



Folsom City Council Staff Report

MEETING DATE:	5/26/2026
AGENDA SECTION:	Consent Calendar
ITEM TITLE:	Resolution No. 11623 – A Resolution Authorizing the City Manager to Execute an Agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for Design, Engineering Services During Construction, and Construction Management and Inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) (WA2703) and Appropriation of Funds
FROM:	Utilities Department

RECOMMENDATION / CITY COUNCIL ACTION

The Utilities Department recommends the City Council pass and adopt Resolution No. 11623 - A Resolution Authorizing the City Manager to Execute an Agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for Design, Engineering Services During Construction, and Construction Management and Inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) (WA2703) and Appropriation of Funds.

BACKGROUND / ISSUE

The Utilities Department identifies water infrastructure rehabilitation and replacement projects through water master plans, ongoing water condition assessment programs, and regulatory changes. Through these efforts, portions of the water system have been identified as needing rehabilitation or replacement in order to improve the water distribution system reliability. Through these efforts, Utilities department staff identified the Zone 4 Tank Rehabilitation Project as a priority project.

During construction of the current Tower Tank Rehabilitation Project (Project WA2402) involving East Tank No. 2, Tower Tank, and Foothills Tank No. 2, the contractor encountered multiple unforeseen conditions involving structural deficiencies and other items requiring rehabilitation or replacement. Since the tanks involved in the Tower Tank Rehabilitation Project are of a similar

age and construction type as the Zone 4 Tank, the Utilities Department has identified the Zone 4 Tank as a priority project to ensure operational reliability of the city's water distribution system.

The City of Folsom's Zone 4 Tank is located on Caversham Drive, in the Broadstone neighborhood. Phase 1 of the Zone 4 Tank Rehabilitation Project involves draining and cleaning the tank so that the contractor can install the necessary scaffolding and perform any required sandblasting to allow a licensed structural engineer access to the interior of the tank. A structural engineer will perform an initial structural assessment of the tank to determine the condition of the tank and provide recommendations regarding rehabilitation. The required assessment by a structural engineer includes review of record drawings, photographs, performing structural steel thickness testing (web, flange, etc.), checking for structural defects (corrosion, pitting, buckling, etc.) and preparing a written report including estimated remaining serviceable life of each component and recommendation for full rehabilitation. Other ancillary work at the Zone 4 Tank includes installation of a mixer and blower, spot repair, and miscellaneous electrical improvements. Additionally, this project will include the installation of a mixer and blower at East Tank to improve water quality.

Design and construction of Phase 2 of the project will occur once the structural engineer's recommendation under Phase 1 is complete. Design is anticipated to begin and be completed in FY 2026-27, and Phase 1 construction is also anticipated to begin and be completed in FY 2026-27.

This Resolution will authorize the City Manager to execute an agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for design, engineering services during construction, and construction management and inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) and appropriation of funds.

POLICY / RULE

Section 2.36.120 of the Folsom Municipal Code states, in part, that contracts for supplies, equipment, services, and construction with an estimated value of \$77,426 or greater shall be awarded by the City Council.

ANALYSIS

In January 2025, the Utilities Department completed a pre-qualification process for consultants for design and construction administration services for water and wastewater projects. The consulting firms Dewberry Engineers, Inc., Kennedy/Jenks Consultants, Inc. and HydroScience Engineers, Inc. were among a group of firms selected to provide these services for this type of project through this previously completed pre-qualification process. At that time, the Utilities Department also completed a pre-qualification process for consultants for Construction Management and Inspection (CM&I) services for water and wastewater projects, and consulting firms Psomas, Inferrera Construction Management Group, Inc (ICM), Dewberry Engineers, Inc., Kennedy Jenks, West Yost & Associates, MCK Americas, and Albat were selected to provide these services.

On March 23, 2026, the city sent a Request for Proposals (RFP) to pre-qualified design consultants to provide plans, front end specifications, technical specifications, and other miscellaneous items to complete the project manual for public bid of the construction project, as well as engineering services during construction. The Zone 4 Tank Rehabilitation Project has an accelerated timeline to perform the work and inspection outlined in the RFP due to operational restrictions of when the tanks can be offline for draining, inspection, and repairs, the RFP sent to the pre-qualified design consultants required they partner with one of the city's pre-approved CM&I firms to expedite the bid process and have the contractor ready to perform the work by October, 2026.

On May 8, 2026, Utilities department staff received proposals from Kennedy/Jenks Consultants, Inc. and HydroScience Engineers, Inc. Dewberry Engineers, Inc. previously notified the city that it was unable to provide the necessary staffing for the project and declined the opportunity to submit a proposal. The proposals were reviewed and scored for project understanding, project team staffing, and recent relevant experience. The technical evaluations were scored as shown in Table 1 based on a maximum technical score of 80.

Consultant	UT 1	UT 2	UT 3	Average
Kennedy/Jenks Consultants, Inc.	49	55	48	50.7
HydroScience Engineers, Inc.	65	73	76	71.3

Table 1: Consultant Technical Scores without Costs

After reviewing each proposal for project understanding, project team staffing, and recent relevant project experience, the proposals were reviewed for project costs. The fee schedules for the scope of work outlined in the request for proposal from each consultant are shown in Table 2.

Consultant	Fee Amount
Kennedy/Jenks Consultants, Inc.	\$1,417,926
HydroScience Engineers, Inc.	\$474,041

Table 2: Consultant Project Costs

HydroScience Engineers, Inc. was determined to provide the best value to the city based on the fee amount, past municipal project experience involving work of similar scope and complexity including staff coordination and technical knowledge and expertise for these types of projects. Additionally, HydroScience Engineers, Inc. has current and relevant project understanding compared to other consultants for this project, including the current Tower Tank Rehabilitation Project that has incurred similar structural inspections and repairs for the City of Folsom.

Table 3 shows the overall total scores including project costs based on a maximum score of 100.

Consultant	Technical Score (Avg.)	Cost Score	Total Score
Kennedy/Jenks Consultants, Inc.	50.7	11.7	62.4
HydroScience Engineers, Inc.	71.3	20	91.3

Table 3: Consultant Overall Scoring Including Project Costs

This resolution will authorize the City Manager to execute an agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for design, engineering services during construction, and construction management and inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) and appropriation of funds.

FINANCIAL IMPACT

If approved, the agreement with HydroScience Engineers, Inc. for design, engineering services during construction, and construction management and inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) (WA2703) would be in the amount of \$474,041. The agreement will require an appropriation of 474,041 in the Water Operating Fund (Fund 520). Sufficient funds are available in the Water Operating Fund (Fund 520) to cover the cost of the agreement and the requested appropriation.

ENVIRONMENTAL REVIEW

This project is replacement and/or improvement of existing infrastructure with negligible or no expansion of use and therefore is categorically exempt from environmental review under the California Environmental Quality Act as noted in Title 14 – California Code of Regulations, Chapter 3 – Guidelines for Implementation of the California Environmental Quality Act, Article 19 – Categorical Exceptions, Section 15301 (Existing Facilities) and 15302 (Replacement or Reconstruction).

ATTACHMENTS

1. Resolution No. 11623 - A Resolution Authorizing the City Manager to Execute an Agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for Design, Engineering Services During Construction, and Construction Management and Inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) (WA2703) and Appropriation of Funds
2. Zone 4 Tank and East Tank No.1 Project Map
3. HydroScience Zone 4 Tank Rehabilitation Project (Phase 1) Scope and Fee

Submitted,

Marcus Yasutake, Director
UTILITIES DEPARTMENT

Attachment 1

RESOLUTION NO. 11623

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT WITH HYDROSCIENCE ENGINEERS, INC. FOR \$474,041 FROM THE WATER OPERATING FUND (FUND 520) FOR DESIGN, ENGINEERING SERVICES DURING CONSTRUCTION, AND CONSTRUCTION MANAGEMENT AND INSPECTION FOR THE ZONE 4 TANK REHABILITATION PROJECT (PHASE 1) (WA2703) AND APPROPRIATION OF FUNDS

WHEREAS, the City has identified this project as a priority to maintain integrity and operation of the water distribution system; and

WHEREAS, the rehabilitation work identified will enhance the city's water distribution system and to continue to provide reliable water service to the City includes rehabilitating the Zone 4 Tank; and

WHEREAS, HydroScience Engineers, Inc. by reason of their experience and abilities for performing these types of services, are qualified to perform the required additional design and engineering services during construction for this project; and

WHEREAS, sufficient funds are available in the Water Operating Fund (Fund 520) for this agreement and the requested appropriation in the amount of \$474,041, and

WHEREAS, the agreement will be in a form acceptable to the City Attorney:

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Folsom authorizes the City Manager to execute an Agreement with HydroScience Engineers, Inc. for \$474,041 from the Water Operating Fund (Fund 520) for Design, Engineering Services During Construction, and Construction Management and Inspection for the Zone 4 Tank Rehabilitation Project (Phase 1) (WA2703).

BE IT FURTHER RESOLVED that the Finance Director is authorized to appropriate \$474,041 for this agreement. The appropriation will be made in the Water Operating Fund (Fund 520) for the amount of \$474,041.

PASSED AND ADOPTED this 26th day of May, 2026, by the following roll-call vote:

AYES: Councilmember(s):
NOES: Councilmember(s):
ABSENT: Councilmember(s):
ABSTAIN: Councilmember(s):

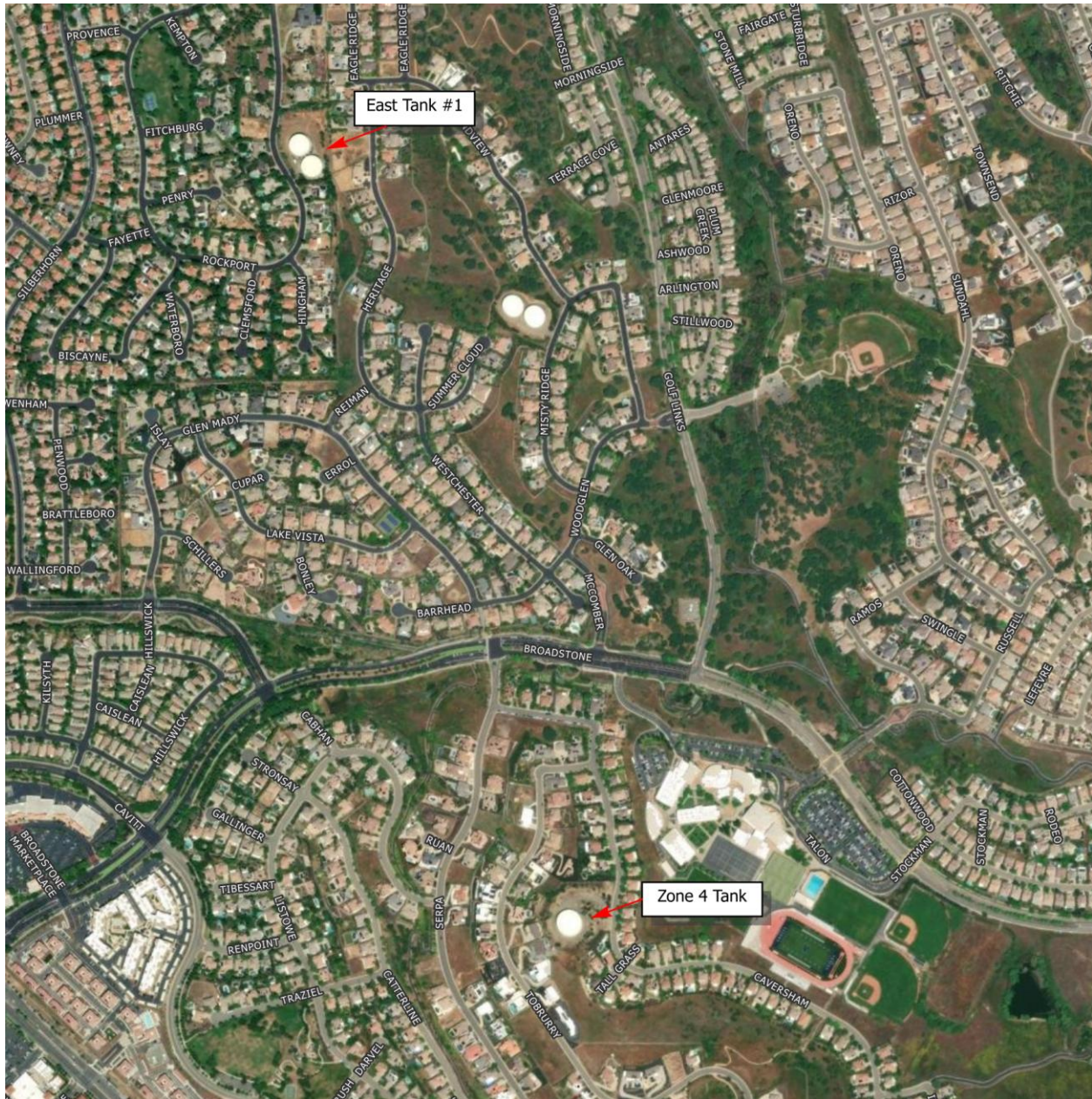
Justin Raithel, MAYOR

ATTEST:

Christa Freemantle, CITY CLERK

ATTACHMENT 2

ZONE 4 TANK REHABILITATION PROJECT MAP



ATTACHMENT 3
HYDROSCIENCE ZONE 4 TANK REHABILITATION PROJECT
SCOPE AND FEE

May 8, 2026

Nathan Sites
City of Folsom – Utilities
50 Natoma Street
Folsom, CA 95630

**Subject: Design and Engineering Services During Construction for the City of Folsom Zone 4
Phase 1 Tank Rehabilitation Project**

Dear Mr. Sites,

HydroScience Engineers, Inc. (HydroScience) is pleased to submit this proposal to provide civil engineering design services for the Zone 4 Phase 1 Tank Rehabilitation Project (Project). We have assembled a team of capable local staff experienced with the design and construction of City water infrastructure projects, who are both intimately familiar with the project elements and committed to a successful outcome. We have additionally included West Yost from the City's list of pre-qualified Construction Management and Inspection (CM&I) consultants to provide those services on this project.

The following summarizes key benefits of choosing the HydroScience team to provide professional engineering services on this project:

- **Proposed Project Manager Eric Jones** has significant prior experience completing City design and construction projects, including: Tower Tank Rehabilitation Project, Ashland I and II water distribution improvements, Willow Hill Pipeline Rehabilitation, Hinkle Creek Pipeline Rehabilitation, and multiple water system pressure reducing valve (PRV) design projects. Intimate knowledge of City standards and procedures and a strong working relationship with City staff results in efficient project execution and effective enforcement of City requirements.
- **Key proposed team members Eric Jones, Austin Poulson, and Brad Friederichs along with West Yost for CM&I** are successfully delivering a similar complex tank rehabilitation project for the City: the Tower Tank Rehabilitation Project. This team demonstrated our ability to fast-track design to meet a winter construction schedule, coordinate closely with the City, pivot quickly to address changing conditions, and function as a cohesive team to drive towards successful completion accomplishing all of the City's objectives. **Our combined team will carry this momentum from Tower Tank directly into this project, improving efficiency and accelerating execution.**
- The proposed project team has worked together to successfully complete dozens of similar water and wastewater infrastructure projects for municipal clients. This team shares a passion for producing high quality results in a collaborative and efficient manner and has a long history of working together effectively.
- Key team members are based in our Sacramento office within 20 minutes driving distance of the City. Being local enhances our ability to get to the site very quickly to address any need and reduces travel cost.
- Principal-in-Charge **Bill Slenter** is a long-term City resident and is committed to the successful outcome of this project. He can travel to the project site or City Hall on very short notice to address any concerns or needs.

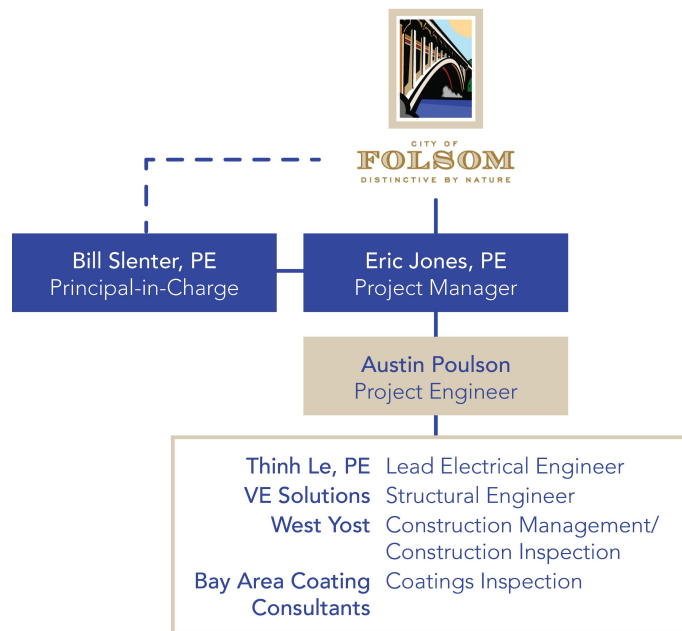
Proposed Staffing

The organization chart to the right illustrates our proposed key staff and roles. We have included their resumes in **Attachment A**:

Our Project staffing strategy is as follows:

- **Eric Jones, PE** will serve as Project Manager (PM) and Design Engineer-of-Record. He will apply rigorous project and technical management practices to keep the project on-track and moving forward, communicating with the City in real time. The City will be regularly informed of project status, needs, and upcoming activities.
- **Austin Poulson** will serve as the Project Engineer (PE). Working with Eric, Austin will coordinate and execute the technical design elements; coordinate with our drafting team; lead the preparation of plans, specifications, and calculations for the design; assist Eric during the bid support phase; and perform RFI and submittal review during construction. Austin has significant prior experience including working with Eric on the Tower Tank Rehabilitation Project and will apply his experience regarding the City's goals for water tank improvements, optimizing the design to achieve the City's goals for this project.
- **Bill Slenter, PE** will serve as Principal-in-Charge. He will be the City's contractual point of contact and alternate contact to Eric and will verify that our team is executing the project in accordance with contractual requirements and HydroScience's quality standards. He will also be available to assist with any field needs given his close proximity to the sites.
- **Thinh Le, PE** will serve as the lead electrical engineer. Thinh manages our Electrical Department and has almost twenty years of experience. He has worked closely with Eric and Austin on dozens of similar projects. He will design improvements that are easy to operate and maintain and conform to City standards and preferences.
- **VE Solutions** will provide structural engineering on this project, including providing the structural tank assessment. If needed, they are prepared to develop stamped structural drawings and calculations for tank repairs.
- **West Yost** will provide CM&I services for the project. They will work in close collaboration with HydroScience on construction activities, following the established procedures demonstrated in the ongoing Tower Tank Rehabilitation Project. Crawford & Associates will provide materials testing and special inspection support as a subcontractor to West Yost.

Project Team Organization



- **Bay Area Coating Consultants** will provide coatings inspection as a subconsultant to HydroScience. They bring over 39 years of coating and lining consulting and inspection firm experience on projects throughout California and Nevada.

Understanding and Approach

This project will address rehabilitation and operational improvement needs at two potable water storage reservoirs within the City: the Zone 4 Phase 1 (Broadstone) Tank and the East Tank No.1. The Zone 4 Tank rehabilitation will include draining and cleaning, targeted micro-abrasive sandblasting to expose structural members, structural engineering inspection and report preparation, spot repairs, retrofit of a roof-mounted THM mixer and blower, and associated electrical and controls upgrade work. Site work shall be completed as needed to support the electrical and blower upgrades. The East Tank No. 1 improvements will consist of the THM mixer and blower scope only. The THM mixers and venting improvements will reduce the formation of THMs in the tanks, assist with water age and turnover, and improve water quality.

The scope of services requested by this RFP includes investigation, detailed design, bid phase engineering support, construction phase engineering support, tank condition assessments during construction, CM&I services. A lesson learned during the Tower Tank Rehabilitation Project was that tank interior condition can be significantly worse than expected, even if a pre-construction corrosion inspection is performed, partly because existing coatings can hide significant structural member corrosion. The City had inspections of these tanks which noted corrosion, but the degree is difficult to discern under the existing coatings. HydroScience reviewed the inspection report provided. It supports the City's strategy and schedule for inspection and ultimate rehabilitation of the tank interior.

The City's approach to this project bundles the detailed structural inspection into the construction phase, leveraging the planned tank outage and the ability to have the contractor strategically remove coatings in inspection areas. HydroScience believes this is the most effective means to obtain a meaningful condition assessment that can guide further repairs if needed.

The City has planned for more extensive repairs of these tanks in a future CIP project in 3-5 years time. Based on recent experiences on the Tower Tanks Rehabilitation Project, there is potential that the level of corrosion found on these tanks during the structural inspection may be more severe than expected. Such a finding would increase the urgency of repairs and likely result in the City moving full rehabilitation of these tanks up the priority list. We further understand that other improvements may be added to the design and rehabilitation scope to bring these tanks up to current City standards. These could include:



Given the HydroScience Team's experience on the ongoing Tower Tanks Rehabilitation Project, where more extensive repairs were implemented to address unexpected severe corrosion (see photo), this team is well-positioned to pivot quickly to any level of rehabilitation design and construction required to restore the condition of the Zone 4 Phase 1 (Broadstone) tank.

Broadstone/Z4

- Water quality monitoring system
- Diver cleanouts
- Stairs
- Level gauge/transmitter enclosures
- Relocate tank outlet above-grade

East Tank No. 2

- Blower/mixer system and curb modifications
- Diver cleanouts

HydroScience demonstrated its effectiveness in helping the City respond to similarly urgent needs on the Tower Tank Rehabilitation Project. This experience positions us to respond quickly should this project see a similar outcome. We are prepared to quickly scope and execute design of any required repairs and incorporate it into this or a future bid package for expedited implementation in the next winter season.

The City provided as-built drawings for both tanks and typical mounting details for the THM mixer system. HydroScience reviewed these documents and considered our understanding of the City's water distribution system and our experience on recent City projects, particularly the Tower Tank Rehabilitation Project, and similar tank projects in the preparation of this proposal.

The City needs bid documents ready by August 1, 2026 with the goal of construction occurring between October 2026 and April 2027 during the low demand winter season when both tanks can be offline. If necessary, project improvements not tied to the shutdown of a tank (electrical, controls, drainage, etc.) can be constructed during higher demand periods in dry weather.

HydroScience will develop and regularly update a detailed Microsoft Project schedule with all major activities and task interdependencies. At the conclusion of design, the schedule will feed into the preparation of detailed Division 01 specifications describing construction sequencing and constraints and establishing the number of contract days. HydroScience has included a preliminary version of this schedule in accordance with the RFP (**Attachment B**) illustrating the anticipated design and construction schedule, with the construction schedule depicting how construction may be phased and sequenced for each tank including outage time, draining, inspection, repairs, and restoration of service. The CM&I proposal is based on the durations shown.

The removal of tanks from service will require careful advance planning and close coordination with City Water System Operations. HydroScience will identify constraints, prerequisite activities, risks, and risk mitigations early in the project and track these as the project definition develops. This tracking will drive critical project decisions and inform the preparation of notes and contract requirements for the contractor to closely adhere to and the construction manager to enforce. Similarly, given the proximity of the tanks to parks and residences, the specifications will carefully describe construction constraints to minimize noise and disruption.

Scope of Services

We developed this scope based on a review of the RFP, our experience with tank construction and retrofit, and our understanding of City standards and practices from our recent work on similar projects at the City. All deliverables will be in PDF format. Native editable file formats will also be provided with final deliverables.

Task 1 – Project Management and Coordination

Eric Jones will be responsible for the overall project management efforts necessary to oversee and direct the work of the project team. Bill Slenter will provide oversight, resource allocation, and serve as a contractual contact. This task is divided into four subtasks which include general project management (tracking and management of decisions, schedule, budget), project communications with the City and other stakeholders, quality assurance and quality control, and project meetings during the predesign and design phases (construction phase meetings are addressed separately in Tasks 5 & 6). These subtasks are detailed below. Project management activities will be carried throughout all of the project phases (Preliminary Engineering, Design, Bidding, and Construction).

A. Project Management: HydroScience will prepare and maintain a project decision log that records design decisions. This log will include summaries of the decisions made, any key items used to reach those decisions, and any other relevant information. HydroScience will work with the City and stakeholders to settle upon key project decisions early in the project to facilitate efficient progression through the remaining detailed design steps.

The Project Manager will conduct monthly reviews and updates of schedule, design expenditures, and progress. The status of these items will be reported to the City with each monthly invoice. The Project Manager will make internal adjustments as required to comply with the requirements of the services agreement. The Project Manager will identify any external risks to schedule or budget and propose appropriate adjustments to keep the project on track. HydroScience will coordinate the schedule of this project to target bidding and construction in accordance with the City's scheduling needs.

B. Project Communications: Standing monthly project status conference calls between the City and HydroScience will be held to discuss ongoing coordination items, review project schedule and progress, review the decision log, and address any other project related items as they arise. HydroScience will prepare monthly invoices and project status reports outlining the team's progress on the project tasks and discuss them with the City's Project Manager. These reports will include budget and work progress updates, work performed during that time period, activities completed, milestones achieved, project schedule status, any issues and proposed resolutions.

C. Quality Assurance and Quality Control: HydroScience will provide quality control and quality assurance (QA/QC) of all submittals prior to City review and in accordance with company policy. Formal internal review will occur prior to submittal of each major deliverable to provide an objective check on the adequacy of the documents. Principal level staff not directly involved in preparation of the work product will complete these reviews. Internal review comments will be discussed with the product's author and resolved as appropriate prior to finalizing the draft document. City review comments on draft documents will be responded to in writing and resolved as appropriate. City comments and HydroScience responses will be tracked in a formal comment log.

D. Project Meetings: Three design phase project meetings will occur including the kickoff meeting and two design progress meetings with City staff scheduled to coincide with submittal of the 50% design and 100% design, to make efficient use of the City's available staff time. For all meetings, HydroScience will be responsible for confirming attendance, preparing the agenda, documenting the meeting minutes, and coordinating action items.

During the kickoff meeting, HydroScience will meet with the City to confirm the project goals and objectives, establish lines of communication, review the project scope and schedule, collect the existing information, and receive City input.

Deliverables:

- Project decision log, updated regularly (PDF)
- Project status reports, submitted monthly with invoices (PDF)
- Meeting agenda and minutes (Word)
- City comment log with HydroScience responses, updated at each design submittal (Excel)

Task 2 – Preliminary Engineering

HydroScience shall complete the following:

Schedule: Prepare, drive, and maintain a detailed critical path master schedule and roll-up schedule summary throughout the contract period and monitor progress on team activities relative to the schedule. The schedule will be updated at each milestone to reflect any modifications.

Field Investigation: Visit the project sites and meet with City engineering and operations staff. The investigation will identify conditions in the field, note site access and constructability issues, note potential interferences, identify construction access, and identify areas requiring further investigation. Key areas of concern or project priority areas shall be examined to aid design feasibility and identify possible design alternatives. This can occur on the day of the Kickoff Meeting.

Documentation Review: Review as-builts and any available inspection documentation on existing tank conditions.

CEQA: HydroScience will prepare technical content for the California Environmental Quality Act (CEQA) Documentation with the assumption that the project qualifies for Categorical Exemption. HydroScience will prepare the project description and complete the Notice of Exemption (NOE) for the City to file.

Preliminary Engineering: HydroScience will confirm the design objectives and criteria with the City. HydroScience will prepare a preliminary construction sequencing plan and schedule. There are no plans or specifications deliverables in this phase. These will be produced in Task 3.

Deliverables:

- Project schedule, with periodic updates issued monthly and as needed (PDF)
- Utility coordination "A" letters
- Sequencing plan outline (PDF)
- CEQA Notice of Exemption documentation for City filing (PDF, Word)
- Preliminary construction schedule (PDF)

Task 3 – Design Phase Services

HydroScience shall complete the following:

Plans, Specifications, and Estimate: HydroScience will complete the 50%, 100%, and Bid Ready submittals. For each submittal, HydroScience will prepare the plans, technical specifications, and the engineer's opinion of probable cost. Comments on each submittal will be incorporated into the subsequent submittal, and a response to comments will be prepared documenting how HydroScience responded to each comment.

The City's standard front-end specifications (general provisions, special provisions, proposal forms, and contract agreement) will be used similar to previous projects that HydroScience has completed with the City. Internal QA/QC (see Task 1) will be applied to each submittal prior to submittal to the City.

HydroScience will submit plans and specifications to the City Engineer, EWR, and Public Works for review as appropriate. Comments received from City departments will be compiled into a comment log and responses will be entered into the same log and distributed with the revised documents.

HydroScience will assist the City with required updates to the water system permit from DDW, assuming one is required. This will consist of filling out a one page form and submitting it with plans and specifications.

Deliverables:

- 50%, 100%, and Final Bid Documents Submittals: plans, specifications, and engineer's opinion of probable construction costs (PDF). Final includes one full size stamped and signed plan set in PDF format. AutoCAD drawings of the plans. One PDF and Word copy of the specifications. PDF of the final engineer's opinion of probable construction costs. Native Word and AutoCAD files.

Assumptions:

- Most of the improvements will be located above grade. A geotechnical report is not required to support the design, though any prior reports or boring data provided by the City will be considered.
- Potholing will not be performed during the design phase. If appropriate, plans will identify recommended potholing to be performed by the Contractor during Construction and the project budget includes a design allowance for limited design modifications required based on the potholing results.
- Cathodic protection (CP) evaluation or design services not included.
- Corrosion engineering services not included but can be optionally obtained as a scope modification.
- Existing power utility service and main switchboard at each site has capacity for the THM mixer/blower system without upgrade.
- Topographical surveying not included. Scope assumes design will be performed utilizing traced or scanned as-built drawings and photos as backgrounds. Civil work will be minor and not require precise elevations.
- Base bid construction services includes one construction season where the tanks can be offline.

- No tank modifications that require recoating are required to install the THM blower/ mixer at East Tank No. 1. The required penetrations and supports are already in place.

Task 4 – Bid Phase Services

HydroScience will attend the pre-bid meeting with the City and provide any technical support required to respond to technical questions from prospective bidders submitted during the bidding phase. Bidding services will include interpreting construction documents, responding to questions posed by the bidders and preparing clarifications and up to three addenda. All communications will be directed through the City. HydroScience will, if necessary, prepare a conformed set of plans to incorporate all addenda issued during the bid phase for up to three bid drawing sheets.

Deliverables:

- Response to bidder inquiries as required (Word)
- Up to 3 addenda – (PDF, Word)
- Up to 3 conformed to bid drawings sheets incorporated into one full conformed set and plans and specifications (PDF, Word, DWG)

Task 5 – Construction Phase Services

HydroScience staff will provide continued support during the construction phase of the project. Project staff will be available to provide the following services:

- **Meetings:** HydroScience will attend regular construction meetings (16 total, 3 in person)
- **Site Visits:** HydroScience will make up to three site visits during construction.
- **Submittal Review:** HydroScience will receive, and review submittals as directed by the City. Up to 40 submittals will be reviewed by HydroScience with up to 20 resubmittals.
- **RFI Response:** HydroScience will receive and respond to Contractor RFIs during the period of construction as directed by the City. HydroScience will respond to up to 20 RFIs.
- **Design Modifications:** Design modifications (allowance) relating to the potholing results, and/or for other unknown changes upon request (up to 3 items, up to the total number of hours shown in the fee).
- **Project Coordination:** HydroScience will review up to two Preliminary Change Order requests, and will make recommendations to the City for issuing Contract Change Orders in accordance with the project specifications.
- **Startup and Testing:** HydroScience will provide the following support services: review of start-up plans submitted by the contractor, make up to two site visits during on-site testing
- **Project Closeout:** Assist the City in the preparation of the project punch lists, and will participate in the final inspection.
- **Record Drawings.** HydroScience will prepare project record drawings depicting “as-built” conditions based on the Contractor’s submitted redline markups.

HydroScience will retain VE Solutions, a California-licensed Structural Engineer, to perform a structural evaluation of corroded roof framing members at the Zone 4 Tank and to prepare a signed and sealed structural engineering report, as summarized below:

- Perform review of available record documents, including original design drawings, previous inspection reports (if available), and photographic documentation.
- Coordinate with the Contractor to perform the assessment after the tank has been drained, cleaned, and required scaffolding has been installed.
- Perform a structural evaluation of corroded roof framing members (e.g., beams, girders, and columns) to assess remaining effective section after corrosion.
- As appropriate and at the Structural Engineer's discretion, determine remaining member thickness using an ultrasonic thickness measuring device, hand caliper, and/or visual estimate.
- Perform structural analysis sufficient to classify evaluated members using a tiered findings approach: Tier 1 (immediate-action / current code non-compliance), Tier 2 (repair recommended in current offline window), Tier 3 (monitor and plan), and Tier 4 (acceptable).
- Prepare a structural engineering report documenting the evaluation results, including photographic documentation of significant conditions.
- Provide recommendations for rehabilitation and replacement items, and recommended reassessment intervals, as supported by the evaluation findings.
- Provide an estimated remaining serviceable life of evaluated components, per stated methodology, assumptions, and limitations.
- Provide final report documents signed and sealed by a California registered Structural Engineer.
- **Exclusions (by others):** Scaffolding and removal of existing coatings to access framing members (including spot coating repair after removal); and construction/bid documents suitable for bidding or construction of repairs.

Deliverables:

- Responses to submittals – up to 40 submittal responses in format selected by Construction Manager
- RFI Responses – up to 20 RFI responses in format selected by Construction Manager
- Up to three design modifications plans.
- Record Drawings – One full size reproducible drawing set and electronic version in AutoCAD and PDF (AutoCAD drawings will have stamps removed).
- Tank assessment report, PDF

Task 6: Construction Management and Inspection Services

HydroScience will provide CM&I services through our pre-qualified subconsultant, West Yost. West Yost's CM&I services shall be as follows:

- **Construction coordination:** Coordinate construction activities with the City, Contractor, HydroScience design team, and other project stakeholders; support implementation of sequencing requirements and tank outage constraints; and manage interfaces between work at the two tank sites.
- **Weekly construction meetings:** Conduct weekly construction meetings, prepare agendas and minutes, track action items, and distribute meeting documentation.
- **RFI and submittal management:** Receive, log, track, and process RFIs and submittals in coordination with the City and HydroScience; monitor response status and maintain the project correspondence and document control system.

- **Construction observation/inspection:** Provide construction observation and inspection services to monitor general conformance with the contract documents.
- **Health and safety awareness:** Maintain awareness of site safety practices and communicate observed safety concerns to the Contractor and City in accordance with standard CM practices (recognizing Contractor responsibility for site safety).
- **Material testing / special inspections:** Coordinate required material testing and special inspection services, coordinate third-party testing and inspection documentation and follow-up on corrective actions.
- **Change order, changes, and claims management:** Evaluate and negotiate potential change orders, and maintain logs to track change requests, status, and impacts. Proactively identify, document, and track potential claims and changes throughout the construction process. Review Contractor-submitted claims for merit, validity, and compliance with contract requirements. Coordinate with the City and project team to evaluate impacts, negotiate resolutions, and document outcomes. Maintain thorough records of all claims-related correspondence and decisions to support timely and equitable resolution.
- **Progress payments:** Review Contractor pay applications for completeness and general consistency with observed progress and contract requirements; assist the City with progress payment processing.
- **Labor compliance:** Support labor compliance administration and coordination consistent with the City's requirements and applicable regulations.
- **SWPPP compliance:** Monitor SWPPP implementation and BMP maintenance for general conformance and coordinate with the Contractor/City regarding observed deficiencies and needed corrective actions.
- **Project closeout:** Manage project closeout activities including punch list development and tracking, final inspections, acceptance recommendations, coordination of final documentation (O&M manuals, training, warranties, test reports), and support to startup/testing activities as needed.

The CM&I budget is based on the included preliminary schedule (**Attachment B**) and following scoping assumptions:

- Projected Notice to Proceed: 9/18/2026
- Anticipated construction completion: 1/29/2027 (about 95 working days)
- Staffing levels will be adjusted based on Contractor's approved schedule and field requirements. Budgets were developed based on the following average weekly staffing levels:
 - 10 CM hours per week
 - 28 inspector hours per week
 - 5 CM administrative hours per week

Materials testing: West Yost will retain Crawford & Associates to perform materials testing up to the budget amount shown in the fee.

Coatings inspection: Bay Area Coatings Consultants, under contract with HydroScience, will provide daily Quality Assurance (QA) coating inspection and documentation for the exterior coating operations of repairs at Zone 4 Tank and East Tank No. 1 as follows:

- **Surface Preparation:** Verification of cleanliness and profile in accordance with specified SSPC/AMPP standards.
- **Environmental Conditions:** Monitoring ambient conditions to confirm compliance with application requirements.
- **Coating Application:** Observation of application methods, workmanship, and stripe coating.
- **Film Thickness:** Dry Film Thickness (DFT) measurements per SSPC-PA 2.
- **Cure/Recoat:** Verification of cure and recoat windows, including solvent rub testing as required.
- **Holiday Testing:** Verification of coating continuity and repair of discontinuities.
- **Documentation:** Daily reports including inspection results, environmental conditions, and photographic documentation.
- **Non-Conformance:** Identification and reporting of work not in compliance with project requirements.

Services will follow applicable SSPC/AMPP, ASTM standards, manufacturer requirements, and project specifications.

Deliverables

- Weekly construction meeting agendas and meeting minutes
- Project correspondence and document control records
- Daily inspection reports documenting observed work, site conditions, and non-conforming work
- Materials testing and special inspection reports
- Non-conformance reports and corrective action tracking (as required)
- Change order and change request logs, including evaluation memoranda and recommendations
- Claims and disputes documentation, including correspondence and resolution records (if applicable)
- Progress payment review documentation and payment recommendation summaries
- Labor compliance tracking documentation (as required by the City)
- SWPPP compliance observation notes and deficiency tracking
- Punch list documents and punch list tracking logs
- Final inspection documentation and acceptance recommendations
- Project closeout checklist and closeout documentation coordination (As-built drawings, O&M manuals, warranties, test reports, training confirmation)

Scope Assumptions, Exclusions, and Notes

- The scope of improvements to each tank are as described on Pages 1-2 of the City's RFP as clarified by City via email.

- Mixers will be provided with local on/off control for operations. Automation of the mixers is not included.
- Scope does not include a new geotechnical investigation. Any available past reports/data will be reviewed by HydroScience if provided.
- P&IDs are not included in the design and are considered unnecessary.
- Sufficient power capacity and spare breaker capacity exists at all sites for the addition of mixers and other powered improvements specified in the RFP.
- The entire project will be bid as one construction package with one set of bid documents.
- Rights of way and easement acquisitions are not required.
- Potholing is not included in this scope. Required potholes will be identified in the contract documents and completed by the contractor.

Project Schedule

HydroScience anticipates completing the design phase in accordance with the preliminary schedule provided in **Attachment B**. All external reviews will need to be accelerated to meet the schedule.

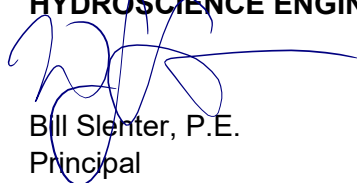
Proposed Fee

The proposed fee schedule for these services has been provided to the City as a separate document per the RFP instructions.

HydroScience appreciates the opportunity to propose our services to the City. I can be contacted at (916) 605-6633 or bslenter@hydroscience.com if you have any questions regarding this proposal.

Sincerely,

HYDROSCIENCE ENGINEERS, INC.



Bill Slenter, P.E.
Principal

Attachments:

- A. Resumes
- B. Preliminary Project Schedule
- C. Fee Spreadsheet (Bound Separately)

Eric Jones, PE

Project Manager



Eric is a project manager, construction manager and project engineer with 26 years of experience in water, wastewater, and recycled water facility planning, design and construction assistance. His specific areas of focus have included pump station design, pipeline design including trenchless technologies, water and wastewater treatment design, feasibility studies and construction management. He has played key roles in several design and construction services teams for many projects throughout California and Australia. Eric has significant experience with rehabilitation and upgrade of existing wastewater treatment plants, including complex coordination with electrical design.

SELECT PROJECT EXPERIENCE

EDUCATION

B.S., Mechanical Engineering
(Environmental Engineering emphasis), University of California, Santa Barbara

REGISTRATION

Civil Engineer, California,
Registration No. 68550

Folsom Tower Tank Rehabilitation

City of Folsom, California

Project Manager. This project involves the rehabilitation and operational improvements of five potable water storage tanks in the City of Folsom, addressing compliance, safety, and functionality needs. Two tanks require upgrades to meet California Division of Drinking Water (DDW) standards. Challenges include a four-month design window and strict sequencing during low-demand winter months to maintain system operations. Improvements to the Tower Tank include structural modifications (vent, rafters, bracing), a staircase replacing the ladder, safety upgrades, a THM reduction mixer, and electrical, SCADA, and utility enhancements, along with antenna relocation, drainage, sampling, coatings, and a cathodic protection system. East Tank #2 upgrades focus on overflow, drain, and vent modifications, exterior coating repairs, and drainage adjustments to meet DDW compliance. Foothills Tanks (1 & 2) improvements include staircases, a catwalk bridge, safety anchors, THM mixers, access upgrades, monitoring cabinets, and SCADA and electrical updates, along with coatings and a pre-fabricated canopy. The South Tank upgrades involve overflow, drain, and vent modifications, exterior repairs, and drainage improvements, ensuring compliance and operational efficiency.

Folsom FPA and FSAG Pipeline and Pump Station

City of Folsom, California

Design Support. The Folsom South Area Group (FSAG) Transmission Pipeline is required to supply the Folsom Plan Area (FPA)

with water as it approaches the buildout phase. All water supply to the FPA is from the City of Folsom through upgrades and extensions of existing infrastructure. The 3.5 mile, 24-inch transmission pipeline associated with this project extends under Highway 50 to a new booster pump station (BPS) located at the City's Water Treatment Plant. The new BPS is planned to have 8,700 gpm firm capacity, 6 vertical turbine pumps, a standby generator, new power transformer, and a surge tank. HydroScience completed the 100% design for the project and is currently rephasing the project in coordination with the City. HydroScience also rephased the project to improve Z3 hydraulics and provide hydraulic benefits to the Z3 system north of Highway 50. Major design elements included routing the new pipeline through sensitive public rights-of-way that are outside of the roadway, the trenchless crossing of two creeks, coordination of the pump station design with existing WTP operations, and significant regrading to improve site drainage along East Bidwell St.

Ashland Water Pipeline Rehabilitation Project II

City of Folsom, California

Project Manager. This project consisted of improvements to allow for abandonment of an existing water main by extending 6 existing branch mains, replacing 22 water services and replacing 3 fire hydrant service and connection the new and extended services to an existing parallel active 14-inch water main located along Baldwin Dam Road. The project also included slurry seal of the entire roadway, evaluation of the benefits for providing a new PRV station, and demolition of an existing

vacant pump station. Once completed the existing transmission line provided fully isolated section of main between all branch tie-ins. HydroScience incorporated many measures in design to minimize disruption to customers, including hot tap sleeves for connecting new service to the active ACP and steel pipeline. Outage maps were provided to the Contractor as an attachment to the specifications for each of the planned outages. These maps showed exactly which customers and fire hydrants would be affected by the outage to help the contractor coordinate the notification process during construction.

Red Hawk Wastewater and Recycled Water Improvements

Shingle Springs Rancheria, El Dorado County, California

Project Engineer. HydroScience designed a new membrane bioreactor (MBR) wastewater treatment plant, recycled water pumping, and effluent disposal systems for Red Hawk Casino. These facilities were commissioned in 2009. Red Hawk retained HydroScience in 2020 to evaluate and design upgrades to support expansion of the resort with a new hotel and entertainment facilities. Upgrades included two new 3.0 million gallon welded steel tanks, a new recycled water booster pump station with two VFD-driven 75-hp vertical turbine pumps, upgrade of existing chlorine contact basin effluent pumps, improvements to the existing sewer lift station, and a new coarse screening facility. The project is currently in the later stages of construction. The project was implemented as a collaborative delivery (progressive design-build) arrangement and involved significant coordination with the facility operator.

Griffith Water Reclamation Plant Upgrade Concept Design

Griffith City Council, New South Wales, Australia

Project Engineer. HydroScience was retained by the City of Griffith to design a 2.8 MGD municipal MBR WWTP. The new plant was designed to produce recycled water to supply the City's ambitious recycled water program. Design features included use of the existing primary sedimentation tanks to peak wet weather flows. Other design features included a 4 train membrane bioreactor, UV disinfection system, sludge dewatering building, operations building, and SCADA control system. HydroScience services also included commissioning and start-up.

Ashland Water Pipeline Rehabilitation Project I

City of Folsom, California

Project Manager. This project rehabilitates 1,500 linear feet of an existing 20 and 21-inch water transmission pipeline with ductile iron and fusion bonded epoxy steel pipe using open-cut construction and trenchless rehabilitation technologies of the existing pipeline. SCADA was added to an existing PRV station, and miscellaneous replacements of failed valves. The

project required coordination with USBR to obtain a temporary construction easement for rehabilitation of the pipeline within USBR property.

Willow Hill Pipeline Rehabilitation

City of Folsom, California

Project Engineer (Phases 1 & 2) / Construction Manager (Phase 2). This project included assessment, preliminary design, final design, construction engineering, construction management, and inspection services for rehabilitation of a 20,585 LF existing raw water main (30- to 48-inch diameter RCP) and potential conversion of that main to future potable water pressure service. The project included both rehabilitation and realignment segments. The preliminary design included preparation of technical memoranda (TMs) for predesign criteria development and hydraulics, condition assessment, rehabilitation technology/methods and rehabilitation/alignment assessments. Final design included realignment using HDPE and fusible PVC pipe as well as HDPE sliplining. Construction management and inspection services included daily field presence at the worksite, written and photographic documentation, pay request and change order processing, issue resolution, inspection, City coordination, and property owner coordination. Specific services provided by Eric include design and preparation of final construction documents, including plans, specification and engineer's opinion of probable cost and fulfilling the role of construction manager during construction and some inspection services. Construction management duties include establishing an electronic, cloud-based construction document tracking, filing, and communication system, evaluate potential change orders to provide recommendations to the City, lead any negotiation process with the City and Contractor, coordinate and review contractor progress payment, review contractor's schedule, serve as a central coordination role with all project parties including coordinate construction activities with stakeholder agencies and lead weekly meetings, prepare project punch list, schedule inspection services, review and finalize daily field reports and review and sign-off on extra work orders.

Folsom Ashland PRV Project

City of Folsom, California

ESDC / Project Engineer. HydroScience designed improvements and modifications to three existing Pressure Reducing Valve (PRV) stations on the City's water distribution system. Tasks included the removal and retirement of one PRV station, the relocation of one PRV station to a separate system, the re-configuration of hydrants as blowoffs for system flushing, raising the PRVs above grade to eliminate immersion potential, and the replacement of an isolation valve between two zones with an above-grade PRV station. All designs were completed in accordance with CDPH requirements. Specific services provided by Eric included design and preparation of the final construction documents and engineering services during construction.

Bill Slenter, PE

Principal-in-Charge



EDUCATION

B.S., Civil Engineering, San Francisco State University

REGISTRATION

Civil Engineer, California, Registration No. 57640

AFFILIATIONS

California Water Environment Association (CWEA)

Central Valley Clean Water Association – Outreach Committee Chairperson

Former Chairperson, CWEA San Francisco Bay Section Communications Committee

CWEA Sacramento Area Section

Bill is a civil engineer with 34 years of experience. His areas of expertise include permitting, funding, planning, design, and construction support of wastewater, water, and recycled water systems. A principal with HydroScience, he has served as principal, project manager and project engineer on a wide range of water-related projects.

SELECT PROJECT EXPERIENCE

Folsom Tower Tank Rehabilitation

City of Folsom, California

Principal-in-Charge. This project involves the rehabilitation and operational improvements of five potable water storage tanks in the City of Folsom, addressing compliance, safety, and functionality needs. Two tanks require upgrades to meet California Division of Drinking Water (DDW) standards. Challenges include a four-month design window and strict sequencing during low-demand winter months to maintain system operations. Improvements to the Tower Tank include structural modifications (vent, rafters, bracing), a staircase replacing the ladder, safety upgrades, a THM reduction mixer, and electrical, SCADA, and utility enhancements, along with antenna relocation, drainage, sampling, coatings, and a cathodic protection system. East Tank #2 upgrades focus on overflow, drain, and vent modifications, exterior coating repairs, and drainage adjustments to meet DDW compliance. Foothills Tanks (1 & 2) improvements include staircases, a catwalk bridge, safety anchors, THM mixers, access upgrades, monitoring cabinets, and SCADA and electrical updates, along with coatings and a prefabricated canopy. The South Tank upgrades involve overflow, drain, and vent modifications, exterior repairs, and drainage improvements, ensuring compliance and operational efficiency.

Ashland Water Pipeline Rehabilitation Project II

City of Folsom, California

Principal-in-Charge. This project consisted of improvements to allow for abandonment of an existing water main by extending 6 existing branch mains, replacing 22 water services and replacing 3 fire hydrant service and connection the new and extended services to an existing parallel active 14-inch water main located along Baldwin Dam Road. The project

also included slurry seal of the entire roadway, evaluation of the benefits for providing a new PRV station, and demolition of an existing vacant pump station. Once completed the existing transmission line provided fully isolated section of main between all branch tie-ins. HydroScience incorporated many measures in design to minimize disruption to customers, including hot tap sleeves for connecting new service to the active ACP and steel pipeline. Outage maps were provided to the Contractor as an attachment to the specifications for each of the planned outages. These maps showed exactly which customers and fire hydrants would be affected by the outage to help the contractor coordinate the notification process during construction.

Water Treatment and Storage Facility

Lytton Rancheria, Sonoma County, California

Principal-in-Charge and QA/QC. HydroScience is providing design engineering and engineering support of construction for new groundwater wells, groundwater treatment, treated water storage, and booster pumping facility to serve the Lytton Rancheria Project, a tribal residential development located near Windsor, CA. HydroScience's role is design engineer-of-record as part of a design/build project team. The facility will produce an average day flow of approximately 120K gpd at buildout. New wells will deliver raw water to a water treatment system to reduce concentrations of arsenic and manganese in the groundwater to below primary maximum contaminant levels. The treatment process will include pH adjustment, oxidation, coagulation/filtration, post-filtration adsorption, and backwash thickening. Dosing of sodium hypochlorite followed by storage in on-site welded steel storage tanks will follow. A booster pump station consisting of banks of low and high flow pumps followed by a hydropneumatic tank will deliver water

to the distribution system for residential demands and fire flows. The treatment and pumping equipment will be housed in a new CMU building, which will also contain an operations office, lab, power distribution, and control systems. The design phase has been completed and HydroScience will provide construction phase support including review of RFIs and submittals, field visits, and commissioning support.

Red Hawk Wastewater and Recycled Water Improvements

Shingle Springs Rancheria, El Dorado County, California

Project Manager. HydroScience designed a new membrane bioreactor (MBR) wastewater treatment plant, recycled water pumping, and effluent disposal systems for Red Hawk Casino. These facilities were commissioned in 2009. Red Hawk retained HydroScience in 2020 to evaluate and design upgrades to support expansion of the resort with a new hotel and entertainment facilities. Upgrades included two new 3.0 million gallon welded steel tanks, a new recycled water booster pump station with two VFD-driven 75-hp vertical turbine pumps, upgrade of existing chlorine contact basin effluent pumps, improvements to the existing sewer lift station, and a new coarse screening facility. The project is currently in the later stages of construction. The project was implemented as a collaborative delivery (progressive design-build) arrangement and involved significant coordination with the facility operator.

Folsom Ashland PRV

City of Folsom, California

Principal-in-Charge. HydroScience designed improvements and modifications to three existing Pressure Reducing Valve (PRV) stations on the City's water distribution system. Tasks included the removal and retirement of one PRV station, the relocation of one PRV station to a separate system, the reconfiguration of hydrants as blowoffs for system flushing, raising the PRVs above grade to eliminate immersion potential, and the replacement of an isolation valve between two zones with an above-grade PRV station. All designs were completed in accordance with CDPH requirements.

Folsom Plan Area PRV

City of Folsom, California

Principal-in-Charge. The PRV Stations project is part of the initial infrastructure phase to provide potable water distribution system pressure and flow regulation for the Folsom Plan Area (FPA). HydroScience provided preliminary design, final design, and engineering services during bidding and construction for four pressure reducing valve stations (PRV stations), utility and agency coordination, and pipe stub-outs for connection by others to the FPA water supply system. The PRV stations design includes a magnetic flowmeter; and above-ground valve

manifolds in insulated enclosures with a separate PRV sized for domestic and fire use.

Ashland Water Pipeline Rehabilitation Project I

City of Folsom, California

Principal-in-Charge. This project rehabilitates 1,500 linear feet of an existing 20 and 21-inch water transmission pipeline with ductile iron and fusion bonded epoxy steel pipe using open-cut construction and trenchless rehabilitation technologies of the existing pipeline. SCADA was added to an existing PRV station, and miscellaneous replacements of failed valves. The project required coordination with USBR to obtain a temporary construction easement for rehabilitation of the pipeline within USBR property.

Hinkle Creek Pipeline Rehabilitation

City of Folsom, California

Principal-in-Charge. HydroScience was retained to provide construction management, inspection, and engineering expertise for the rehabilitation of 5,200 LF of 6- to 10-inches vitrified clay gravity sewer main utilizing Cured-In-Place-Pipe (CIPP) trenchless pipeline rehabilitation technology. The work was conducted in a sensitive corridor adjacent to Hinkle Creek and the backyards of homes. Bypass pumping during sewer lining was carefully managed to prevent spills and maintain continuous service. The project also included repair of 25 manholes, installation of six flow level monitoring systems that included SCADA integration, and a complete creek bypass. HydroScience conducted a peer review of the CIPP technical specifications prior to contract bidding, and quickly respond to issues that arose throughout construction.

Willow Hill Pipeline Rehabilitation

City of Folsom, California

Principal-in-Charge for HydroScience. This project included assessment, preliminary design, final design, construction engineering, construction management, and inspection services for rehabilitation of a 20,585 LF existing raw water main (30- to 48-inches diameter RCP) and potential conversion of that main to future potable water pressure service. The project included both rehabilitation and realignment segments. The preliminary design included preparation of technical memoranda (TMs) for predesign criteria development and hydraulics, condition assessment, rehabilitation technology/methods and rehabilitation/alignment assessments. Final design included realignment using HDPE and fusible PVC pipe as well as HDPE sliplining. Construction management and inspection services included daily field presence at the worksite, written and photographic documentation, pay request and change order processing, issue resolution, inspection, City coordination, and property owner coordination.

Austin Poulson

Project Engineer



EDUCATION

B.S., Civil Engineering,
California State University,
Sacramento



Austin has 11 years of engineering design experience, including the design of wastewater and water treatment systems, sewer lift stations, sewer and water pipelines, booster pump stations, water storage tanks, site drainage, grading and paving, and fire protection systems. He has also served as a construction manager on fire protection projects. Austin's capabilities include site civil design in AutoCAD Civil3D and encompasses grading, paving, drainage, and design of retention basins.

SELECT PROJECT EXPERIENCE

Folsom Tower Tank Rehabilitation

City of Folsom, California

Project Engineer. This project involves the rehabilitation and operational improvements of five potable water storage tanks in the City of Folsom, addressing compliance, safety, and functionality needs. Two tanks require upgrades to meet California Division of Drinking Water (DDW) standards. Challenges include a four-month design window and strict sequencing during low-demand winter months to maintain system operations. Improvements to the Tower Tank include structural modifications (vent, rafters, bracing), a staircase replacing the ladder, safety upgrades, a THM reduction mixer, and electrical, SCADA, and utility enhancements, along with antenna relocation, drainage, sampling, coatings, and a cathodic protection system. East Tank #2 upgrades focus on overflow, drain, and vent modifications, exterior coating repairs, and drainage adjustments to meet DDW compliance. Foothills Tanks (1 & 2) improvements include staircases, a catwalk bridge, safety anchors, THM mixers, access upgrades, monitoring cabinets, and SCADA and electrical updates, along with coatings and a prefabricated canopy. The South Tank upgrades involve overflow, drain, and vent modifications, exterior repairs, and drainage improvements, ensuring compliance and operational efficiency.

Folsom Zone 3 and Zone 4 Potable Water Storage Tanks – Conceptual Design and Zone 3 Phase 1 Final Design

City of Folsom, California

Project Engineer. Both the Zone 3 and Zone 4 storage tanks will be located within the newly developed Folsom Plan Area (FPA).

The Zone 3 distribution system will be served at buildout by two tanks, each partially buried AWWA D110 prestressed concrete tanks with an operating volume of 3 million gallons (MG). The Zone 4 tank will be an above grade AWWA D110 prestressed concrete tank with an operating volume of 2 MG. The Zone 3 tanks will receive water from the FPA/FSAG transmission pipeline and may also feed the Zone 4 tank. The Conceptual Design phase evaluated each zone's tank and site layouts within City-owned parcels and established preliminary design criteria. Both Zone 3 and 4 conceptual design information were presented to the developers, City, and stakeholders through separate PowerPoint presentations. These presentations and meeting minutes established the basis of design for each zone's tank final design. For Zone 3, the first tank will be installed during Phase 1. When demand increases, the second Zone 3 tank will be constructed. HydroScience completed the Z3 tank final design, which will include provisions for the future installation of the second tank. Design of the Z4 tank is in progress.

Bickford Ranch Off-Site Water Infrastructure

Bickford Ranch, Placer County, CA

Design Support. HydroScience prepared a potable water hydraulic model to serve this 1,928 acre development in Placer County. The design includes development of a new greenfield tank and pump site adjacent to the Catta Verdera neighborhood in Lincoln, CA. New water facilities include one 1.4 MG tank to mitigate impacts of peak hour deliveries from Placer County Water Agency (PCWA) and provide operational storage, a 7.5 mgd booster pump station with canned vertical turbine pumps, 10,000 gallon hydropneumatic tank

for pressure control, CMU pump station building, 4,000 LF of 18-inch transmission main pipeline, and 4,000 LF extension of PCWA's 60-inch Ophir transmission pipeline. HydroScience also designed the development's 18-inch off-site sewer trunk. Portions of the sewer alignment parallels Hwy 193 and is within Caltrans right-of-way. As part of the Caltrans Encroachment Permit process, Placer County is obtaining a cooperative agreement with Caltrans because of this complex project.

Water Treatment and Storage Facility

Lytton Rancheria, Sonoma County, California

Project Engineer. HydroScience is providing design engineering and engineering support of construction for new ground-water wells, groundwater treatment, treated water storage, and booster pumping facility to serve the Lytton Rancheria Project, a tribal residential development located near Windsor, CA. HydroScience's role is design engineer-of-record as part of a design/build project team. The facility will produce an average day flow of approximately 120K gpd at buildout. New wells will deliver raw water to a water treatment system to reduce concentrations of arsenic and manganese in the groundwater to below primary maximum contaminant levels. The treatment process will include pH adjustment, oxidation, coagulation/filtration, post-filtration adsorption, and backwash thickening. Dosing of sodium hypochlorite followed by storage in on-site welded steel storage tanks will follow. A booster pump station consisting of banks of low and high flow pumps followed by a hydro-pneumatic tank will deliver water to the distribution system for residential demands and fire flows. The treatment and pumping equipment will be housed in a new CMU building, which will also contain an operations office, lab, power distribution, and control systems. The design phase has been completed and HydroScience will provide construction phase support including review of RFIs and submittals, field visits, and commissioning support.

Red Hawk Wastewater and Recycled Water Improvements

Shingle Springs Rancheria, El Dorado County, California

Support Engineer. HydroScience designed a new membrane bioreactor (MBR) wastewater treatment plant, recycled water pumping, and effluent disposal systems for Red Hawk Casino. These facilities were commissioned in 2009. Red Hawk retained HydroScience in 2020 to evaluate and design upgrades to support expansion of the resort with a new hotel and entertainment facilities. Upgrades included two new 3.0 million gallon welded steel tanks, a new recycled water booster pump station with two VFD-driven 75-hp vertical turbine pumps, upgrade of existing

chlorine contact basin effluent pumps, improvements to the existing sewer lift station, and a new coarse screening facility. The project is currently in the later stages of construction. The project was implemented as a collaborative delivery (progressive design-build) arrangement and involved significant coordination with the facility operator.

Placer Vineyards Sewer Lift Station #2

Placer County, California

Project Engineer. HydroScience was retained to provide design for a sewer lift station in support of the Placer Vineyards development. HydroScience prepared a Basis of Design Report to recommend upgrades and construction phasing for the improvements. Design included a 40-foot deep cast in place concrete wet well with 1,232 gpm submersible pumps, a 600,000 gallon emergency overflow storage facility using 10-ft diameter reinforced concrete pipe upstream wastewater, MCC/ Chemical Building, control provisions, electrical and controls, and standby power generator. A 32,000 cubic yard excavation will be required for the wet well and emergency storage with provisions in the contract document for off haul of 10,000 cubic yards of soil. Austin's duties include design of lift station, site grading, site piping and equipment, chemical storage building, and overflow storage tanks.

Cordova Hills Special Planning Area Sewer Pump Station

Rancho Cordova, California

Project Engineer. HydroScience is planning and designing the sewer pump station that will serve the Cordova Hills Special Planning Area, a 2,400+ acre planned development located east of Grant Line Road and south of Douglas Road. HydroScience is working with Cordova Hill's engineer and SacSewer's Development Services Group to design the required sewer facilities that must meet the initial through buildout sewer flow demands. At buildout, this pump station will serve 11,718 equivalent single family dwelling units. The design includes a new sewer pump station with dual wet wells and parallel 14-inch and 20-inch force mains to allow flexibility in phasing of the pumping capacity to meet the phasing of the Cordova Hills development. Austin's duties include design of lift station, site grading, site piping, electrical building, and overflow storage tanks.

Thinh Le, PE

Lead Electrical Engineer



EDUCATION

M.S., Electrical Engineering,
California State University,
Sacramento

B.S., Electrical Engineering,
California State University,
Sacramento

REGISTRATION

Electrical Engineer, California,
Registration No. E18362

Thinh Le has 23 years of experience serving as Project Manager, Lead E&IC Engineer on a variety of water, wastewater, and recycled water projects. He has knowledge of ISA, IEEE, NEC, NFPA, and codes applicable to electrical and I&C system design and construction. He has worked in both electrical and I&C roles on design and construction management projects and has an extensive working knowledge of electrical project development from analysis, SCADA systems, network & communication security, industrial automation controls, emergency and standby power, and electrical power systems including low and medium voltage electrical systems.

SELECT PROJECT EXPERIENCE

Folsom Tower Tank Rehabilitation

City of Folsom, California

Electrical Engineer. This project involves the rehabilitation and operational improvements of five potable water storage tanks in the City of Folsom, addressing compliance, safety, and functionality needs. Two tanks require upgrades to meet California Division of Drinking Water (DDW) standards. Challenges include a four-month design window and strict sequencing during low-demand winter months to maintain system operations. Improvements to the Tower Tank include structural modifications (vent, rafters, bracing), a staircase replacing the ladder, safety upgrades, a THM reduction mixer, and electrical, SCADA, and utility enhancements, along with antenna relocation, drainage, sampling, coatings, and a cathodic protection system. East Tank #2 upgrades focus on overflow, drain, and vent modifications, exterior coating repairs, and drainage adjustments to meet DDW compliance. Foothills Tanks (1 & 2) improvements include staircases, a catwalk bridge, safety anchors, THM mixers, access upgrades, monitoring cabinets, and SCADA and electrical updates, along with coatings and a prefabricated canopy. The South Tank upgrades involve overflow, drain, and vent modifications, exterior repairs, and drainage improvements, ensuring compliance and operational efficiency.

Bickford Ranch Water Infrastructure Phasing

Placer County, California

Electrical Engineer. HydroScience prepared a potable water hydraulic model to serve this 1,928 acre development in Placer County. The design includes development of a new

green-field tank and pump site adjacent to the Catta Verdera neighborhood in Lincoln, CA. New water facilities include one 1.4 MG tank to mitigate impacts of peak hour deliveries from Placer County Water Agency (PCWA) and provide operational storage, a 7.5 mgd booster pump station with canned vertical turbine pumps, 10,000 gallon hydropneumatic tank for pressure control, CMU pump station building, 4,000 LF of 18-inch transmission main pipeline, and 4,000 LF extension of PCWA's 60-inch Ophir transmission pipeline. HydroScience also designed the development's 18-inch off-site sewer trunk. Portions of the sewer alignment parallels Hwy 193 and is within Caltrans right-of-way. As part of the Caltrans Encroachment Permit process, Placer County is obtaining a cooperative agreement with Caltrans because of this complex project.

Water Treatment and Storage Facility

Lytton, Sonoma County, California

E&C. HydroScience is providing design engineering and engineering support of construction for new groundwater wells, groundwater treatment, treated water storage, and booster pumping facility to serve the Lytton Rancheria Project, a tribal residential development located near Windsor, CA. HydroScience's role is design engineer-of-record as part of a design/build project team. The facility will produce an average day flow of approximately 120K gpd at buildout. New wells will deliver raw water to a water treatment system to reduce concentrations of arsenic and manganese in the groundwater to below primary maximum contaminant levels. The treatment process will include pH adjustment, oxidation, coagulation/filtration,

post-filtration adsorption, and backwash thickening. Dosing of sodium hypochlorite followed by storage in on-site welded steel storage tanks will follow. A booster pump station consisting of banks of low and high flow pumps followed by a hydro-pneumatic tank will deliver water to the distribution system for residential demands and fire flows. The treatment and pumping equipment will be housed in a new CMU building, which will also contain an operations office, lab, power distribution, and control systems. The design phase has been completed and HydroScience will provide construction phase support including review of RFIs and submittals, field visits, and commissioning support.

Pump Station 15 Improvements

City of Santa Rosa, CA

Project Manager. HydroScience designed and prepared bid plans and specifications for the improvement of City of Santa Rosa's Pump Station 15. This project included, recoating the hydropneumatic tank (inside and out), new 4-inch Flow Switch, new magnetic flow meters, and the replacement of the existing Automatic Transfer Switch, natural gas generator, fire pump starter, PLC, operator terminal, and pressure transmitters. The pump station is the only supply of pressure for the City's R15 pressure zone, therefore the pump station continued to operate during construction to supply water to the zone. HydroScience developed a construction constraints and sequencing plan and vetted this with City staff. This plan was then reflected in the bid documents and includes construction phasing, shutdown and bypass prerequisites, and temporary construction provisions to maintain facility operations.

Buena Vue Casino Water and Wastewater Facilities

Buena Vue Rancheria, Amador County, California

Electrical Engineer. HydroScience is providing detailed design services for a 100,000 gpd MBR that will provide tertiary treatment to serve the casino and produce Title-22 compliant effluent for discharge in accordance with an NPDES permit and onsite irrigation reuse. The flat-plate MBR system includes influent pumps, fine screens, nitrification/denitrification and emergency storage. The facility includes an ultraviolet disinfection and a solids handling system. Water treatment will be designed for groundwater from onsite wells and water will be stored in a 1.25 MG water storage tank. Our scope includes design of power distribution, an emergency generator, and controls. The project will be constructed via the design-build project delivery method.

Wolfe-Evelyn Water Plant Reconstruction

City of Sunnyvale, Santa Clara County, California

Electrical Engineer. HydroScience provided planning, design and construction services for the City of Sunnyvale at the Wolfe-Evelyn Water Plant to replace four existing and aged pumps

with new VFD controlled pumps with a capacity of approximately 7.9 MGD. The design allows the plant to safely remain on-line while the new electrical system is installed and each existing pump is replaced and tested in succession. The entire outdated electrical system was removed and updated with arc-clash compliant motor control centers. Other site upgrades include site paving around the existing pump building, grading and access road improvements around the storage tank, a vehicle tire wash down station, and seismic upgrades to the existing pump building. HydroScience prepared the CEQA documentation for Categorical Exemption for the City, as well as assist in the preparation and acquisition of any other required permitting or documentation.

Recycled Water Project Implementation

City of Hayward, Alameda County, California

Electrical Engineer. HydroScience has been working with the City of Hayward to implement multiple portions of their new recycled water project. HydroScience is providing Engineering Review Services for the design of 10 miles of recycled water distribution system, the new recycled water storage tank and recycled water pump station. HydroScience helped the City optimize the recycled water pipeline, fix significant issues with the 75% design drawings, and ensure that the PS&E contained the information required to result in a constructible project. HydroScience is the engineer-of-record for the design of all 35 of the recycled water retrofit designs to be connected to the new recycled water distribution system.

Regional Wastewater Control Facilities

Stockton, San Joaquin County, California

Lead EI&C. HydroScience played a lead role on the rehabilitation of the primary clarifiers and sludge and scum pumping systems as part of this Progressive Design-Build project. The existing clarifiers consisted of three discrete banks constructed at different times (as far back as the 1940s) and configured differently. Two of the clarifiers were "squirircular" (circular mechanisms in square tanks) while the remaining ones are rectangular. HydroScience performed a mechanical condition assessment, utilized a facility mass balance to determine anticipated future sludge removal rates and flows for pumping, developed proposed rehabilitation approaches for the clarifiers, worked with the contractor to refine construction approach and develop cost estimates for the improvements, and presented our findings in a workshop to City staff. HydroScience helped develop the process control narratives and finalized the construction plans and specifications and provided review of construction submittals. The updated clarifiers now have a total capacity of 80 MGD.

Brad Friederichs, SE

Structural Engineer

VE Solutions



EDUCATION

B.S., Civil Engineering with honors, California State University, Sacramento

REGISTRATION

Structural Engineer, California, Registration No. S2780

AFFILIATIONS

Structural Engineers Association of Central California, president 1989-90

American Society of Civil Engineers

American Concrete Institute

American Institute of Steel Construction

Brad has over 40 years of experience as a structural engineer for wastewater, water treatment, commercial, industrial, agricultural, retail and residential structures. His expertise is in cast-in-place concrete, prestressed concrete, steel, wood and masonry construction. His specialty is in producing completely detailed, contractor friendly, value-oriented construction documents resulting in projects that bid well with few change orders.

PROJECTS AS SUBCONSULTANT TO HYDROSCIENCE

WTP On-Site Residuals Management

San Juan Water District, California

Structural Engineer. HydroScience evaluated the District's WTP on-site residuals handling practices with respect to current and future regulations. Evaluations included quantifying the solids produced and determining the solids drying area required under current and buildout conditions. Based on the preliminary evaluations, HydroScience proposed improvements to the solids drying area to better retain solids and capture rain runoff. The recommended improvements include provisions to return runoff into the WTP process stream. HydroScience prepared a Technical Memorandum that summarized the evaluation results and preliminary design parameters for a solids retention bed (for additional drying) and for a sump and pump to collect surface runoff from the solids retention bed.

El Macero Sewer Lift Station and Force Main Re-Design

City of Davis, California

Structural Engineer. HydroScience is helping the City of Davis replace the aging Sewer Lift Station No. 1 (SLS #1), originally built in 1975, due to significant maintenance, safety, and reliability issues. Located in the El Macero community, the new SLS #1 will be constructed on an adjacent City-acquired property and will include submersible pumps with VFDs, a wet well, odor control, bypass provisions, and connections to both interim (14-inch) and future (12-inch) force mains. It will be designed to meet current City standards and blend with the neighborhood. To support the new lift station, a new 12-inch sanitary sewer force main approximately 9,744 feet in length will be constructed in two phases, phase I will begin from SLS #1 up to the I-80 crossing and phase II includes crossing I-80 and UPRR to connect with the City's sewer collection system. HydroScience previously

completed the 2015 Lift Station Assessment and 2017 Feasibility Study, which identified SLS #1 for major upgrades, and is now leading the design with a focus on minimizing construction impacts and improving O&M efficiency.

Eagle View Well Site Improvements

City of Morgan Hill

Structural Engineer. HydroScience is designing a new well for the City that will improve water supply redundancy and provide an additional source of drinking water to the City's Boy's Ranch pressure zone. The well design criteria include 800 GPM capacity at a depth of 370 feet bgs, 16-inch well casing and using vertical turbine pumps. The project includes Phase I for well development with drilling and testing, and Phase II for well equipping with site improvements, a climate-controlled building, chemical treatment, electrical equipment and other utilities. Phase I has been bid and design of Phase II is ongoing.

North Fork Mono Casino Water Treatment Plant, Well, Pump Station, and Storage Tank

North Fork Rancheria of Mono Indians, Madera, California

Structural Engineer. HydroScience served as engineer-of-record for the design-build project to design and construct new water supply and wastewater treatment facilities serving this casino. HydroScience also prepared the original water and wastewater feasibility study in 2008. The project included site grading, all wet/dry utilities, electrical, I&C, and SCADA, as well as operations space, restroom/shower facilities, and process laboratory, and an on-site diesel backup generator. Water facilities include two wells, a sodium hypochlorite system; a 1-million-gallon steel potable water storage tank, and a booster pumping station. Wastewater facilities include a pre-fabricated MBR WWTP producing disinfected

tertiary recycled water for reuse as within the Rancheria. The WWTP includes influent screening, equalization storage, sludge storage and dewatering, treatment, ultraviolet disinfection, and effluent pumping.

North Fork Mono Casino Water Treatment Plant, Well, Pump Station, and Storage Tank

North Fork Rancheria of Mono Indians, Madera, California

Structural Engineer. HydroScience served as engineer-of-record for the design-build project to design and construct new water supply and wastewater treatment facilities serving this property. HydroScience also prepared the original water and wastewater feasibility study in 2008. The project included site grading, all wet/dry utilities, electrical, I&C, and SCADA, as well as operations space, restroom/shower facilities, and process laboratory, and an on-site diesel backup generator. Water facilities include two wells, a sodium hypochlorite system; a 1-million-gallon steel potable water storage tank, and a booster pumping station. Wastewater facilities include a pre-fabricated MBR WWTP producing disinfected tertiary recycled water for reuse as within the Rancheria. The WWTP includes influent screening, equalization storage, sludge storage and dewatering, treatment, ultraviolet disinfection, and effluent pumping.

Florin Pump Station Ventilation Improvements

City of Sacramento, California

Structural Engineer. Florin Pump Station, a large below-ground water booster pump station, had excessive levels of carbon monoxide and methane gases. HydroScience worked closely with City engineering staff to develop a detailed project scope, evaluate ventilation improvement alternatives, and implement a ventilation improvements design to improve worker health and safety and comply with OSHA thresholds. Improvements include: modification of exhaust stack outlets to improve dispersion of gases, installation of a separate air supply and cooling for the control room, and supply and exhaust ducting and fan additions in the equipment room. HydroScience also designed electrical power and controls modifications to operate the new equipment.

Eagle View Well Site Improvements

City of Morgan Hill, California

Structural Engineer. HydroScience is designing a new production well for the City that will supply 800 gpm of drinking water while meeting primary and secondary water quality standards. The project will increase the water supply redundancy and provide additional source of water to the City's Boy's Ranch pressure zone. The well design criteria include 800 GPM capacity at a depth of 370 feet bgs, 16-inch well casing and using vertical turbine pumps. The project includes phase I for well development with drilling and testing, and phase II for well equipping with site improvements, a climate-controlled building, chemical treatment, electrical equipment and other utilities.

Manteca Well 29 TCP Treatment

City of Manteca, California

Structural Engineer. HydroScience designed a new wellhead treatment system to remove 1,2,3 -Trichloropropane (TCP) from the City of Manteca's Well 29, a 2,000 gpm well located in Yosemite Village Park. The new treatment system uses granular activated carbon (GAC) filters, which were successfully implemented by the HydroScience team for TCP removal on several other City wells. The DDW had a tight compliance deadline that required careful identification and management of critical path items from the outset and efficient execution of the preliminary and final designs. Challenges included minimizing aesthetic impacts to the park and residents, facilitating media changeouts and O&M, maximizing media life, completing CEQA documentation on a short timeline, and meeting the fast-track schedule.

CalPoly Water Reclamation Facility

San Luis Obispo, California

Structural Engineer. HydroScience is designing a 1 MGD membrane bioreactor reclamation facility to produce recycled water for on-site irrigation reuse. This facility will treat a portion of the campus wastewater that is currently discharged to the city treatment plant, facilitate beneficial reuse, and reduce campus reliance on potable water supplies. This project is being implemented through a unique progressive design-build model in partnership with a general contractor and the campus. The treatment system will utilize factory-assembled and tested stainless steel treatment biological and membrane filtration treatment units. It will also utilize a packaged sludge storage, aeration, and dewatering system utilizing screw presses. Recycled water will be stored in a new 85 acre-foot lined reservoir and distributed to irrigation uses around the campus.

Wastewater Treatment and Effluent Management Facilities

Lytton Rancheria, Sonoma County, California

Structural Engineer. As part of a design/build team, HydroScience completed design of wastewater and recycled water facilities serving a new tribal residential development in Sonoma County. The Lytton Rancheria project consists of construction of new homes, a community center, and a retreat center. HydroScience designed a complete Membrane Bioreactor (MBR) Wastewater Treatment Facility utilizing shop-fabricated treatment units to treat 250,000 gpd of peak dry weather flow. The design includes an administration building, UV disinfection, solids dewatering system using screw presses, effluent storage pond, and recycled water pump station. The design was developed through a



J.P. Davis, PE, CCM, QSP

Staff Title: Construction Management
Business Sector Lead /
Construction Manager IV

Office Location: Sacramento, CA

Years of Experience: 27

Years with West Yost: 11

Professional Registrations

- Professional Civil Engineer, California No. C66826
- Certified Construction Manager, Construction Management Certification Institute, ID No. 4505
- Qualified SWPPP Practitioner, Certificate No. 25223
- 10-Hour Cal OSHA Construction Safety Certification, January 2021

Education

- BS, Civil Engineering, University of California, Irvine

Certifications

- Confined Space Competent Person & Confined Space Entry and Non-Entry Rescue, April 2024
- First Aid and CPR/AED, American Heart Association, Certified December 2024
- Fall Protection, December 2025
- US Army Corps of Engineers Construction Quality Management for Contractors #784

Professional Affiliations

- American Public Works Association
- Construction Management Association of America
- American Society of Civil Engineers

J.P. has experience in civil engineering, construction management, and construction inspection for commercial, industrial, and capital improvement projects. His focus is on water/wastewater infrastructure projects, including pretreatment and filtration structures, pump stations, reservoirs, large diameter underground piping, and hydropneumatic surge tanks. His experience as a construction manager, resident engineer, and inspector includes constructability review, management of construction documentation, management of staff and subconsultants, contract and change order negotiations, budget and schedule review tracking and analysis, schedule of values and progress payment review, chairing of progress meetings and lead inspection, and project tracking, including written and photographic documentation of daily construction activities.

J.P. also has a strong background in geotechnical engineering and materials testing and inspection. His experience in these fields includes borehole soil logging and sampling; performance and oversight of laboratory soils and construction materials testing; preparation of geotechnical investigation/compaction reports; grading and AC paving observation/inspection; field in situ compaction testing; and special inspection. It also includes forensic destructive/nondestructive data compilation and analysis for geotechnical expert testimony in residential construction defect litigation. In addition to being a Certified Construction Manager (CCM), J.P. is a California licensed Professional Engineer and a Qualified SWPPP Practitioner (QSP).

EXPERIENCE

Tower Tank Rehabilitation Project, City of Folsom, CA: Project/Construction Manager for the \$5 million Tower Tank Rehabilitation project to meet State of California Department of Drinking Water requirements, provide safer and more efficient maintenance access for City staff, and increase longevity of potable water utility assets. The project consists of rehab and modification of five (5) existing water storage tanks throughout the City. The project is located at four sites throughout the City including the (1) East Tank No. 2, (2) South Tank, (3) Foothills Tanks Nos. 1 & 2, and (4) Tower Tank sites. Key modifications and/or upgrades include but are not limited to: crow's nest installation; beams, bracing, and rafter replacement; interior roof plate seal welds; staircase, catwalk, and guardrail installation; tank overflow system modifications; tank cathodic protection improvements; tank mixer & power vent system installation; interior and exterior tank coatings; storm drain and drain piping installation; and electrical, instrumentation, and SCADA upgrades.

Reservoir No. 2 Rehabilitation Project, City of Folsom, CA: Construction Manager during rehabilitation of this \$1.3 million project involving the City of Folsom's existing Reservoir Nos. 1 and 2 water tanks located at the Water Treatment Plant. Modifications consisted of rerouting the inlet and outlet piping, installing a cathodic protection system, stairs, and flexible connections, and recoating the interior of Reservoir No. 2 and exteriors of Reservoir Nos. 1 and 2. A key project challenge included tank outage constraints, limiting construction to the low-demand season between November and April. The project went over schedule due to several contributing factors, including insufficient and unqualified construction personnel, lack of management/supervision by the contractor, and unforeseen conditions that were not vetted out by the contractor during the early stages of the project. Due to the late completion of the project, liquidated damages were assessed, and J.P. successfully negotiated coating of two additional 2.5 MG tanks to offset the losses incurred by the City.

Cimarron, Nimbus, and Reservoir No. 2 Rehabilitation Project, City of Folsom, CA: Construction Manager for rehabilitation of the City of Folsom's existing Cimarron, Nimbus, and Reservoir No. 2 steel water tanks. The project consisted of multiple improvements, including rerouting the inlet piping above ground and installing a seismic flexible coupling, Tideflex mixing header, cathodic protection system, roof vent, and stairs, and recoating the exterior roof and all interior components of the Cimarron tank. Also included were roof vent replacements at the Nimbus and Reservoir 2 tanks. Key project challenges included strict site access requirements as the Cimarron Tank is located within the Prison Industry Authority (PIA) property and a tight construction completion schedule with multiple milestone completion dates. The 80 calendar day construction schedule with a liquidated damage penalty of \$1,000 for each day beyond the completion date was enforced to impress upon the contractor the importance of getting the tanks back in service before increase in water demand. The project went over schedule due to several contributing factors, including insufficient and unqualified construction personnel, lack of management/supervision by the contractor, and several days in which no work was performed on controlling operations. J.P. saw the project through to successful completion while diligently documenting the project, successfully negotiating over \$250,000 in liquidated damages to offset the losses incurred by the City.

Bickford Ranch Water Tank No. 1 and Pump Station No. 1, Placer County Water Agency (PCWA): Construction Manager. West Yost is providing construction management and inspection services on behalf of PCWA for this developer driven, \$9 million project that includes water distribution, storage, and pumping equipment and facilities to serve the new Bickford Ranch housing development in unincorporated Placer County, California. The project consists of a new pumping station with four 200 hp and two 25 hp jockey vertical turbine pumps with VFDs, controls, valves and all other related mechanical and electrical components, site piping including pump suction and discharge, site water, irrigation and drainage, an approximately 1,650 sq. ft. pump station structure, backup generator, 10,000 gallon hydropneumatic tank and air compressors, a 1.4-MG welded steel water storage tank, approximately 4,500 feet of new 18 inch ductile iron distribution pipeline, approximately 1,800 feet of new 60 inch welded steel transmission pipeline, a new 24 foot wide paved access road to Pump Station No. 1 including a new concrete box culvert for crossing the Caperton Canal, and associated side work including grading, paving, landscaping, retaining walls, equipment pads structural foundations, and retention pond.

East Tank No. 1 Rehabilitation Project, City of Folsom, CA: Construction Manager during rehabilitation of this \$3.1 million project involving the City's existing steel 3 MG East Tank Nos. 1 and 2, 4 MG Zone 4 Tank, 3 MG Zone 5 Tank, and 3 MG South Tank. Modifications consisted of recoating the interior of East Tank No. 1 and the exterior of all four tanks listed above, modifying tank piping and structural roof support systems, constructing two stairways, retrofitting or replacing various tank features, and installing a new cathodic protection system in East Reservoir, Tank No. 1.

Zones 4 and 5 Pump Station (PS) and Zone 6 PS/Zone 5 Tank, City of Folsom, CA: Lead Inspector for these two projects with a combined value of \$10 million, constructed for supplying potable water to the new Folsom Plan Area (FPA) development south of Hwy 50. The Zones 4 and 5 PS project included construction of a new booster pump station with three 125 hp 1280-GPM vertical turbine pumps (VTP) and infrastructure for build out to the future Zone 4 Tank. The Zones 4 and 5 PS delivers water from the City's existing water system to a new 2.5 MG steel tank (Zone 5 Tank) and gets further distributed to the City's Zone 6 region with two 3,000-GPM fire flow and three 400-GPM VTP pumps to service the ongoing FPA developments.

Water System Rehabilitation Project #2, City of Folsom, CA: Construction Manager. This \$1.4 million project covered the construction of numerous valves and connections to help improve the reliability and redundancy of the water system in the City and performing related, required work. There are 12 different locations which are in the public right of way and/or on private property. Project Size: Multiple locations requiring construction of valves and connections to new water system pipes.

JM Pike Park Stormwater to Sanitary Sewer Cross Connection Removal and Water Main, City of Modesto, CA:

Project/Construction Manager for the \$30.6 million J.M. Pike Park project which aims to address peak wet weather flows in the north central portion of the City. It involves removal of nine (9) stormwater to sanitary sewer cross connections, installation of approximately 10,566 linear feet of new storm drain systems that will carry the runoff to an underground stormwater pre-treatment facility at J.M. Pike Park. To minimize disruption to the public and unnecessary replacement of asphalt paving, the Project also includes replacement of existing, deteriorating and undersized water mains in the same general areas where the new storm drain system will be installed. The new potable water line piping will consist of approximately 17,213 LF of 8-inch and 5,675 LF of 12-inch water mains, and associated appurtenances.



Jason C. Bergh, QSP

Staff Title: Resident Inspector (Prevailing Wage Group 2)

Office Location: Sacramento, CA

Years of Experience: 21

Years with West Yost: 3

Education

- MBA, Business Administration, Chapman University, Orange, CA
- Graduate Certificate, Organizational Leadership, Orange, CA
- BA, Organizational Leadership, Chapman University, Orange, CA
- AA, Cosumnes River College, Sacramento, CA

Certifications

- International Code Council (ICC) No. 8356420
 - Commercial Building Inspector
 - Commercial Mechanical Inspector
 - Commercial Plumbing Inspector
 - Reinforced Concrete
 - Prestressed Concrete
 - Soils Special Inspector
 - Spray-Applied Fireproofing Special Inspector
 - Structural Masonry Special Inspector
 - Structural Steel and Bolting Special Inspector
 - Structural Welding Special Inspector
 - Master of Special Inspection
 - American Concrete Institute (ACI)
 - Concrete Field-Testing Technician – Grade I
- 10-Hour Cal OSHA Construction Safety Certification, July 2022
- Troxler - Nuclear Moisture – Density Gauge
- CASQA - Qualified SWPPP Practitioner (QSP/CESWI)
- Radiation Safety Officer Training - (RSO) Certified
- California Department of Insurance – Licensed Producer
- California Department of Real Estate – Licensed Broker

Jason Bergh has extensive experience in construction observation, materials testing, and special inspections. He has managed materials testing for various projects, including private and large-scale residential housing, apartments, multi-story commercial buildings, recreational facilities, parking structures, and municipality infrastructure and improvements. As an International Code Council certified Master of Special Inspection, he provides quality control, monitoring, and inspection for reinforced concrete, masonry, structural steel, and fireproofing. Additionally, he has a strong background in soil identifications, mass grading, evaluation and testing of roadway subgrade, aggregate base, and asphalt placement. He is knowledgeable about the use of geotextiles and chemical treatments for mitigating unstable surfaces. Jason is a certified erosion, sediment, and stormwater inspector and a Qualified SWPPP Practitioner (QSP) in the state of California. His experience includes testing and monitoring of stormwater, providing recommendations, and implementing corrective measures to comply with local, state, and federal regulations.

EXPERIENCE

Tower Tank Rehabilitation Project, City of Folsom, CA: Resident Engineer/Inspector for the \$5 million Tower Tank Rehabilitation project to meet State of California Department of Drinking Water requirements, provide safer and more efficient maintenance access for City staff, and increase longevity of potable water utility assets. The project consists of rehab and modification of five (5) existing water storage tanks throughout the City. The project is located at four sites throughout the City including the (1) East Tank No. 2, (2) South Tank, (3) Foothills Tanks Nos. 1 & 2, and (4) Tower Tank sites. Key modifications and/or upgrades include but are not limited to: crow's nest installation; beams, bracing, and rafter replacement; interior roof plate seal welds; staircase, catwalk, and guardrail installation; tank overflow system modifications; tank cathodic protection improvements; tank mixer & power vent system installation; interior and exterior tank coatings; storm drain and drain piping installation; and electrical, instrumentation, and SCADA upgrades.

Bickford Ranch Water Tank No. 1 and Pump Station No. 1, Placer County Water Agency (PCWA), CA: Resident Inspector. Providing inspection services on behalf of PCWA for this developer driven, \$9 million project that includes water distribution, storage, and pumping equipment and facilities to serve the new Bickford Ranch housing development in Unincorporated Placer County, California. The project consists of a new pumping station with four 200 hp and two 25 hp jockey vertical turbine pumps with VFDs, controls, valves and all other related mechanical and electrical components, site piping including pump suction and discharge, site water, irrigation and drainage, an approximately 1,650 sq. ft. pump station structure, backup generator, 10,000 gallon hydropneumatic tank and air compressors, a 1.4-MG welded steel water storage tank, approximately 4,500 feet of new 18 inch ductile iron distribution pipeline, approximately 1,800 feet of new 60 inch

welded steel transmission pipeline, a new 24 foot wide paved access road to Pump Station No. 1 including a new concrete box culvert for crossing the Caperton Canal, and associated side work including grading, paving, landscaping, retaining walls, equipment pads structural foundations, and retention pond.

Zones 4 and 5 Pump Station (PS) and Zone 6 PS/Zone 5 Tank, City of Folsom, CA: Special Inspector for these two projects with a combined value of \$10 million, constructed for supplying potable water to the new Folsom Plan Area (FPA) development south of

Highway 50. The Zones 4 and 5 PS project included construction of a new booster pump station with three 125 hp 1280-gpm vertical turbine pumps (VTP) and infrastructure for build out to the future Zone 4 Tank. The Zones 4 and 5 PS delivers water from the City's existing water system to a new 2.5-MG steel tank (Zone 5 Tank) and gets further distributed to the City's Zone 6 region with two 3,000-gpm fire flow and three 400-gpm VTP pumps to service the ongoing FPA developments.

Owner's Representative Services, Well 80, Sacramento Suburban Water District, CA: Resident Inspector. West Yost is providing Construction Management and Inspection services as part of its Owners Representative's role beginning with the first of up to four new monitoring wells and four new groundwater wells and associated pumping and treatment facilities. The projects are being constructed under a progressive design build project delivery process. As the Owner's Representative West Yost is representing the district in the contracting and management of the progressive design build team.

Lagoon Valley Project, City of Vacaville, CA: Resident Inspector. West Yost is providing CM Services on several areas under this contract. Sewage Lift Station: 2.5 MGD lift station with cast-in-place concrete wet well, submersible chopper pumps, associated valving and piping, approximately 20 feet of dual 10 inch force main; one sanitary sewer manhole; 120 feet of VCP sanitary sewer; control building to house electrical and emergency generator equipment, variable frequency drives and power distribution equipment; foul air system; site work; landscaping; electrical and instrumentation work; and miscellaneous improvements for a complete and operational facility. Construction under this Contract involves modification of facilities at the existing operating wastewater collection system, which must continue to meet requirements of State and Federal regulating agencies. Lagoon Valley Water Storage Reservoir: Partially buried 2.54 MG circular prestressed concrete potable water storage reservoir, valve vault and access roadway. Reservoir is a 136-foot diameter, 27-foot-tall buried concrete tank with a separate buried 26-foot by 21-foot concrete valve vault and associated site work and piping. Water Booster Pump Station: Booster pumping station with four, 50 hp pumps in a CMU building, two (2) valve vaults, and access roadway. The work includes all site preparation; environmental and erosion control measures; excavation; subgrade preparation; concrete work; process piping; drainage piping; reservoir accessories; electrical power and instrumentation; leak testing; disinfection; backfilling; landscape restoration; irrigation; and fencing. Northern Utilities Offsite Improvements: Approximately 8,000 LF of 6 inches to 18 inches in diameter sewer and 23 precast concrete manholes; 5,500 LF of 12 inches to 18 inches in diameter waterline and associated valves, hydrants, blow offs and ARV's; and 435 LF of 15 inches to 48 inches in diameter storm drainpipe. This work will include pavement restoration and tie into existing infrastructure. These projects must be in compliance with NSF/ANSI 61 Standards.

Alder Creek Parkway Sewer Lift Station and Force Main, Mangini Improvement Company, Folsom, CA: As Inspector, Jason conducted testing during earthwork operations and installation of sewer improvements for a sanitary sewer lift station and force main. Special inspection services included epoxy placement and concrete observation and testing. (Completed under prior employment.)

Water Treatment Plant, Rancho Murieta Community Services District, Rancho Murieta, CA: Inspector for this project that included expansion and improvement of an existing water treatment plant. Observed mass grading and underground utility installation for the expansion and improvement of an existing wastewater treatment plant. Performed compaction testing as well as numerous special inspection tasks. (Completed under prior employment.)

Greenback Sewer and Lift Pump Station, City of Folsom, CA: Office/Resident Engineer for this project involving comprehensive construction management and inspection services for upgrades to Pump Station No. 3 (PS3) and sewer system modifications along Greenback to improve operational flexibility. Key components included piping and sanitary sewer manhole modifications, new flow control structures, and pipeline abandonment, as well as interior changes to manholes to redirect flow from PS3 to Pump Station No. 2 (PS2). Additional work included relocating city-owned sewer mains, reconnecting private sewer connections, and site improvements around PS3 such as drainage modifications, fencing, and new bypass pumping connections. The project also involved equipment upgrades at PS3 and PS2, abandonment of an existing force main, and procurement, startup, and testing of two new portable bypass pumps.

Harvest Water Program Central South Distribution Pipelines Project, Sacramento Regional County Sanitation District (Regional San), CA: Resident Engineer. West Yost is providing construction management and inspection services for the Harvest Water Program, \$40M Central South Pipeline Project as a subconsultant to Psomas. West Yost's \$2.1 million scope supports Regional San's \$1.6 billion recycled water Harvest Water Program, which delivers highly treated tertiary water to agricultural users south of Sacramento. This project is for installation of large diameter recycled water pipelines forming the Central South conveyance backbone throughout the City of Elk Grove to farmers in the region. The work includes daily field oversight, documentation, schedule and cost monitoring, coordination with operations & maintenance staff, public outreach, and quality assurance to verify compliance with project specifications. The Harvest Water Program supports Regional San's broader goal of reusing up to 50,000 acre-feet of treated wastewater annually, reducing river discharges while improving groundwater sustainability and agricultural resilience. Date Completed: 12/2025 (est.)



Jesse Shah

Staff Title: Resident Inspector (Prevailing Wage - Group 2)

Office Location: Sacramento, CA

Years of Experience: 21

Years with West Yost: 6

Certifications

- International Code Council No. 5298462:
 - Structural Masonry Special Inspector (2025)
 - Structural Steel/Welding Inspector (2025)
 - Reinforced Concrete Special Inspector (2025)
- American Concrete Institute, Field Testing Technician, Grade I
- American Portable Nuclear Gauge Association, Nuclear Gauge Training Certification
- California Department of Transportation, Materials Engineering and Testing Services, California Test Methods: 125, 127, 216, 231, 375, 504, 518, 533, 539, 540, 556, 557
- Confined Space Competent Person & Confined Space Entry and Non-Entry Rescue, June 2021
- First Aid and CPR/AED, American Heart Association, Certified August 2020
- 10-Hour Cal OSHA Construction Safety Certification, January 2021
- Fall Protection, November 2021

Jesse is experienced in the construction and steel fabrication industry. He has performed special inspection and testing services on a variety of building and infrastructure projects, including wastewater treatment plants, hospitals, schools, commercial buildings, and highway projects in accordance with Caltrans, AASHTO, federal, and local quality assurance/quality control test methods. Jesse's experience includes soils, reinforced concrete, masonry, and structural steel inspection and testing.

EXPERIENCE

Tower Tank Rehabilitation Project, City of Folsom, CA: Construction inspector for the \$5 million Tower Tank Rehabilitation project to meet State of California Department of Drinking Water requirements, provide safer and more efficient maintenance access for City staff, and increase longevity of potable water utility assets. The project consists of rehab and modification of five (5) existing water storage tanks throughout the City. The project is located at four sites throughout the City including the (1) East Tank No. 2, (2) South Tank, (3) Foothills Tanks Nos. 1 & 2, and (4) Tower Tank sites. Key modifications and/or upgrades include but are not limited to: crow's nest installation; beams, bracing, and rafter replacement; interior roof plate seal welds; staircase, catwalk, and guardrail installation; tank overflow system modifications; tank cathodic protection improvements; tank mixer & power vent system installation; interior and exterior tank coatings; storm drain and drain piping installation; and electrical, instrumentation, and SCADA upgrades.

Construction Management Services for the EchoWater Project Procurement 1, Sacramento Regional County Sanitation District (Regional San), Sacramento, CA: Construction Inspector for the \$33 million Site Preparation project as part of the \$1.5 billion EchoWater Program. The project consisted of installing over six miles of various pipelines (reclaimed water, digested sludge, secondary effluent, potable and non-potable water, and storm drain) using HDPE, PVC, and RCP materials throughout the Plant site. The project also included approximately three miles of 12 kV and signal duct banks and manholes; replacement of signal wiring with fiber optic cabling; new plant access roads; security fencing; construction water well and access road; construction field office complex with wireless communication system; and a new main construction entrance that included a six-lane entrance, security card readers, automatic security gates, and a manned remote security guard facility.

CM for Water Treatment Plant Pretreatment System Improvements Project, City of Folsom, CA: Resident Inspector. This \$2.088 million project consists of modifications to the existing Actiflo and Basin 5 pretreatment systems to increase the City's treatment and distribution capacity. These upgrades will allow the City to meet the increased demand for the FPA development south of Hwy 50, as well as provide redundancy. General upgrades include the addition of tie downs over the lamellar settling tubes at Actiflo Trains 1 and 2 which will re rate each train from 20-MGD to 25-MGD, modifications to the raw water inlet piping into Sedimentation Basin 5, installation of a slide gate to prevent settled water from entering the basin from Actiflo when the City performs its annual cleaning, modifications to existing baffle and weir walls within Basin 5 to accommodate change in hydraulics due to increase in flow, and installation of 32 plate settlers which will increase the pretreatment capacity in Basin 5 from 15-MGD to 25-MGD. The project was completed in 500 calendar days.

River Trunk Realignment – Gravity System, Modesto, CA: Construction Inspector. West Yost is providing inspection for this \$22 million construction project that includes trenching, conduit, and pipe placement; backfill and compaction for approximately two miles of large diameter piping. This includes construction of concrete junction structures and requires a large public outreach effort and coordination with multiple stakeholders.

River Trunk Realignment – Shackleford Pump Station, City of Modesto, CA: Construction Inspector. West Yost is providing construction management and inspection for the \$10 million construction of a 7 MGD sewage pump station, new pressure and gravity pipelines up to 36 inch diameter, and associated structures located in the City of Modesto and unincorporated Stanislaus County, CA. New facilities will include a sewage pump station with three submersible screw centrifugal pumps located in a belowground cast in place concrete structure; associated pump station valves and flow meter located in a cast in place belowground concrete structure; a pump station electrical building, outdoor generator, and monorail crane; force main pipelines that operate under pressure, including ductile iron and polyvinyl chloride pipe materials, installed on a pump station site and through Dryden Park Golf Course; and sanitary sewer pipelines that flow by gravity installed on pump station site, within public right of way and Golf Course. It will also include asphalt pavement replacement within public right of way and Golf Course; reinforced concrete junction structures and manholes along the new sanitary sewer pipeline alignments; a paved pump station site with retaining wall and fencing; a grinder pump station located on the Golf Course; and sod restoration for all disturbed area on the Golf Course.

Lagoon Valley Project, City of Vacaville, CA: Construction Inspector. West Yost is providing CM Services on several areas under this contract. Sewage Lift Station: 2.5 MGD lift station with cast-in-place concrete wet well, submersible chopper pumps, associated valving and piping, approximately 20 feet of dual 10 inch force main; one sanitary sewer manhole; 120 feet of VCP sanitary sewer; control building to house electrical and emergency generator equipment, variable frequency drives and power distribution equipment; foul air system; site work; landscaping; electrical and instrumentation work; and miscellaneous improvements for a complete and operational facility. Construction under this Contract involves modification of facilities at the existing operating wastewater collection system, which must continue to meet requirements of State and Federal regulating agencies. Lagoon Valley Water Storage Reservoir: Partially buried 2.54 MG circular prestressed concrete potable water storage reservoir, valve vault and access roadway. Reservoir is a 136-foot diameter, 27-foot-tall buried concrete tank with a separate buried 26-foot by 21-foot concrete valve vault and associated site work and piping. Water Booster Pump Station: Booster pumping station with four 50 hp pumps in a CMU building, two (2) valve vaults, and access roadway. The work includes all site preparation; environmental and erosion control measures; excavation; subgrade preparation; concrete work; process piping; drainage piping; reservoir accessories; electrical power and instrumentation; leak testing; disinfection; backfilling; landscape restoration; irrigation and fencing. Northern Utilities Offsite Improvements: Approximately 8,000 LF of 6 inches to 18-inch diameter sewer and 23 precast concrete manholes; 5,500 LF of 12- to 18-inch diameter waterline and associated valves, hydrants, blow offs and ARV's; and 435 LF of 15 inch to 48 inch diameter storm drain pipe. This work will include pavement restoration and tie into existing infrastructure. These projects must follow NSF/ANSI 61 Standards.

EchoWater Project Nitrifying Sidestream Treatment, Regional San, Sacramento, CA: Resident Inspector for a \$45 million Nitrifying Sidestream Treatment project that involved construction of three Sequential Batch Reactor (SBR) rectangular concrete tanks that nitrify highly concentrated wastewater from the final solid storage basins using high-speed turbo air blowers and an automated decanter system. Supporting the process includes a fine screen facility, influent lift station, dedicated electrical building, and a dry lime storage and slurry feed facility that adjusts the alkalinity of the SBRs. In addition, a basin washdown pump station, and a stormwater pump station were constructed.

Headworks and Dryden Box and Influent Plume Improvements Project, City of Modesto, CA: Construction Inspector for the \$18.6 million Headworks and Dryden Box Project at the City of Modesto's Primary Sutter Avenue treatment plant that is currently under construction by general contractor, C. Overaa & Co. The project involves constructing numerous buried junction structures tying into existing pipelines, installation of several hundred feet of large diameter fiberglass and RCP pipe, new process equipment, odor control improvements, and major electrical improvements that include replacing motor control centers and upgrading control systems with PLCs to improve remote automated control via the existing SCADA system. The work includes pumped bypasses, shutdowns, temporary systems, tie ins, and startups requiring manipulation of existing system valves and gates to test the new system in a loop prior to incorporation into the process with small windows of opportunity for testing and confirming reliability. The junction structures require control of groundwater and complicated shoring systems to construct the structures, and temporary bypasses to demolish existing piping within the new tie in structures, while minimizing impacts to the operation of the existing treatment plant processes. The project started in November 2018 and is scheduled to be completed on or before November 2020.

Main Pump Station Emissions Control Study, City of Milpitas, CA: Construction Inspector including special inspection services for an alternatives analysis of odor control technologies that could be implemented at the Main Pump Station to identify a technology best suited to reliably control all types of odorous emissions, fit within available space at the Main Pump Station site, and minimize life cycle costs. Odor emission control technologies assessed included biofiltration, activated carbon filtration, and liquid phase technologies (oxygen balance, chemical oxidation, precipitation, substitute oxygen sources, pH control, and biological control).



Amy Rangel

Staff Title: Construction Manager I

Office Location: Sacramento, CA

Years of Experience: 20

Years with West Yost: 8

Certifications

- Confined Space Competent Person & Confined Space Entry and Non-Entry Rescue, June 2021
- First Aid and CPR/AED, American Heart Association, Certified December 2023
- 10-Hour Cal OSHA Construction Safety Certification, January 2021

Amy is a construction project manager and administrator providing support for construction management and design of environmental and engineering projects focused on wastewater and potable water treatment facilities and associated infrastructure ranging from \$4 million to \$47 million in value. Amy has excellent organization, communication, and project management skills. Her experience includes document tracking and distribution using Procore, Ebuilder, CMIS, Primavera and MS Access databases. She is experienced in all phases of project administration and effectively manages all documentation between the Design Engineer, Contractor, and Project Owner. Her experience also includes managing daily operations for projects with multiple field locations, construction administration, and vendor coordination.

EXPERIENCE

Tower Tank Rehabilitation Project, City of Folsom, CA: Construction Administrator for the \$5 million Tower Tank Rehabilitation project to meet State of California Department of Drinking Water requirements, provide safer and more efficient maintenance access for City staff, and increase longevity of potable water utility assets. The project consists of rehab and modification of five (5) existing water storage tanks throughout the City. The project is located at four sites throughout the City including the (1) East Tank No. 2, (2) South Tank, (3) Foothills Tanks Nos. 1 & 2, and (4) Tower Tank sites. Key modifications and/or upgrades include but are not limited to: crow's nest installation; beams, bracing, and rafter replacement; interior roof plate seal welds; staircase, catwalk, and guardrail installation; tank overflow system modifications; tank cathodic protection improvements; tank mixer & power vent system installation; interior and exterior tank coatings; storm drain and drain piping installation; and electrical, instrumentation, and SCADA upgrades.

Bickford Ranch Water Tank No. 1 and Pump Station No. 1, Placer County Water Agency (PCWA): Construction Administrator. West Yost is providing administration for construction management and inspection services on behalf of PCWA for this developer

driven, \$9 million project. The project includes water distribution, storage, and pumping equipment and facilities to serve the new Bickford Ranch housing development in Unincorporated Placer County, California. The project consists of a new pumping station with four 200 hp and two 25 hp jockey vertical turbine pumps with VFDs, controls, valves and all other related mechanical and electrical components, site piping including pump suction and discharge, site water, irrigation and drainage, an approximately 1,650 sq. ft. pump station structure, backup generator, 10,000 gallon hydropneumatic tank and air compressors, a 1.4 MG welded steel water storage tank, approximately 4,500 feet of new 18 inch ductile iron distribution pipeline, approximately 1,800 feet of new 60 inch welded steel transmission pipeline, a new 24 foot wide paved access road to Pump Station No. 1 including a new concrete box culvert for crossing the Caperton Canal, and associated side work including grading, paving, landscaping, retaining walls, equipment pads structural foundations, and retention pond.

Owner's Representative Services, Well 80, Sacramento Suburban Water District, CA: Construction Administrator. West Yost is providing Construction Management and Inspection services as part of its Owners Representative's role beginning with the first of up to four new monitoring wells and four new groundwater wells and associated pumping and treatment facilities. The projects are being constructed under a progressive design build project delivery process. As the Owner's Representative West Yost is representing the district in the contracting and management of the progressive design build team.

River Trunk Realignment – Gravity System, City of Modesto, CA: Construction Administrator for a \$22 million construction project that includes trenching, conduit and pipe placement; backfill and compaction for approximately two miles of large diameter piping.

This includes construction of concrete junction structures and requires a large public outreach effort and coordination with multiple stakeholders. The project consists of installation of approximately 1.7 miles of new 42-inch to 60-inch diameter Fiberglass Reinforced Polymer Mortar Pipe (FRPMP) sanitary sewer pipeline, small diameter sewer collection pipelines, and smaller diameter potable water distribution pipelines, and construction of associated reinforced concrete junction structure and appurtenances at depths over 30 feet below existing ground surface. Key challenges to be addressed for successful completion of this project include extensive public outreach and traffic control as approximately ¾ of the alignment is routed along residential streets, deep excavation monitoring requiring engineered shoring and strict safety protocol adherence, vibration monitoring services due to proximity of the work to residences, permit tracking, and coordination with multiple stakeholders such as the Modesto Irrigation District (MID) and various private utility companies that will be impacted by the project. Primary administrator for the Construction Management Team, and was responsible for receiving, tracking, and distributing all submittals and RFIs via CMIS document management system, as well as, preparing and issuing all Contract Change Orders (using Ebuilder document management system) and field directives. Attended progress meeting and prepared detailed agendas and minutes as well as monthly status reports for the Owner.

River Trunk Realignment – Shackleford Pump Station, City of Modesto, CA: Construction Administrator for the \$10 million construction of a 7-MGD sewage pump station, new pressure and gravity pipelines up to 36 inch diameter, and associated structures located in the City of Modesto and unincorporated Stanislaus County, CA. New facilities include a sewage pump station with three submersible screw centrifugal pumps located in a belowground cast in place concrete structure; associated pump station valves and flow meter located in a cast in place belowground concrete structure; a pump station electrical building, outdoor generator, and monorail crane; force main pipelines that operate under pressure, including ductile iron and polyvinyl chloride pipe materials, installed on a pump station site and through Dryden Park Golf Course; and sanitary sewer pipelines that flow by gravity installed on pump station site, within the public right of way and Golf Course. Responsible for submittal management (documenting, routing, tracking), RFI management, change order creation, and preparing various status reports. Attended weekly progress meetings, prepare and distributed meeting agendas and minutes.

Greenback Sewer and Lift Pump Station, City of Folsom, CA: Construction Administrator for this \$2.5 million project that includes upgrades to Pump Station No. 3 (PS3) and sewer system modifications along Greenback to improve operational flexibility. Key components included piping and sanitary sewer manhole modifications, new flow control structures, and pipeline abandonment, as well as interior changes to manholes to redirect flow from PS3 to Pump Station No. 2 (PS2). Additional work included relocating city-owned sewer mains, reconnecting private sewer connections, and site improvements around PS3 such as drainage modifications, fencing, and new bypass pumping connections. Served as the primary administrator and coordinator using Procore Construction Management Software for all project related documents, such as submittals and RFIs. Responsible for tracking all potential changes and preparing and issuing change orders and field directives and assisted with processing monthly pay applications. Attended progress meeting and prepared detailed agendas and minutes.

Ashland Water Rehabilitation Project 1, City of Folsom, CA: Construction Administrator for this \$2.3 million project consisting of the replacement of approximately 450 lineal feet (LF) of existing 20-inch ductile iron pipe (DIP) water main along Greenback Lane on the north and south sides of the Rainbow Bridge, relocation of existing and installation of new isolation valves, rehabilitation of existing blowoff and air release valves, and closed-circuit television (CCTV) inspection of the existing 21-inch and 18-inch water main on Greenback Lane to the intersection at Folsom-Auburn Boulevard, and northbound along Folsom-Auburn Boulevard to Hillswood Drive. Served as the primary administrator and coordinator using Procore Construction Management Software for all project related documents, such as submittals and RFIs. Responsible for tracking all potential changes and preparing and issuing change orders and field directives and assisted

Sanitation Lift Station SCADA Improvements, City of Garden Grove, CA: Construction Administrator for the Garden Grove Sanitation SCADA project consisting of a complete replacement of each control panel, modifications to existing power feeds, installation of new field instrumentation, and integration of signals from MCCs, ATSS, and the generator at each of the three lift station sites. Served as the primary administrator and coordinator using Procore Construction Management Software for all project related documents, such as submittals and RFIs. Responsible for tracking all potential changes and preparing and issuing change orders and field directives and assisted with processing monthly pay applications. Attended progress meeting and prepared detailed agendas and minutes.



Benjamin D. Crawford, PE, GE

Principal

Ben Crawford is the Founder and President of Crawford & Associates, Inc. He has managed complex projects including bridges, roadways, pavement rehabilitation, water and wastewater, parks, and trails. Ben leads the Crawford team in providing geotechnical construction observation and testing services. He oversees testing and inspection including soil backfill compaction testing; aggregate base compaction testing; asphalt concrete observation and testing; and concrete special inspection, sampling and testing.

EDUCATION

B.S. Civil Engineering,
California Polytechnic
State University, San Luis
Obispo, 2002

REGISTRATIONS

Civil Engineer, CA #68457
Geotechnical Engineer,
CA #2861

ORGANIZATIONS

- Geoprofessional
Business Association
- American Public Works
Association
- Modesto Engineers Club
- American Council of
Engineering Companies
- County Engineers
Association of California

EXPERIENCE

At Crawford: 11 years
Total: 21 years

AVAILABILITY

35%

REPRESENTATIVE PROJECTS

River Trunk Realignment: Beard Brook Siphon and Cannery Segregation, Modesto, CA

Principal Geotechnical Engineer. Prepared a Draft Geotechnical Study to upgrade and improve the River Trunk, Beard Brook Siphon, and Cannery Segregation Diversion Structures. Improvements include rehabilitation of the existing Sutter Trunk; replacement of the existing River Trunk with force main and gravity systems; installation of a pump station; replacement of the existing Beard Brook Siphon with a new gravity sewer beneath Dry Creek; reroute Shackelford Siphon to the new River Trunk gravity sewer; and utilization of the existing River Trunk facilities for future Cannery Segregation Line capacity needs. Design issues include deep excavation, dewatering, horizontal directional drilling, and liquefaction mitigation.

River Trunk Pipeline Rehabilitation at Gallo Winery, Modesto, CA

As Principal Geotechnical Engineer, Ben oversaw the preparation of a Geotechnical Report for the River Trunk Pipeline Rehabilitation project located within the Gallo Winery property in Modesto, CA. The City of Modesto recently experienced a failure along the River Trunk Pipeline within the Gallo property. The failure occurred near the roof of the pipe due to fatigue and was likely not caused by a lack of soil support. Through this area the River Trunk Pipeline consists of a 45 to 60 inch diameter reinforced concrete pipe (RCP) approximately 10 feet below existing grade. Improvements to the pipeline will include slip lining the existing pipeline. Crawford analyzed subsurface and surface conditions and completed laboratory testing to provide geotechnical considerations for grading; soil excavatability and stability; scarification and compaction; and fill placement and backfill.

Modesto River Trunk Pipeline Realignment & Pump Station Project, Modesto, CA

The overall project includes about 23,000 lineal feet of 15-60" diameter pipeline, new pump station with ancillary support structures, and various manhole and vault structures. Crawford performed Cone Penetrometer Tests and exploratory test borings and installed vibrating wire piezometers during drilling to monitor groundwater conditions. Prepared a Geotechnical Report with analysis of subsurface conditions and provided pipeline, trench sidewalls, backfill material, and compaction recommendations. Foundation recommendations for the pump station and ancillary structures include Mat Foundations and Strip or Spread footings. Key geotechnical considerations include the variability in soil strata throughout the alignment and the presence of loose/soft soils within the planned pipe zone, and groundwater presence within the required deep excavations for the pump station.

Materials Testing for NVRRWP Turlock Component, Turlock, CA

Principal-In-Charge. Oversaw staff providing grading observation and compaction testing as well as periodic concrete, bolt, and welding special inspection depending on material selection of the reservoir. Crawford staff were on-site to observe the placement of the rebar cages and concrete for CIDH piles. Reviewed daily field reports.

Materials Testing Industrial Tank No. 13 and Pump Station, Modesto, CA

Principal-In-Charge. Oversaw staff provide the required grading observation and compaction testing, and periodic concrete, masonry, steel, and welding special inspection. Crawford staff also performed laboratory testing on sampled materials, and prepared and provided daily field reports with findings, descriptions of the daily events, test results, and provided Geotechnical consulting services during construction.



NACE No. 106

NACE Certified Level 3

(45 years of industry experience)



Professional Affiliations



Ed F. Darrimon
President/CEO

Ed formed B.A.C.C. in 1987 and has 45 years of experience in the Coatings & Linings Field. Ed has completed thousands of projects in the past 45 years.

Ed administers the daily operations and provides high performance technical coating and lining specifications, failure analysis, surveys, and technical consulting in the water and wastewater industry.

Ed Darrimon started his career (1976) with East Bay Municipal Utility District for eleven years in the Engineering & Maintenance Departments as supervising coating specialist. Mr. Darrimon designed and developed the District's physical coating and lining testing lab for accelerated testing and the Districts Rehabilitation program of 170 reservoirs, water treatment plants, and two hydroelectric plants including penstocks.

ACCOMPLISHMENTS

STEEL STRUCTURES PAINTING COUNCIL: (S.S.P.C.)

- * National Board of Directors from 1988-92 (Pittsburg PA). Re-elected in 1992-96 to serve second four-year term.
- * National award 1989 for Outstanding Chairman award.
- * Past President and Founder of the first S.S.P.C. chapter in the U.S.A and which has won the most chapter awards since 1986.
- * Member of numerous committees, Education, Lead Removal, Urethane, Zinc, Epoxy, and Inspection.

NATIONAL ASSOCIATION OF CORROSION ENGINEERS: (N.A.C.E.)

- * Past Chairperson / Bay Area Section
- NACE Certified Level III Inspector #106

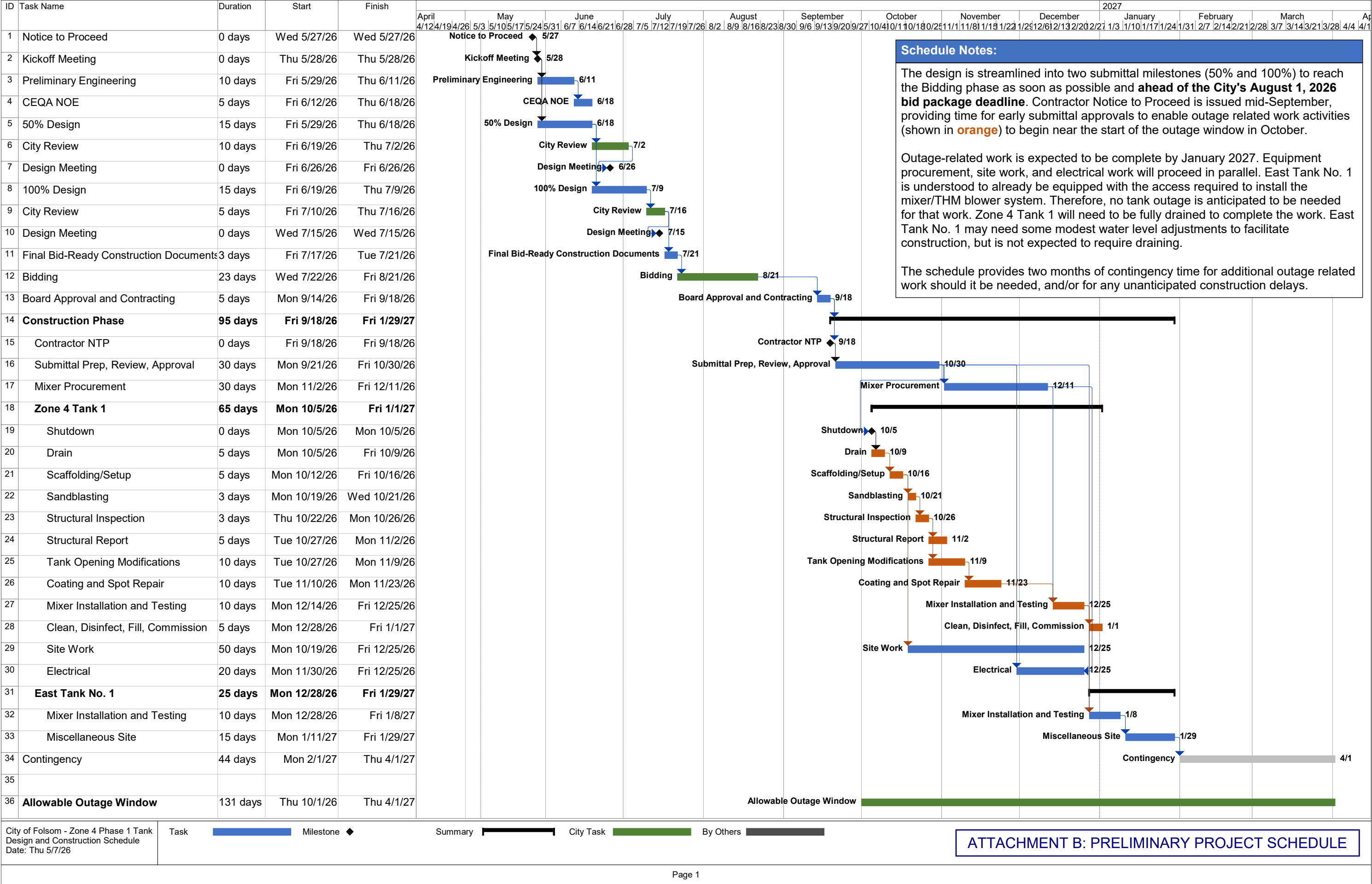
AMERICAN WATER WORKS ASSOCIATION: (A.W.W.A)

- * Committee Member National D-100, 103, 104, 106, 108, & 102 Standards Committee approval (35+ Years -present) Life Member award 2020
- * Cal/NV Corrosion Committee. * Cal/NV past Vice Chairman Maintenance Committee.

Mr. Darrimon has presented numerous talks to the following Organizations: A.W.W.A., N.A.C.E., & S.S.P.C. on the following topics: * Tank linings, 100% solids technology using epoxies and polyurethanes, Tank inspection, Specifications, Abrasive blasting, & Dehumidification use. Ed has published articles for the National Association of Corrosion Engineers on 100% solids usage, technology and performance. Published author in Material Performance on tank linings.

Past Projects:

- **Silicon Valley Water Authority-** Numerous projects over the past twenty years, including headworks, digesters, clarifiers, and contact basins.
- **SFPUC-Southeast/Oceanside WWTP.** Numerous projects over the past twenty years, including headworks, digesters, clarifiers, and contact basins.
- **Ora Loma WWTP-** Numerous projects over the twelve years, including headworks, digesters, clarifiers, and contact basins.
- **Delta Diablo WWTP** Numerous projects over the past eighteen years, including headworks, digesters, clarifiers, and contact basins.
- **Truckee Meadows Regional WWTP** Numerous projects over the past twenty-five years, including headworks, digesters, clarifiers, and contact basins.



HydroScience Engineers

Proposed Fee: City of Folsom Zone 4 Phase 1 Tank Rehabilitation Project

May 8, 2026

Task	Description	Bill Senter, PIC	Eric Jones, Project Manager	Austin Poulson, Project Engineer	Thinh Le, Electrical Lead	Electrical Support	CAD Manager	Hours	Fee	ODCs	VE Solutions - Structural	West Yost - CM&I	Bay Area Coatings Consultants - Coatings QA	Expense Subtotal with Markup	Total Fee	Phase Totals
Labor Classification		Princ	E-VI	E-II	E-IX	E-III	CADM									
Hourly Rate		\$330	\$280	\$258	\$319	\$240	\$179									
1	Project Management and Coordination															\$16,310
	Project Management		16					16	\$4,480					\$0	\$4,480	
	Project Communications		10					10	\$2,800					\$0	\$2,800	
	QA/QC	8						8	\$2,640					\$0	\$2,640	
	Design Phase Meetings		10	10	3			23	\$6,337	\$50				\$53	\$6,390	
2	Preliminary Engineering															\$8,689
	Schedule		2	6				8	\$2,108					\$0	\$2,108	
	Field Investigation		6	6	6			18	\$5,142	\$100				\$105	\$5,247	
	CEQA NOE		2	3				5	\$1,334					\$0	\$1,334	
3	Design Phase Services															\$91,816
	Water System Permit Updates		1	3				4	\$1,054					\$0	\$1,054	
	Cost Estimate		2	6	2			10	\$2,746					\$0	\$2,746	
	50% Design		35	70	18	55	16	194	\$49,666					\$0	\$49,666	
	100% Design		25	40	15	24	8	112	\$29,297					\$0	\$29,297	
	Final Design		5	20	2	4	5	36	\$9,053					\$0	\$9,053	
4	Bid Phase Services															\$10,810
	Inquiries and Addenda (up to 3)		3	6	2	4		15	\$3,986					\$0	\$3,986	
	Attend Pre-Bid Meeting		4	4				8	\$2,152	\$50				\$53	\$2,205	
	Conformed Set (up to 3 plan updates)		3	6	1	2	8	20	\$4,619					\$0	\$4,619	
5	Construction Phase Services															\$123,238
	Structural Evaluation and Report							0	\$0		\$14,500			\$15,225	\$15,225	
	Meetings (3 In person, 13 virtual)		14	18	4			36	\$9,840					\$0	\$9,840	
	Submittals (40 plus 20 resubmittals)		24	100	18	26		168	\$44,502					\$0	\$44,502	
	RFIs (20 total) and General Proj Coord	8	40	30	8	16		102	\$27,972					\$0	\$27,972	
	Design Modifications (3 total)		6	12	2	6	4	30	\$7,570					\$0	\$7,570	
	Project Coordination (3 PCOs reviews)		3	6	3			12	\$3,345					\$0	\$3,345	
	Site Visits (up to 3)		3	6	3			12	\$3,345	\$100				\$105	\$3,450	
	Startup and Testing Support		4		2	10		16	\$4,158					\$0	\$4,158	
	Punchlist		4		4	4		12	\$3,356					\$0	\$3,356	
	Record Drawings		3	6			8	17	\$3,820					\$0	\$3,820	
6	Construction Management and Inspection															\$223,179
	CM&I Services							0	\$0			\$197,071		\$206,925	\$206,925	
	Coatings Inspection							0	\$0				\$15,480	\$16,254	\$16,254	
TOTAL BASE FEE		16	225	358	93	151	49	892	\$235,322	\$300	\$14,500	\$197,071	\$15,480	\$238,719	\$474,041	

Notes:

1. See next page for CM&I fee detail.

Task 6 Fee Detail for West Yost Associates

West Yost Associates	CM IV \$318	RI_G2 \$247 Jason B./ Jesse S.	CM I \$222 Amy R.	PE/PS/PG II \$355 Jim M.	Labor		CFD	Costs			
					Hours	Fee		Sub. w/ markup 10%	Other Direct	Total Costs	
PROJECT: City of Folsom Zone 4 Phase 1 Tank Rehabilitation Project - CM&I Services											
Task 1	Preconstruction Phase (9/1/26 through 10/15/26)										
1.01	Preconstruction Conference	2	2	4		8	\$ 2,018				\$ 2,018
1.02	Project Setup & Review	2	4	4		10	\$ 2,512				\$ 2,512
1.03	Preconstruction Photographic & Video Documentation		4			4	\$ 988				\$ 988
Subtotal, Task 1 (hours)		4	10	8	0	22					
Subtotal, Task 1 (\$)		\$ 1,272	\$ 2,470	\$ 1,776			\$ 5,518				\$ 5,518
Task 2	Construction Phase										
2.01	Construction Coordination	96				96	\$ 30,528				\$ 30,528
2.02	Conduct Weekly Construction Meetings	24		32		56	\$ 14,736				\$ 14,736
2.03	Change Order, Changes, and Claims Management	8				8	\$ 2,544				\$ 2,544
2.04	Progress Payments	8				8	\$ 2,544				\$ 2,544
2.05	RFI & Submittal Management			45		45	\$ 9,990				\$ 9,990
2.06	Construction Observation/Inspection Services		420			420	\$ 103,740				\$ 103,740
2.07	Health & Safety Awareness		2			2	\$ 494				\$ 494
2.08	Material Sampling and Testing					0		\$ 5,000	\$ 5,500		\$ 5,500
2.09	Labor Compliance			28		28	\$ 6,216				\$ 6,216
2.10	SWPPP Compliance		4			4	\$ 988				\$ 988
2.11	Project Closeout (Punch List, Final Inspections, and Startup/Testing)	2	4	4	2	12	\$ 3,222				\$ 3,222
Subtotal, Task 2 (hours)		138	430	109	2	679					
Subtotal, Task 2 (\$)		\$ 43,884	\$ 106,210	\$ 24,198	\$ 710		\$ 175,002		\$ 5,500		\$ 180,502
Task 3	ODCs										
3.01	Vehicle Usage					0				\$ 8,138	\$ 8,138
3.02	Annual Rate Increase (Assume 5%)					0				\$ 2,914	\$ 2,914
Subtotal, Task 3 (hours)		0	0	0	0	0					
Subtotal, Task 3 (\$)										\$ 11,051	\$ 11,051
TOTAL (hours)		142	440	117	2	701					
TOTAL (\$)		\$ 45,156	\$ 108,680	\$ 25,974	\$ 710		\$ 180,520	\$ 5,000	\$ 5,500	\$ 11,051	\$ 197,071

Est. Level of Effort % (TOTAL HRS/Max HRS)

22%

69%

18%

0%

