, inspector present, weather conditions, and construction progress. All project documentation will be completed on standard forms. All documents will be submitted in hard copy and electronic copy formats.

Our inspector will provide emergency contact information to allow for 24-hour accessibility. He will verify site safety conditions on a daily basis and, should conditions be unsafe, advise the contractor of corrective actions. If the contractor fails to remediate such conditions, he will advise the Authority and request direction. Should an accident occur, we will notify the Authority and note all site conditions and photo document the accident location.

Deliverables: Daily Field Reports, Site Deficiency Reports, Batch Tickets, Photographs, Accident Reports, Testing Reports, and Summary Reports

Task No. 4 – Post Construction Management Services

TKE will provide the following subtasks related to post construction management services:

Task 4a - Project Close-Out

After project construction is essentially complete, we together with Authority staff, if desired, will field review the project and prepare a construction deficiencies list (punch list) of items requiring remedial work. After all deficiencies are corrected, our Construction Manager will prepare a letter, recommending acceptance of the project. Once the remedial work is completed, TKE will review and process the final project invoice.

TKE will assist the Authority to identify, track and monitor the completion of warranty work prior to the construction completion date. We will obtain lien waivers, bonds, guarantees, warranties, if required, and other documents required by the Contract Documents for final Contract Closeout.

In addition, we will prepare the Notice of Substantial Completion to establish the date for the commencement of contract warranty periods and acceptance of maintenance responsibility by Authority. We will provide the Contractor with a list of any remaining incomplete work requirements to be completed prior to Final Completion.

After all project requirements have been completed, we will prepare a "Notice of Completion" report documenting the final completion of the project and acceptance of the project improvements by the Authority.

Once the project has been completed, we will provide the Authority with a complete set of redlined record drawings which will reflect the improvements as constructed; any changes made during project construction will be shown on the record drawings based on contractor's and our records.

We will forward copies of all records in digital and hard copy format (CD ROM and mylar) and we will prepare a summary of construction changes, final cost, and schedule revisions.

Deliverables: Record Drawings, Punch List, Final Payment, Project Records, and Notice of Completion

Task No. 4b – Record Drawings

Each month, our Construction Inspector will review the contractor's records to ensure that a diligent effort is being made to keep current and accurate records of work in place. If deficiencies are observed, we will withhold the contractor's progress payment until the contractor demonstrates compliance.

Once the project has been completed, we will provide the Authority with a complete set of redlined record drawings which will reflect the improvements as constructed; any changes made during project construction will be shown on the record drawings based on contractor's and our records. Drawings will be forwarded to the design engineer to prepare final as-built drawings to be provided to the Authority.

Deliverables: Redlined Record Drawings

FEE

TKE's fee to provide the scope of service described above is shown on the attached fee table breakdown. Our fee is a "time and material basis" fee amount and we will not provide added services without prior written approval from the Authority. Fees for construction

administration services will be provided in accordance with our attached rate schedule and are assumed on a 12-month (365 Calendar Days) project schedule, inspection does not include the electrical or control work phase at the end of the project. TKE will invoice monthly in accordance with our rate schedule and will not exceed our fee without prior approval from the Authority.

Thank you for the opportunity to submit our proposal to provide professional engineering and inspection services. If you have any questions, please contact me at (951) 680-0440 or email me at Trenner@tkeengineering.com.

Sincerely,



Terry Renner, P.E., Q.S.D.
Senior Vice President
TKE ENGINEERING, INC.

Attachments: Fee Breakdown Table

Sweetwater Authority
Construction Management and Inspection Services for
Wheeler Reservoir Constructability Review, Construction Management & Inspection Services
Consulting Engineering Fee Breakdown

Task No.	Task	Construction Manager		Assistant Construction		Clerical		Senior Construction		Survey Crew		Total
		Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	\$
1	Preconstruction Services	16	\$ 2,720	16	\$ 2,400	8	\$ 720	4	\$ 520		\$ -	\$ 6,360
2	Construction Management Services ^{2.)}	150	\$ 25,500	330	\$ 49,500	24	\$ 2,160		\$ -		\$ -	\$ 77,160
3	Construction Inspection Services ^{3.)}	16	\$ 2,720	24	\$ 3,600	40	\$ 3,600	2080	\$ 270,400		\$ -	\$ 280,320
4	Postconstruction Services	24	\$ 4,080	40	\$ 6,000	16	\$ 1,440		\$ -		\$ -	\$ 11,520
Subtotal:		206	\$ 35,020	410	\$ 61,500	88	\$ 7,920	2,084	\$ 270,920	0	\$ -	\$ 375,360

Rates:

Construction Manager	\$ 170 /HR
Assistant Construction Manager	\$ 150 /HR
Clerical	\$ 90 /HR
Senior Construction Inspector	\$ 130 /HR
2-Man Survey Crew	\$ 250 /HR

Notes:

- 1.) Reimbursables Include Cost for Prints, Copies, Mileage, Etc.
- 2.) Assumes 260 Working Days with Part Time Construction Management (i.e. 6 - 8 hours per week)
- 3.) Assumes Full Time Inspection (i.e. 40 hours per week) for 365 Calendar Days; Includes Specialty Inspection for Coatings. A 4-hour minimum will be charged for an inspector arriving to the site. The overall inspection hours will be adjusted according to the hours required by the Contractor.

Total: \$ 375,360