Agreement for Professional Services
Mission Springs Water District
66575 Second Street
Desert Hot Springs, CA 92240
Telephone (760) 329-6448 - FAX (760) 329-2482

For your protection, make sure that you read and understand all provisions before signing. The terms on Pages 2 - 6 are incorporated in this document and will constitute a part of the agreement between the parties when signed.

TO: **TKE Engineering, Inc.**
2305 Chicago Ave.
Riverside, CA 92507

DATE: April 22, 2021

TITLE: **Engineering Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project**

The undersigned Consultant agrees to furnish the following:

All Work/Services per the attached Exhibit A – Proposal, Exhibit B – Cost Proposal provided by TKE Engineering, Inc., and per Exhibit C – Term, Early Termination & Notice

Contract price $: Not to Exceed $101,200.00

Term: One hundred sixty (160) days from the effective Agreement DATE above

Instructions: Sign and return the originals. Upon acceptance by Mission Springs Water District, a copy will be signed by its authorized representative(s) and promptly returned to you. Insert the names of your authorized representative(s) below.

Accepted:

Mission Springs Water District

By: _____
Arden Wallum

Title General Manager

Other authorized representative(s):

Luiz Santos
Associate Engineer

Danny Friend
Director of Engineering and Operations

Consultant:

TKE Engineering, Inc.
(Business Name)

By: _____
Steve Ledbetter

Title Vice President

Other authorized representative(s):

Terry Renner
Senior Vice President

Michael Thornton
President

Consultant agrees with the Mission Springs Water District that:

a. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, Consultant will immediately defend, indemnify and hold harmless Mission Springs Water District, its directors, officers, employees, and authorized volunteers from all claims and demands of all persons that arise out of, pertain to, or relate to the Consultant's negligence, recklessness, or willful misconduct in the performance (or actual or alleged non-performance) of the work under this agreement. Consultant shall defend itself against any and all liabilities, claims, losses, damages, and costs arising out of or alleged to arise out of Consultant's performance or non-performance of the work hereunder, and shall not tender such claims to Mission Springs Water District nor to its directors, officers, employees, or authorized volunteers, for defense or indemnity.

b. Other than in the performance of professional services, to the fullest extent permitted by law, Consultant will immediately defend, indemnify and hold harmless Mission Springs Water District, its directors, officers, employees and authorized volunteers from all claims and demands of all persons arising out the performance of the work or furnishing of materials; including but not limited to, claims by the Consultant or Consultant's employees for damages to persons or property except for the sole negligence or willful misconduct or active negligence of Mission Springs Water District, its directors, officers, employees, or authorized volunteers.

c. By his/her signature hereunder, Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and that Consultant will comply with such provisions before commencing the performance of the professional services under this agreement. Consultant and sub-consultants will keep workers' compensation insurance for their employees in effect during all work covered by this agreement.

d. Consultant will file with Mission Springs Water District, before beginning professional services, a certificate of insurance satisfactory to Mission Springs Water District evidencing professional liability coverage of not less than $1,000,000 per claim and $2,000,000 annual aggregate, that coverage shall not be cancelled except with notice to Mission Springs Water District. Coverage is to be placed with a carrier with an A.M. Best rating of no less than A-:VII, or equivalent, or as otherwise approved by Mission Springs Water District. The retroactive date (if any) is to be no later than the effective date of this agreement. Consultant shall maintain such coverage continuously for a period of at least five (5) years after the completion of the contract work. Consultant shall purchase a five-year extended reporting period i) if the retroactive date is advanced past the effective date of this Agreement; ii) if the policy is canceled or not renewed; or iii) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement. In the event that the Consultant employs other consultants (sub-consultants) as part of the work covered by this agreement, it shall be the Consultant's responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above.

e. Consultant will file with Mission Springs Water District, before beginning professional services, certificates of insurance (Acord Form 25 or equivalent) satisfactory to Mission Springs Water District evidencing

Coverage – Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

1. Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001)

2. Insurance Services Office (ISO) Business Auto Coverage (Form CA 0001), covering Symbol 1 (any auto)

Limit – The consultant shall maintain limits no less than the following

1. General liability - coverage of not less than two million ($2,000,000) per occurrence or the full per occurrence limits of the policies available, whichever is greater for bodily injury, personal injury and property damage; ($4,000,000 general and products-completed operations aggregate (if used)).

2. Auto liability - One million dollars $1,000,000 for bodily injury and property damage each accident limit.

3. Workers' compensation (statutory limits) and employer's liability ($1,000,000) (if applicable).

Required Provisions –

- The general liability coverage shall give Mission Springs Water District, its directors, officers, employees (collectively the District), and authorized volunteers insured status (via ISO endorsement at least as broad as CG 2010 1185 or **both** CG 20 10 plus CG 20 37 if a later editions is used) specifically naming the Mission Springs Water District, its directors, officers, employees, or authorized volunteers; or using the language that states "as required by written contract."

- The general liability coverage is to state or be endorsed (with as broad as ISO endorsement CG 20 01 04 13) to state "such insurance shall be primary and any insurance, self-insurance or other coverage maintained by Mission Springs Water District, its directors, officers, employees, or authorized volunteers shall not contribute to it".

- Coverage is to be placed with a carrier with an A.M. Best rating of no less than A-:VII, or equivalent, or as otherwise approved by Mission Springs Water District.

- The coverage shall contain no special limitations on the scope of protection afforded to Mission Springs Water District, its directors, officers, employees, or authorized volunteers.

- In the event that the Consultant employs other consultants (sub-consultants) as part of the work covered by this agreement, it shall be the Consultant's responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above.

f. If any of the required coverages expire during the term of this agreement, the Consultant shall deliver the renewal certificate(s) to Mission Springs Water District at least ten (10) days prior to the expiration date.

g. Consultant shall not accept direction or orders from any person other than the General Manager or the person(s) whose name(s) is (are) inserted on Page 1 as "other Authorized Representative(s)."

h. Payment, unless otherwise specified on Page 1, is to be within thirty (30) days after acceptance by Mission Springs Water District.

i. Professional permits required by governmental authorities will be obtained at Consultant's expense, and Consultant will comply with applicable local, state and federal regulations and statutes including but not limited to Cal/OSHA requirements.

j. Any change in the scope of the professional services to be done, method of performance, nature of materials or price thereof, or to any other matter materially affecting the performance or nature of the professional services will not be paid for or accepted unless such change, addition or deletion is approved in advance, in writing by a supplemental agreement executed by Mission Springs Water District. Consultant's "Authorized Representative(s)" has (have) the authority to execute such written change for Consultant.

k. Unless otherwise agreed upon in writing, all reports, documents, or other written material, including any documents, images, photographs, video files, or other media created or developed by Consultant as part of the services required hereunder ("Written Products") shall be considered to be "works made for hire", and all Written Products and any and all intellectual property rights arising from their creation, including, but not limited to, all copyrights and all other proprietary rights, shall be and remain the property of Mission Springs Water District without restriction or limitation upon their use, duplication or dissemination by Mission Springs Water District, except as otherwise provided herein. Consultant shall not obtain or attempt to obtain copyright protection as to any of the Written Products.

l. Consultant hereby assigns to Mission Springs Water District all ownership and any and all intellectual property rights to the Written Products that are not otherwise vested in Mission Springs Water District pursuant to section above.

m. Consultant shall not disclose, publish, or authorize others to disclose or publish, design data, drawings, specifications, reports, or other information pertaining to the projects assigned to the Consultant by the Mission Springs Water District or other information to which the Consultant has had access during the term of this Agreement without the prior written approval of an Authorized Representative during the term of this Agreement. Consultant's covenant under this section shall survive the termination of this Agreement

n. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by the Mission Springs Water District or the Authorized Representative. The Consultant shall maintain adequate records on services provided in sufficient detail to permit an evaluation of service. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. At all times during regular business hours, Consultant shall provide access to such books and records to the Authorized Representative or his or her designees, and shall give the Authorized Representative or his or her designees the right to examine and audit such books and records and to make transcripts as necessary, and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement.

o. This Agreement is personal to the Consultant. Any attempt to assign or subcontract any right or obligation hereunder by the Consultant shall be void unless approved in writing in advance by the Authorized Representative. Consultant's services pursuant to this Agreement shall be provided by the representative or directly under the supervision of the representative and Consultant shall not assign another to supervise the Consultant's performance of this Agreement without the prior written approval of the Mission Springs Water District, by and through the Authorized Representative

p. Consultant shall not maintain, commit, or permit the maintenance or commission of any nuisance in connection with the performance of services under this Agreement

q. Consultant agrees to be familiar with and comply with all applicable federal, state, and local conflict of Interest laws, including, but not limited to, the Political Reform Act (California Government Code Sections 81000, et seq.) and California Government Code Section 1090. During the term of this Agreement, Consultant shall retain the right to perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the prior written approval of the Authorized Representative, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute.

r. A waiver by the Mission Springs Water District of any breach of any term, covenant, or condition contained in this Agreement shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained in this Agreement whether of the same or different character.

s. The Consultant shall commence, carry on, and complete all required tasks with all practicable dispatch, in a sound, economical, and efficient manner in accordance with all applicable laws and generally accepted industry standards.

t. No Third Party Beneficiaries. The Mission Springs Water District shall not be obligated or liable under this Agreement to any party other than the Consultant.

u. In no event shall the making by the Mission Springs Water District of any payment to the Consultant constitute or be construed as a waiver by the Mission Springs Water District of any breach of covenant, or any default which may then exist, on the part of the Consultant, and the making of any such payment by the Mission Springs Water District while any such breach or default shall exist shall in no way impair or prejudice any right or remedy available to the Mission Springs Water District with regard to such breach or default.

v. If any legal action is necessary to enforce any provision of this Agreement or for damages by reason of an alleged breach of any provisions of this Agreement, the prevailing Party shall be entitled to receive from the losing Party all costs and expenses in such amount as the courts may determine to be reasonable. In awarding the cost of litigation, the court shall not be bound by any court fee schedule, but shall, if it is in the interest of justice to do so, award the full amount of costs, expenses, and attorneys' and experts' fees paid or incurred in good faith.

w. In the performance of the work required by this Agreement, Consultant shall abide by and conform with and to any and all applicable laws of the United States and the State of California, and with the local County and Municipal Code, ordinances, regulations and policies.

x. If any part, term, or provision of this Agreement shall be held illegal, unenforceable, or in conflict with any law of a federal, state, or local government having jurisdiction over this Agreement, the validity of the remaining portions or provisions shall not be affected by such holding.

y. The terms of this Agreement shall be interpreted according to the laws of the State of California. Should litigation occur, venue shall be the Superior Court of Riverside County, California.

z. This Agreement represents the entire Agreement between the Mission Springs Water District and Consultant with respect to the subject matter hereto and supersedes all prior oral or written negotiations, representations or agreements. No verbal agreement or implied covenant shall be held to vary the provisions of this Agreement. This Agreement shall bind and inure to the benefit of the parties to this Agreement and any subsequent successors and assigns. In the event of any inconsistency between the provisions of this Agreement and Consultant's proposal or Quote, and Exhibits hereto, the provisions of this Agreement shall control.

aa. Precedence of Exhibits. All documents referenced as exhibits in this Agreement are hereby incorporated in this Agreement. In the event of any material discrepancy between the express provisions of this Agreement and the provisions of any document incorporated herein by reference, the provisions of this Agreement shall prevail.

bb. Consultant will act hereunder as an independent contractor. This agreement shall not and is not intended to constitute Consultant as an agent, servant, or employee of the Mission Springs Water District and shall not and is not intended to create the relationship of partnership, joint venture or association between the Mission Springs Water District and Consultant.

cc. Each of the signatories herein, hereby represents that he or she has the authority to execute the Agreement on behalf of his or her contracting party.

dd. Pursuant to Section 1770, and following, of the California Labor Code, the consultant shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the office of the Owner, which copies shall be made available to any interested party on request. The consultant shall post a copy of such determination at each job site.

This project is subject to the State of California "Prevailing Wage Rates".

This project is subject to the requirements of California Labor Code Section 1720 et seq. requiring the payment of prevailing wages, the training of apprentices and compliance with other applicable requirements. In accordance with provisions of Section 1773 of the Labor Code, the Director of the Department of Industrial Relations has ascertained the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, and similar purposes applicable to the craft, classification, or type of workers employed on the work. The wage determinations shall be included in the bid specifications. All pertinent wage determinations shall be posted on the jobsite. If federal funding is included in the project, the higher of the State and Federal wage rates shall be used.

Pursuant to SB854, no contractor or subcontractor may work on a public works project unless registered with DIR for contracts awarded on/after April 1, 2015 General Contractors shall ensure all subcontractors executing work under the contract are DIR registered. All public works contractors and subcontractors to furnish Certified Payrolls and related records to the Agency’s representative and shall also furnish electronic certified payroll records directly to the Labor Commissioner using the DLSE’s online portal.

EXHIBIT A

REQUEST FOR PROPOSAL

Request for Proposal for Engineering Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project Job ID: 116696

for:

Mission Springs Water District

66575 2nd St
Desert Hot Springs, CA 92240

April 08, 2021

Prepared by:

TKE ENGINEERING, INC.

2305 Chicago Avenue
Riverside, California 92507
(9 5 1) 6 8 0 - 0 4 4 0

Cover Letter

Section A: Understanding and Approach

Section B: Scope of Services

Section C: References

Section D: Qualifications and Experience

Section E: Project Team

Section F: Schedule

Section G: Contracting

Section H: Contracting

Contact Information

Prepared for:

Mission Springs Water District
66575 2nd St
Desert Hot Springs, CA 92240
Contact: Luis Santos, Associate Engineer
Phone: (951)694-6444
E-mail: lsantos@mswd.org

Prepared by:

TKE Engineering, Inc.
2305 Chicago Avenue
Riverside, CA 92507
Contact: Steve Ledbetter, P.E., Vice President
Phone: (951) 680-0440
E-mail: sledbetter@tkeengineering.com

April 08, 2021

Luiz Santos, Associate Engineer
Mission Springs Water District
66575 Second Street
Desert Hot Springs, CA 92240

Subject: Request for Proposal for Engineering Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project Job ID: 116696

Dear Mr. Santos,

Thank you for the opportunity to present this material outlining TKE Engineering's (TKE) qualifications to provide professional engineering services to the Mission Springs Water District (MSWD). Enclosed herein are our qualifications to provide for Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project. TKE is a full service, multi-disciplinary consulting firm located at 2305 Chicago Avenue, Riverside, CA 92507. TKE was established in 2000 and over the past 21 years has developed into one of Southern California's leading consulting engineering firms. TKE is highly qualified to perform the services required for successful project design and management, expedient and cost effective project delivery and we are enthusiastic about the opportunity to assist the MSWD in bettering the infrastructure of our communities and reaching their goals of improving ground water quality programs, throughout the Coachella Valley region.

Why should the MSWD choose TKE to provide design engineering services? Please consider the following:

1. Our Team - MSWD will benefit greatly by continuing the vision, leadership, and dedication to community exhibited by TKE's project team. Our experience in the Coachella Valley region, numerous accomplishments and management skills will help maintain continuity in the delivery of wastewater system improvements. In particular, Mr. Michael Thornton, our Principal in Charge, has a vast amount of experience with all aspects of water resources within Southern California, and more specifically the Coachella Valley. Mr. Thornton's experience extends from project planning to design and bidding through construction including several MSWD water and wastewater capital projects. In addition, Mr. Steven W. Ledbetter, our Project Manager, also has a vast amount of experience with facility and pipeline design for wastewater, water, and recycled water projects, including the management of projects with special permitting requirements. Mr. Ledbetter is currently working with MSWD on the Regional Water Reclamation Program, serving as program manager. Furthermore, Mr. Ledbetter is currently working with the City of Hesperia on lift station and water booster station design project. His excellent project management skills, experience with wastewater and water facility projects and knowledge of state and local regulatory requirements will provide a great benefit to MSWD, in particular, his experience with "cutting edge" creative engineering techniques focused on cost control, ensuring that projects provide the maximum value for the public's investment. Supporting Mr. Thornton and Mr. Ledbetter will be TKE's key personnel, including Mr. Terry Renner for QA/QC, Ms. Kristine Macalma for technical design and Mr. Ron Musser for surveys. More detailed information about each member of our project team is presented in our proposal. After reading our proposal, we are sure you will be pleased with the amount of specialized experience our team brings to this project.

2. Our Experience and Qualifications - TKE is a full-service, multi-disciplinary firm capable of managing and delivering the project presented in the RFP. As described in our proposal, TKE has a vast amount of wastewater facility and pipeline design experience, having designed 72 miles of pipe over the past 21 years. We specialize in the successful completion of projects with tight budgetary and scheduling constraints. TKE's broad range of successful services includes turnkey program and project management and delivery for a diverse array of wastewater design projects, including treatment plant upgrades, lift

stations, and large and small diameter VCP and PVC wastewater pipeline projects. TKE vast experience includes every aspect of wastewater design and construction. Our proposal details common pitfalls related to wastewater projects and TKE's understanding and approach to overcome these challenges. MSWD benefits from our broad range of experience through our intimate understanding of the common pitfalls for each project variation and our past history of successfully overcoming these challenges.

3. Our Commitment - TKE is committed to assisting MSWD in achieving its goal of delivering reliable public infrastructure. To deliver public infrastructure and mitigate effluent disposal concerns, MSWD desires to partner with consultants to develop comprehensive projects, prepare cost effective designs, assist regulatory and CEQA compliance processing, comply with permitting requirements, and deliver projects within budget and on schedule. TKE is committed to completing all project tasks working closely with MSWD's project manager. TKE prepared the Preliminary Design Report for the Project within the accelerated schedule, showing commitment to providing top notch service to MSWD. The project that MSWD endeavors to complete will include challenges and requires the consultant with the 'right' experience. TKE has completed similar projects and is highly qualified to provide all of the services that MSWD will require for successful project completion.

Prior to beginning any services, TKE's Project Manager will meet to discuss project requirements and scheduling needs. Our Project Manager will be in contact with MSWD staff and all design subconsultants each week to ensure they are progressing on schedule and are within their allocated budgets. It is this personal touch and contact that define our "local service" approach. We consider ourselves community builders and take ownership of projects assigned to TKE, ensuring that our personnel will be allocated on an as needed basis in order to complete all projects on schedule.

Our broad array of services and in-house team provides MSWD a trusted consultant to turn to in any challenge, no matter how simple or complex. We pride ourselves in the management and completion of special, atypical projects and thrive on challenging budgets and deadlines. It is this commitment to service and diverse array of offerings that makes us unique and drives our long-standing relationship with our client base and it is these qualities and that make us "the right fit" for MSWD.

4. Our Value - TKE's management team and staff are fundamentally committed to creating value in each task that we perform. As such, we have created a professional culture wherein each member of our staff constantly strives for increased efficiency, ultimately allowing us to provide highly professional services at competitive rates. This culture of constant value creation and increased efficiencies ensures that the services contracted to and provided by TKE will always mean good stewardship of public resources.

Thank you for your consideration. TKE would very much appreciate the opportunity to submit a comprehensive proposal to provide sewer design services. If you have any questions, please call me at (951) 680-0440 or e-mail me at sledbetter@tkeengineering.com. Our fax number for your reference is (951)680-0490.

Sincerely,

Steven Ledbetter, P.E.
Vice President
TKE Engineering, Inc.

TKE Engineering, Inc. AT A GLANCE

Location of Office

TKE Engineering, Inc.'s only office is located at 2305 Chicago Avenue Riverside, CA 92507

Years in Business

TKE was founded in 2000 and has 21 years of experience in providing engineering support services for Municipalities.

Company Structure

TKE is a California Corporation founded in June 2000. TKE is not a subsidiary. California Business License Number: 00109901

DIR NUMBER PWCR #1000019851

Firm Owners

Michael Thornton, P.E., P.L.S., M.S. – President
Terry Renner, P.E., Q.S.D. – Senior Vice President
Steven Ledbetter, P.E. – Vice President

Size of Organization

43 Professional Engineers, Surveyors, Designers, Project and Construction Managers, Inspectors, Plan Checkers, & Support Staff

City/District Engineer

TKE serves as the City Engineer in 6 Cities/Districts in Southern California, including 2 in Riverside County

Staff Augmentation

TKE currently provides Staff Augmentation in 10 Cities / Counties / Districts

Mission Springs Water District's Contact

Steven Ledbetter, P.E., –
Vice President
Phone: (951) 680-0440
Email: sledbetter@tkeengineering.com

1. PROJECT UNDERSTANDING & APPROACH

PROJECT UNDERSTANDING

Due to degrading groundwater quality associated with septic systems, Mission Springs Water District (MSWD) has implemented its Groundwater Quality Protection Program (GQPP). The GQPP aims to construct a wastewater collection and treatment systems to mitigate the groundwater quality impacts of septic systems. The District's success with the GQPP has led to an increase in wastewater flow to the Horton Wastewater Treatment Plant (Horton WWTP). As influent flows have increased up to 2.0 million gallons per day (MGD), MSWD expanded the existing effluent disposal ponds to dispose of the secondary effluent. However, since the expansion was completed in 2018, the Horton WWTP has not benefited from the expected relief in effluent disposal capacity. In fact, MSWD has seen a decrease in percolation rates over the last couple years, leading to an additional burden on operations frequently turning the pond floors, moving water between ponds, and culminated in an overflow event recently. As such, MSWD desires to add effluent cloth filters to reduce total suspended solids (TSS) in the secondary effluent, which will result in increased infiltration rates and reduced pond maintenance.

MSWD is requesting proposals from professional engineering firms to provide professional engineering services for the design of the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction, which will provide a higher quality secondary effluent for land disposal. The Project includes instillation of one cloth filtration unit with a total average daily flow (ADF) of 2.3 MGD and no redundant backup unit. In addition, the project includes modification to the effluent pond piping, backwash piping, retaining walls and equipment pads, electrical and instrumentation, pipe backfill and trench repair, and pavement.

TKE has been working with MSWD over the past 16 years and in that time has become extremely familiar with MSWD standards, design requirements and staff. In

addition, TKE assisted MSWD with preparing the grant funding applications and program management of the Regional Wastewater Program. Further, TKE is performing sewer design for MSWD's Regional Conveyance Line in an effort to alleviate flows at the Horton WWTP and completed the design of the Horton WWTP Odor Control project. Finally, TKE completed the Horton WWTP Tertiary Effluent Filters Preliminary Design Report (PDR) that serves as the basis of design. Our history of a collaborative partnership with MSWD provides us with additional knowledge of the existing conditions and critical issues that will need to be overcome to provide a successful project.

In addition to our experience with wastewater systems design in general, TKE is currently working with MSWD on various other water and wastewater capital projects, including the Regional Water Reclamation Facility, Horton Chopper Pumps, Horton Activated Sludge Unit Demolition (design complete), Well 22 Rehabilitation and Well 42 Construction Management. Further, TKE is working with MSWD on various management and funding support efforts. TKE's partnership with MSWD in the funding development for the various capital projects, knowledge of the project area and other recently completed Horton WWTP projects, and working relationships with MSWD staff provides us with a distinct advantage to successfully completing this project.

PROJECT APPROACH

Successful project delivery is our goal. Our definition of successful project delivery is:

- Project completion that meets all project requirements
- Project completion within budget
- Project completion on schedule

Our goal is not limited to the design of the projects only, but includes the incorporation of value engineering and constructability review. Through the examination of specific design alternatives, we will identify the most cost-effective project alternative that meets design requirements and will provide for the greatest opportunity for expedited construction, which allows us to consistently deliver projects that use public resources in a very wise and responsible manner. We have developed this project approach in order to maintain an expertise in our core business of projects with tight budgetary constraints.

Our approach to the Horton WWTP Tertiary Effluent Filters, recognizing that both schedule (4 months to complete a bid ready package) and budget are of primary concern, dictates that design decisions must be made quickly but carefully. When this is coupled with the various constraints present with any project, it is critical that MSWD choose a consultant with a proven track record of delivering. With a familiar team of senior level design and construction professionals, TKE is the right choice for this project.

With wastewater facility construction projects, our experience tells us that there must be a proactive approach to completing the work. This approach includes early identification of critical design elements, experience with common challenges, and accurate cost estimating throughout the entire process. In preparing this proposal, our team spent several hours visiting the project site, reevaluating the Project's PDR, and reviewing the RFP to establish key issues so we can be prepared to mobilize on a moment's notice to assist you.

CRITICAL ISSUES

IDENTIFICATION OF CRITICAL DESIGN ELEMENTS

There are several challenging aspects to the design of this wastewater facility, including the following:

1) Existing hydraulic profile
2) Filter backwash rate and efficiency
3) Identification of all potential utility conflicts
4) System integration

Our approach to these critical issues will be to immediately initiate field review, perform very thorough records research, and document all the critical design elements so they can be presented to MSWD. This will provide a head start on instructing our survey team about

what detailed information to collect. These elements include key ground and equipment elevation information at locations necessary to ensure appropriate cover, appropriate elevations to maintain gravity flow, the location of any areas that will require special construction methods, and potholing critical underground utilities in order to ensure proper clearance and minimize relocations during construction of on-site piping improvements.

Figure 1. We thrive in creating solutions to challenging problems. The 1720 Zone West project required deep pit bore and jack construction under an active freight rail line, requiring significant permitting efforts and additional construction coordination.

EXPERIENCE WITH COMMON CHALLENGES

PIPELINE BEDDING

TKE has experience in the analysis and selection of appropriate pipe zone bedding for appropriate sewer sizes and depths. Our past project experience in MSWD's service district shows record information that the existing on-site piping ranges are four feet deep and greater. TKE is familiar with the sandy soil conditions and proper bedding methods associated with the types of soils found in MSWD service area. Our team is committed to finding the optimal and most cost efficient solution to challenges presented.

FUTURE SYSTEM INTEGRATION

One of the critical issues with adding the tertiary filters is ensuring the system can be easily converted to full tertiary treatment in the future with little to no "throw away". Our experience in wastewater system design allows us to avoid the common challenges which may occur. As shown in our PDR, TKE has prepared a basis of design to include UV and chlorine disinfection in the future, as well as adding a redundant backup filter unit. This seemingly simple design issue can cause extensive changes in the future. We know these issues and have proven methods to avoid them.

UTILITIES

For pipeline projects, construction contract change orders are primarily attributable to inaccurate plotting of utility interferences or due to unknown utilities. Comprehensive utility research together with design potholing of critical utility interferences and potholing of all interferences prior to construction by the project contractor will ensure that contract change orders will be significantly reduced or even eliminated. It is anticipated that numerous underground utilities will be encountered around the footprint of the existing Horton WWTP facilities. For larger existing facilities and project connections, TKE will identify those as critical and request that the MSWD excavate them to verify both horizontal and vertical alignments. In addition, we will request that at connections existing facilities, pipeline materials and condition be noted to properly design each connection. Again, to avoid potential change orders, detailed connection and abandonment designs will be included.

HYDRAULIC PROFILE

It's critical that the gravity hydraulic profile be maintained with the proposed improvements. In particular, the impacts of the backwash water on the hydraulic of the existing primary treatment facility need to be evaluated. In addition, to ensure efficient filter performance, its best to operate the filters continuously, without interruption, and with a fairly low variation in the hydraulic loading. Since there are no equalization basin for secondary effluent, special attention will be paid to the system hydraulics between the existing clarifiers and proposed filter. These issues have the potential to create significant impacts to the performance of the system. TKE will take special care to minimize impacts to

the system performance due to variations in the hydraulic profile.

PAVEMENT RESTORATION

One side effect of most pipeline construction projects is the need for pavement restoration. In our experience, it is common for restoration requirements to be varying among the municipal stakeholders. We are already familiar with MSWD's requirements and our design will incorporate appropriate restoration techniques into the contract documents in order to minimize costly construction changes.

PERMITTING/AGENCY COORDINATION

TKE's wide range of successful project delivery has enabled us to forge relationships with the various resource agencies necessary for complex environmental and encroachment permitting. Our prior project experience has allowed us to develop many working relationships. We have successfully acquired permits from Caltrans, Riverside and San Bernardino Counties, US Army Corps of Engineers, US Fish and Wildlife Service, California Department of Water Resources, California State Water Resources Control Board, Cal-OSHA Mining and Tunneling, Colorado Regional Water Quality Control Board, BNSF, UPRR, and SBCTA, as well as local City permits, to name a small sample. Our long-standing relationships and permitting experience, specifically with the Colorado Regional Water Control Board on both Horton and Regional WDR permitting, allows us to expedite the permitting process and provides MSWD knowledgeable experts to turn to in order to avoid future challenges.

ACCURATE COST ESTIMATING

TKE understands the limits on MSWD funding. Because of the limited budget for projects, it is vital to keep costs controlled. Our approach to controlling costs is to provide frequent and accurate cost estimates by using TKE's detailed cost estimating database. In addition to using this database, TKE utilizes our considerable experience with Construction Management to assist in providing constructability reviews and cost estimating based on current information from our on-going projects. Finally, with the current economic climate, construction costs are widely varying. We will also discuss the project's elements with local contractors to assure that we have the most current construction information available so that MSWD can get the most "bang for their buck".

PROJECT SCHEDULE

We are committed to completing MSWD's projects design in accordance with our schedule provided in the proposal. More specifically, TKE is committed to completing the project design within 4 months. TKE is available and will apply the necessary man hours to complete the projects on schedule. We will monitor design progress weekly to ensure the project is proceeding in accordance with the approved project schedule. Our proposed project schedule has been included in this proposal for review and approval.

1. SCOPE OF SERVICE

SCOPE OF WORK

Our design scope of services is presented in the following paragraphs:

TASK NO. 1 INITIAL 'KICK OFF' MEETING

Prior to commencement of services, TKE proposes to meet MSWD staff to review project obligations and to discuss all project requirements in detail. In addition, we will discuss the project's scope of services and design schedules. We will also utilize this meeting to acquire MSWD's existing utility plans.

TASK NO. 2. RECORDS RESEARCH

We will thoroughly research existing utility records and acquire copies of all available records. The purpose of the records research is to assemble survey records to establish site constraints for the proposed filter and associated improvements and determine locations of all existing utilities and improvements.

While TKE has already assembles some site records during the PDR phase, our research will consist of assembling copies of assessors' maps, tract maps, parcel maps, monument ties, benchmark data, corner records, street improvement plans, and utility drawings to build upon existing records. We will notify Underground Service Alert to acquire a complete list of underground utility purveyors. The utility drawings will include existing drawings from MSWD, including the existing site boundary survey, and drawings and/or atlas maps from all private utility companies, and/or agencies.

TASK NO. 3. SURVEYING

During the PDR phase, the District provided top of slope point for the recently expanded effluent disposal ponds. However, since the basins will need to be regraded and deepened, additional topographic survey is required. Therefore, TKE will perform site topographic survey to collect details of all on-site features needed to prepare filter and piping improvement plans, including the recently expanded effluent disposal ponds. The site survey will be tied to the existing site benchmark to ensure consistency with existing site records and tied to record survey monuments.

TASK NO. 4. BASE DRAWINGS

We will prepare the base construction drawings on 24" by 36" sheets with MSWD's standard title block using AutoCAD 2019 software at a drawing scale of 1"=20'. The base construction drawings will include a plan view based on survey data. We will add the sheet north arrow, graphic scale, existing improvements and utilities (based on both assembled records and field data), property lines, public and private right-of-way, street centerline, and street names to the plan view portion of the drawings.

Once the base drawings are complete, we will perform a careful field review to ensure all above ground and underground facilities are shown correctly. We will request that experienced MSWD staff assist us with the field review to ensure all underground facilities and treatment plant appurtenances have been identified and accurately shown. In addition, we will work with MSWD staff to identify site unknowns (e.g. effluent distribution box, electrical conduits, SCADA tie-ins, etc.).

TASK NO. 5. HYDRAULIC ANALYSIS

Following preparation of base drawings and site visit, TKE will prepare a hydraulic analysis identifying head conditions and hydraulic constraints. The analysis will evaluate backwater impacts to the clarifiers, tailwater constraints to the spreading ponds, and filter backwash water recirculated back to the headworks on the overall treatment plant hydraulics. After the hydraulic analysis is complete, TKE will forward it to MSWD for review. Upon completion of MSWD's review, TKE will meet with staff to gather comments and receive direction for design.

TASK NO. 6. 60% DESIGN

The 60% design will consist of a title sheet, construction notes sheets, demolition sheet, site plan, plan and profile sheets, and detail sheets.

The title sheets shall include the title of the job, a vicinity map showing MSWD's service area in relationship to surrounding communities, a location map showing the project limits, a list of abbreviations used, benchmark data, general notes, construction quantities, an index for the drawings, and references.

The construction notes will include requirements for notifications, existing utility protection and relocation, materials, excavation, shoring, bedding, backfilling, compaction, improvement restoration, testing, and construction sequencing.

The demolition sheet will include all required removals to complete construction (e.g. effluent piping).

The site plan will show digital topographic data, existing improvements and utilities, centerline/site control, proposed treatment plant improvements and appurtenances, spreading pond improvements, and electrical single line diagram.

The plan and profile sheets will also show the site plan details and a pipeline profile (at a drawing scale of 1"=40' horizontal and 1"=4' vertical) will show existing ground surface over the proposed sewer main or drain line, flow line, top of pipe, utility crossings, slopes, length of pipe, manholes, and special bedding requirements.

The construction details will include filter unit, clarifier, and headworks mechanical sections and details, control schematics, telemetry, and related details, etc., as required, all at appropriate drawing scales.

After 60% design is complete, we will forward electronic copies to MSWD for review and comment. Thereafter, MSWD will provide comments via email.

TASK NO. 7. ENVIRONMENTAL COORDINATION

TKE will coordinate with MSWD's environmental consultant throughout the design process. Coordination with the environmental consultant will result in a better understanding of environmental impacts associated the proposed plant improvements. These impacts will be considered when determining the environmental determination and required mitigation measures.

TASK NO. 8 PERMIT ACQUISITION

After the 60% design, TKE will begin application preparation for required permits. Applicable permits include:

- Colorado River Regional Water Quality Control Board WDR Permit Amendment

Upon completion of the applications, TKE will submit applications to appropriate agencies and track permit progress.

TASK NO. 9. 90% DESIGN

We will incorporate MSWD's 60% comments, refine the design as required, and provide the District revised drawings. In addition, TKE will prepare project specifications (Bid Sheets and Special Provisions) in accordance with MSWD standards and in Microsoft Word format. The specifications will include bid schedules with special bid instructions on MSWD's award intentions. They will also include technical specifications for the filter unit and electrical requirements. Further, we will prepare an engineer's estimate. We will use the bidding schedules to prepare the engineers estimates. The bidding schedules will include all material and construction requirements as shown on the drawings. After 90% design is complete, we will forward electronic copies to MSWD for final review and comment. Thereafter, MSWD will provide comments via email for final design.

TASK NO. 10. FINAL DESIGN

We will incorporate MSWD's 90% comments and provide MSWD with hard (mylar drawings and specifications) and digital (PDF and Word) copies of the drawings, and specifications for final approval and bidding. In addition, we will prepare a final construction cost estimate for the project.

TASK NO. 11. BIDDING ASSISTANCE

TKE will provide project pre-award services as needed including but not limited to preparation of response to RFI's during bid period, preparation of addenda as required, and attend pre-bid job walk for technical assistance. Lastly, TKE will assist MSWD with review of bid proposals in accordance with the contract documents.

1. REFRENCES

Please see the table below for a small, but representative list of agencies who have and continue to request TKE to assist them in delivering valuable projects to their communities. We respectfully request that you verify our qualifications with the references listed below.

REFERENCES			
AGENCY	CONTACT NAME	PHONE NUMBER/ EMAIL	DATES SERVICES PROVIDED (FROM/THROUGH)
MISSION SPRINGS WATER DISTRICT 66575 2ND STREET DESERT HOT SPRINGS, CA 92240	MR. ARDEN WALLUM GENERAL MANAGER	(760) 329-5169 AWALLUM@MSWD.ORG	2001 – PRESENT
SAN BERNARDINO MUNICIPAL WATER DISTRICT 1350 S E STREET SAN BERNARDINO, CA 92408	MR. TED BRUNSON, DEVELOPMENT SERVICES MANAGER	(909) 453-6165 TED.BUNSON@SBMWD.ORG	2003-PRESENT
RUBIDOUX COMMUNITY SERVICES DISTRICT 3590 RUBIDOUX BLVD. RUBIDOUX, CA 92509	MR. STEVE APPEL ASSISTANT GENERAL MANAGER	(951) 684-7580 STEVE@RCSD.ORG	2001 - PRESENT
CITY OF UPLAND 1370 N. BENSON AVENUE UPLAND, CA 91786	ROSEMARY HOERNING, CITY MANAGER	(909) 291-2931 RHOERNING@CI.UPLAND.CA.US	2000 - PRESENT
CITY OF FONTANA 16489 ORANGE WAY FONTANA, CA 92335	MR. CHUCK HAYS, DIRECTOR OF PUBLIC WORKS	(909) 350-6727 (909) 350-6755 CHAYS@FONTANA.ORG	2000 - PRESENT

1. QUALIFICATIONS AND EXPERIENCE

TKE has extensive experience with an excellent reputation in both the design of and construction support of wastewater projects. Throughout our history of our 21 years serving Southern California, we have provided design and construction support services for pipelines ranging from 300 lineal feet to 7 miles in length and various wastewater facilities. We have successfully completed complex and challenging projects for a variety of municipal agencies who have continued to request that we partner with them in delivering much needed infrastructure to their communities.

Our wastewater improvement projects have included the full services of civil engineering design, including coordination with geotechnical engineers, utility location consultants, and other consultants necessary for the completion of challenging wastewater design projects.

We are sure that the successful results of our past performance in the delivery of wastewater projects, along with our firm's proven ability to utilize our experience for a complete and well engineered project, will provide a valuable resource to MSWD.

Specific project experience is shown below which identifies a few relevant projects with similar requirements to those in the RFP.

QUALITY ASSURANCE/ QUALITY CONTROL

TKE takes pride in our reputation for thoroughness, rapid turnaround, cost efficiency and overall quality of work, and believes that a high level of quality is needed on all PS&E packages. High quality design yields the following tangible results:

- Ease of oversight
- Smoother processing
- Healthy number of bidders
- Consistent bids
- Minimized construction support cost
- Absence of design-related change orders
- Reduced claims and dispute resolution costs

TKE believes that the most successful quality assurance program is one that is applied inherently throughout the entire design process and all design activities. This program requires not only formal procedures for checking, but encourages the conscientious effort of experienced people to always "create quality" in every task performed throughout the design process.

This program has become a natural element in all aspects of TKE's design and management activities, and will guide our work on this contract:

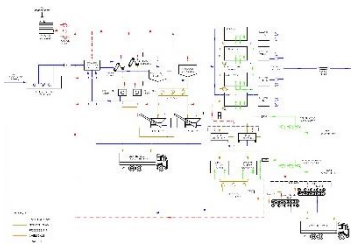
- Staff training and development
- Assignment of experienced staff
- Continuity of staffing
- Project-specific work plan
- Schedule compliance
- Comprehensive field review and compilation of site data
- Established design procedures
- Established detailing standards
- Established checking procedures, including independent in-house QA/QC review
- Dual (independent) quantity estimates
- Review by Constructability expert

This Quality Assurance/Quality Control program is in place to ensure that PS&E documents prepared by TKE continue to exceed the standards of our clients and that we will deliver the project on schedule and within budget

2. PROJECT SPECIFIC EXPERIENCE

The following projects performed by our team serve as a small sample of the success we have had with public agencies on completing projects similar to the Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project. We encourage MSWD to contact our references to confirm the level of success we have had with our other clients and can continue to have with you

The following is a brief list of projects similar in nature to the project types listed in the RFP.



Regional Water Reclamation Facility

Mission Springs Water District

Client Contact
Mr. Arden Wallum
Mission Springs Water District
760.329.5169
awallum@mswd.org

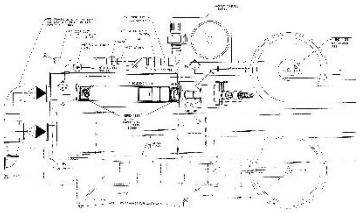
Project Cost
$49.0 Million

Completion Date
Current

Project Team
Michael P. Thornton, P.E., L.S.
Terry Renner, P.E., Q.S.D.
Steven Ledbetter, P.E.
Kristine Macalma
Ron Musser, L.S

Description: Mission Springs Water District (MSWD) retained TKE to prepare a preliminary engineering analysis that evaluated expanding an existing WWTP or building a new regional WWTP. Ultimately, MSWD selected to proceed with a new regional WWTP, the Regional Water Reclamation Facility (RWRF). Thereafter, TKE was retained to be the program manager for the for the development of the RWRF and associated projects. As program manager, TKE is responsible for coordinating the design, hydrogeological analysis, environmental compliance processing, and construction of the RWRF, a new Regional Conveyance Trunk Sewer to deliver wastewater to the new WWTP, and the M-2 Collection System to connect 695 parcels to the sewer system. In addition, TKE is in charge of grant funding and permit acquisition. The project includes coordination with the State Water Resource Control Board, Regional Water Quality Control Board, Air Quality Management District, other agencies, and other consultants.

Services: Preliminary engineering, benefit-cost analysis, project planning and scoping, Board report preparation and presentations, prepare grant funding applications and management, preparation of wastewater flow projection report, technical report and design review, prepare RFPs, environmental compliance services, prepare right-of-way acquisition documents, provided program/project management, regulatory and stakeholder meetings and presentations, perform construction management and inspection.



Horton Wastewater Treatment Plant Odor Control

Mission Springs Water District

Client Contact
Mr. Arden Wallum
Mission Springs Water District
760.329.5169
awallum@mswd.org

Project Cost
$395,000

Completion Date
Current

Project Team
Michael P. Thornton, P.E., L.S..
Steven Ledbetter, P.E.
Kristine Macalma
Brad Enscoe

Description: TKE prepared updates to plans, specifications, and estimates for the construction of an odor control system for the District's existing Horton Wastewater Treatment Plant. The proposed vapor phase odor control system will service the influent pump station and headworks facilities. The project will significantly reduce odor emissions to neighboring residential developments. The project includes coordination with the Regional Water Quality Control Board, Air Quality Management District, other agencies, vendors, and consultants.

Services: Services include records research, coordination with agencies, vendors, and consultants, design, cost estimating, technical and benefit cost analysis, regulatory agency coordination, permitting, bidding, construction management, construction staking, and inspection.

Horton Wastewater Treatment Plant Tertiary Filtration System

Mission Springs Water District

Client Contact
Mr. Arden Wallum
Mission Springs Water District
760.329.5169
awallum@mswd.org

Project Cost
$1,524,000

Completion Date
Current

Project Team
Michael P. Thornton, P.E., L.S.
Steven Ledbetter, P.E.
Kristine Macalma

Description: TKE is preparing a Preliminary Design Report to determine the feasibility and cost effectiveness to alleviate existing and future secondary effluent disposal deficiencies at the Horton Wastewater Treatment Plant. To address the issues at hand, the level of treatment will be limited to the installation of tertiary filters to reduce suspended solids prior to disposal. In addition, TKE evaluated the ability to use the proposed tertiary filters along with disinfection facilities to meet Title 22 recycled water standards in the future.

Services: Services include records research, coordination with MSWD and vendors, identification of appropriate design parameters (flows and mass loading), assessment of existing disposal deficiencies of the Plant secondary effluent, development of alternatives for the tertiary treatment facilities for interim and ultimate conditions, hydraulic analysis, cost estimating, technical and benefit cost analysis.

Jurupa Hills Lift Station

Jurupa Valley, CA

Client Contact
Mr. Steven Appel
Rubidoux Community Services District
951.684.7580
Project Cost
$450,000
Completion Date
December 2019
Project Team
Michael P. Thornton, P.E., L.S.
Terry Renner, P.E., Q.S.D.
Kristine Macalma
Ron Musser, L.S
Stephen Biscotti – Public Works Inspector

Description: This project consists of the replacement of an existing 300 gpm lift station, site demolition and abandonments, electrical and backup power tie-ins, and easement document preparation at the Jurupa Hills Country Club Golf Course. TKE is developing plans, specifications and estimates for installation of submersible pump on rail system with soft start features to reduce electrical power consumption and maximize pump efficiency.

Services: Services include Preliminary Engineering, Opinion of Probable Cost, Planning System Alternatives, Sewer Hydraulic Modeling Analysis, Design, Topographic Surveying, Preparation of Plans, Specifications, and Estimates, Construction Management, Inspection and Construction Staking.

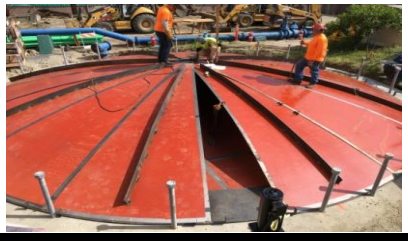
San Bernardino Avenue Treatment Plant Sewer Improvement

City of Fontana, CA

Client Contact
Ms. Liza Munoz, P.E.,
Senior Engineer
Inland Empire Utilities Agency
(909) 993-1522
lmunoz@ieua.org
Project Cost
$0.6 Million
Completion Date
May 2016
Project Team
Michael P. Thornton, P.E., L.S.
Terry Renner, P.E., Q.S.D.
Steven Ledbetter, P.E.
Ron Musser, L.S

Description: The San Bernardino Avenue Treatment Plant Sewer is located in the City of Fontana north of Interstate 10 between Commerce Drive and Mulberry Avenue. The project included approximately 1,100 linear feet of 18-inch vitrified clay sewer pipe, including four sewer diversion manholes, a channel crossing and connection to the existing lift station. The facility construction is required to abandon a privatized treatment plant and divert flows to the San Bernardino Avenue Lift Station which will convey flows to IEUA's Regional Plant No. 4. The project will include connection to the existing lift station wet well and will require the lift station to modify the high water level.

Services: Services include project management, conventional topographic surveying, records research, preliminary engineering design, potholing coordination, hydraulic modeling, permitting, coordination with agencies, bidding services, and construction assistance.



0.5 MG Reservoir and Manganese Treatment Plant

Huntington Park, CA

Client Contact
Mr. Sergio Palos
Maywood Mutual Water Company No. 1
(323) 791-1043

Project Cost
$4.3 Million

Completion Date
August 2016

Project Team
Michael P. Thornton, P.E., L.S.
Terry Renner, P.E., Q.S.D.
Steven Ledbetter, P.E.
Ron Musser, L.S.

Description: The 0.5 MG Reservoir and Manganese Treatment Plant is located in the City of Huntington Park at the corporate yard of Maywood Mutual Water Company No. 1. The project consists of the demolition and reconstruction of a 35-foot wide by 70-foot tall steel reservoir and the installation of a 1,500 gpm manganese filtration plant. The project includes site improvements and 45-feet deep caissons for structural foundation supports.

Services: Services include records research, conventional topographic surveying, permitting, coordination with agencies, preliminary design, cost estimating, preparation of construction plans and specifications, bidding services, SRF grant management, construction administration, construction inspection, construction staking, and as-built verification.

1. PROJECT TEAM

PROJECT TEAM

TKE fully recognizes MSWD's concern for high quality, timely performance, and precise communication when utilizing the services of a consultant. Each project conducted by TKE is managed and staffed by a project team assembled to meet the specific needs of the project. TKE has assembled a highly qualified and experienced project team, which we believe will best serve your needs and is capable of meeting the milestones set forth in the RFP. Resumes of each team member can be found below.

Michael P. Thornton, P.E., L.S., M.S. – Principal in Charge

Education:

Bachelor of Science - California State Polytechnic University, Pomona, Civil Engineering

Masters of Science – California State University, Long Beach, Civil Engineering

Experience:

35 Years

Credentials:

California Professional Civil Engineer #44226

California Professional Land Surveyor #6867

Mr. Thornton is TKE's President and will be serving in the role as principal in charge for the project. He has over 35 years of experience in engineering planning, design, land surveying and construction management for public works projects. He has worked on a variety of public works engineering projects including wastewater systems, water systems, street improvements, park improvements, bike trail improvements, drainage improvements, and reclaimed water system improvements projects. Mr. Thornton has been responsible for management of hundreds of miles of wastewater pipeline improvements including funding administration, planning, evaluating, and has provided design engineering and surveying services for many of these same projects.

Steven W. Ledbetter, P.E. – Project Manager

Education:

Bachelor of Science - California State Polytechnic University, Pomona, Civil Engineering

Experience:

19 Years

Credentials:

California Professional Civil Engineer #84044

PM-10 Certified

Mr. Ledbetter has over 19 years of professional experience in the civil engineering industry and will provide quality assurance on the project. He has handled various critical and challenging projects from planning through design and implementation; all while ensuring that projects are executed as per specification in the stipulated time with quality. He has a well-rounded background with experience in: preparation and analysis of street and utility improvement plans and specifications including potable and non-potable water, wastewater, and drainage; utility master planning including computer modeling, analysis, and report preparation; waste water and water supply planning including feasibility studies, urban water management plans, water supply assessments and verifications; storm water compliance reporting including water quality management plans and storm water pollution prevention plans, permitting and grant writing for various State and Federal agencies.

Terry M. Renner, P.E., Q.S.D. – QA/QC Manager

Education

Bachelor of Science – California State Polytechnic University, Pomona, Civil Engineering

Experience

20 Years

Years with Firm

20 Years

Credentials

California Professional Civil Engineer #69984

California Qualified SWPPP Developer #24329

Arizona Professional Civil Engineer #55194

Mr. Renner, is the Vice President of TKE and the Project Manager. He has over 21 years' experience in civil engineering infrastructure projects, including water and sewer improvements, transportation improvements, drainage improvements, facilities improvements and recreation improvements. He has managed numerous projects and has delivered projects for the water departments of MSWD, RCSD, and SBMWD, the Counties of Riverside and San Bernardino as well as the cities of Fontana, Rialto, Upland, Riverside, Redlands, El Monte, Moreno Valley, Colton and Corona. As a project manager, Mr. Renner has been responsible for survey and design production, supervising a staff of surveyors, engineers and drafters, coordinating work between the production team and the client, and for submitting all deliverables in a timely manner. He has successfully delivered a wide variety of complex and challenging projects and is dedicated to ensuring that the plans produced by TKE continue to exceed industry standards.

Kristine Macalma – Project Engineer

Education:
BS, Civil Engineering, California State Polytechnic University, Pomona
Experience:
5 Years
Years with Firm
5 Years

Ms. Macalma is an Project Engineer at TKE and has 5 years of experience in assisting in engineering drafting, design, and assistant construction management. Her experience includes transportation improvements, street improvements, utility research, grading plans, construction management assistance, grant preparation, preliminary and final design drawings, specifications and engineer's cost estimates, and water and wastewater facilities including pipelines and water storage reservoirs. Ms. Macalma has been an integral part of projects successfully completed for the Mission Springs Water District, City of Calimesa, City of Highland, City of Yucaipa, City of Hesperia, City of Adelanto, City of Fontana, City of Upland, and City of Wildomar.

Ronald A. Musser, P.L.S. – Senior Surveyor

Education:
Riverside Community College
Experience:
53 Years
Years with Firm:
16 Years
Credentials:
California Professional Land Surveyor #4230

Mr. Musser has over 53 years of experience in performing field and office surveying services for public and private projects include ding roadway and highway projects. Prior to joining TKE Engineering, Inc., Mr. Musser worked as a Partner in an engineering and surveying firm and supervised the mapping department providing mapping and calculations support for the firm's projects. He has prepared records of survey, parcel maps and tract maps in Riverside County, San Bernardino County, San Diego County, Orange County and Los Angeles County. He has performed boundary, topographic, ALTA, and precise level surveys as well as Global Positioning Surveys.

LABOR RESOURCES

a) RESOURCES

TKE has strived to develop techniques that reach outside the box and develop well rounded individuals committed to providing high quality, efficient services to meet all of our clients' needs. TKE trains our staff on every facet of engineering design and construction to provide a level of knowledge that can identify problems in every phase of a construction project prior to being constructed. It is this commitment to service and diverse array of offerings that makes us unique and drives our long-standing relationships with our client base. Understanding that all aspects of design and construction are important and time sensitive to ensure MSWD's interests are protected, our team brings TKE management level professionals to projects ensuring that every aspect receives full, timely and comprehensive consideration. It is this personal touch and contact that define our 'local service' approach. We consider ourselves community builders and take ownership of services requested from TKE,

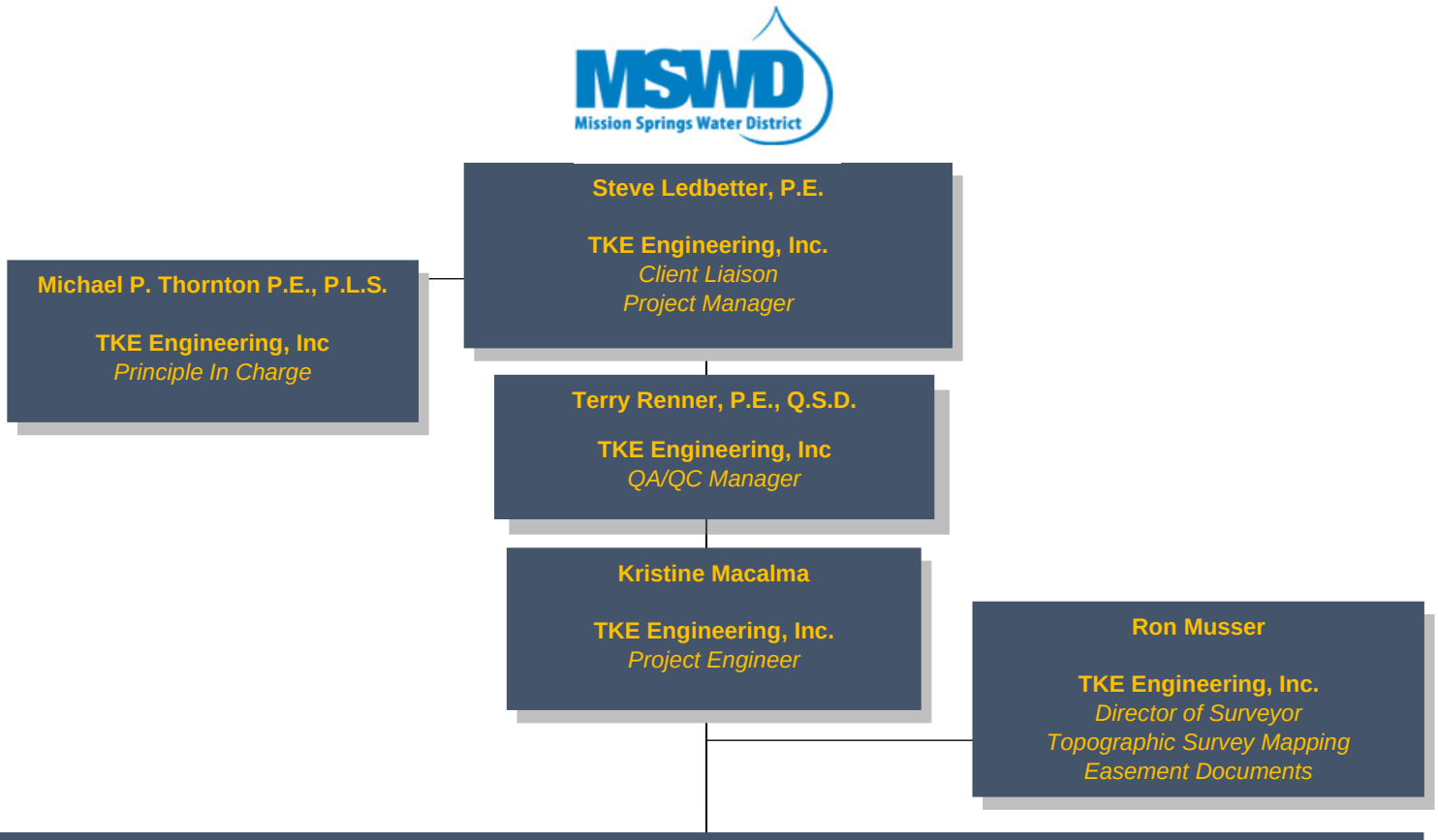
ensuring that our personnel will be allocated on an as needed basis in order to complete all services on schedule and within specified budget. TKE is committed to responding to our clients' needs as they arise.

TKE is aware of MSWD's need to complete projects on schedule. We are committed to providing services as requested in the RFP to ensure all projects are completed on schedule. TKE's proactive management approach ensures we rarely experience 'crisis' project delivery needs. When requested by a client, TKE will add resources, commit extended work hours, develop an efficient implementation plan and other efforts as needed. Our office location in Riverside will permit TKE staff to respond to requested meetings and field inspections at a moment's notice.

b) WORKLOAD

TKE currently provides similar services to other clients; as can be verified by our references, TKE effectively meets the needs of our clients. If selected, TKE is committed to meeting all of MSWD's needs. TKE's local service approach ensures that MSWD's needs will be met and TKE will constantly exceed MSWD's expectations. TKE maintains state of the art conferencing and communications equipment. We are fully capable of hosting multi-participant meetings including video conferencing. TKE, with its current clients, already utilizes similar tools including clients' ability to view host computer screens for document development and review.

2. ORGANIZATIONAL CHART



TKE Engineering, Inc. Support Staff

Jennifer Cioffi, P.E. – *Project Manager*
David Kinzle – *Project Manager*
Octavio Parada – *Project Manager*
Dennis Donahue, P.E., P.L.S., Q.S.D. – *Senior PC Engineer*
Steve Nix, P.E., P.L.S. – *Senior Engineer*
Bob Doss, P.E. - *Resident Engineer*
Monae Pugh – *Traffic Engineering Specialist*
Mycal Balta – *Survey*
Marvin Lara, EIT – *Associate Engineer*
Alex Estepa– *Associate Engineer*
Yesenia Diaz – *Associate Engineer*
Jose Hernandez – *Associate Engineer*
Metehan Gumustekin - *Associate Engineer*
Jayden Renner – *Engineering Technician*
Daniel Melero - *Engineering Technician*
Candice Velasco – *Marketing Manager*
Diana Rodriguez – *Clerical*
Deana Vilches – *Clerical*
Cassondra Gutierrez – *Clerical*
Robert Doss, P.E.,P.L.S. - *Construction Manage*
Kathleen Robles –*Project Manager*
Michelle Arellano, P.E. – *Senior Plan Check Engineer*
Brian Wolfe, P.E. – *Senior Engineer*
Steve Dukett – *Managing Director Development Services*
Gabor Pakozdi, P.E., Q.S.D. - *Project Manager*
Patrick Palafox - *Senior Public Works Inspector*
Brad Enscoe - *Senior Public Works Inspector*
Stephen Biscotti - *Senior Public Works Inspector*
Jeff Lantosh - *Senior Public Works Inspector*
Brett Enscoe – *Survey*
Shelby Kelley, EIT – *Associate Engineer*
Jose Martinez – *Associate Engineer*
Chance Renner – *Assistant Engineer*
Nyesha Burnatte – *Engineering Technician*
Marcus Zofrea – *Engineering Technician*
Michelle Sells – *Accounting/Office Manager*
Tracey McLoughlin – *Clerical*
Allison Cordova – *Clerical*

MICHAEL THORNTON, P.E., P.L.S., M.S.

TKE Engineering, Inc.

EDUCATION

MS, Civil Engineering, California State University, Long Beach

BS, Civil Engineering, California State Polytechnic University, Pomona

CERTIFICATIONS

Registered Civil Engineer, PE 44226 (CA)

Professional Land Surveyor, LS 6867 (CA)

AFFILIATIONS

American Society of Civil Engineers

American Water Works Association

California Rural Water Association

American Public Works Association

American Council of Engineering Companies

Mr. Thornton, TKE's President, is in charge of all TKE projects. He has over 35 years of experience in engineering planning, design, land surveying and construction management for public works projects. He has worked on a variety of public works engineering projects including water system improvements, sewer system improvements, street improvements, park improvements, bike trail improvements, drainage improvements, and reclaimed water system improvements projects. Mr. Thornton has been responsible for managing including funding administration, planning, evaluating, and designing these projects and has provided construction engineering and surveying services for many of these same projects.

DETAILED PROJECT EXPERIENCE

- **Horton Wastewater Treatment Plant Odor Control, Desert Hot Springs, CA** - Mr. Thornton was Principal-in-Charge for services on the Horton Wastewater Treatment Plant Project. The proposed vapor phase odor control system will service the influent pump station and headworks facilities. The project will significantly reduce odor emissions to neighboring residential developments. The project includes coordination with the Regional Water Quality Control Board, Air Quality Management District, other agencies, vendors, and consultants. Services include records research, coordination with agencies, vendors, and consultants, design, cost estimating, technical and benefit cost analysis, regulatory agency coordination, permitting, bidding, construction management, construction staking, and inspection.

- **Horton Wastewater Treatment Plant Odor Control, Desert Hot Springs, CA** - Mr. Thornton was Principal-in-Charge for services on the • Horton Wastewater Treatment Plant Odor Control project. He oversaw the preparation of plans, specifications, and estimates for the construction of an odor control system for the District's existing Horton Wastewater Treatment Plant. The proposed vapor phase odor control system will service the influent pump station and headworks facilities. The project will significantly reduce odor emissions to neighboring residential developments. The project includes coordination with the Regional Water Quality Control Board, Air Quality Management District, other agencies, vendors, and consultants. Services include records research, coordination with agencies, vendors, and consultants, design, cost estimating, technical and benefit cost analysis, regulatory agency coordination, permitting, bidding, construction management, construction staking, and inspection

- **San Bernardino Avenue Trunk Sewer, City of Fontana, CA** - Mr. Thornton was Principal-in-Charge for services on the San Bernardino Avenue Trunk Sewer and provided project and construction management, coordination with stakeholders and agencies, flow generation calculations, model preparation, flow monitoring analysis,

cost estimating and report preparation for the San Bernardino Avenue Trunk Sewer System, an area encompassing approximately 9,400 acres covering the majority of the San Sevaine redevelopment project area. The study limits were State Route 210 to the north, Maple Avenue to the east, San Bernardino Avenue to the south and East Avenue to the west. The trunk sewer construction included 22,000 linear feet of 42" and smaller diameter lined RCP and VCP sewer pipe, two siphon structures, interconnections with gated manholes to major sewer crossings and residential and commercial laterals

- **Sewer Master Plan Update, City of El Monte, CA** – Mr. Thornton was Principal in charge for this Sewer Master Plan Update for the City of El Monte. This study includes approximately 9.67 square miles in an area located northwest of the Interstate 10 and 605 Freeways. The project services included meetings, records research, coordination with stakeholders and agencies, area map exhibit preparation, flow generation calculations, model preparation, flow monitoring, cost estimating, capital improvement programming and report preparation.

- **I-15 Sewer Lift Station, Hesperia, C**A - Mr. Thornton was Principal-in-Charge for services on the sewer lift station project he oversaw the design to accept wastewater flows from existing and proposed developments at Interstate 15 and Ranchero Road, and the surrounding community of approximately 110 acres. The analysis included defining the tributary area, calculating existing, near-term, and ultimate wastewater flows (0.94 MGD, 1.78 MGD, and 2.56 MGD, respectively), calculating head loss, selecting pumps, and designing the wet well and piping system. TKE identified two self-cleaning high efficiency 25 hp wastewater pumps with variable frequency drives. The pumps were selected based on its peak efficiency (76%) under ultimate head and flow conditions, while maintaining good efficiency (65%) under initial head and flow conditions.

STEVEN LEDBETTER, P.E.

TKE Engineering, Inc.

EDUCATION

BS, CIVIL ENGINEERING (ENVIRONMENTAL),

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

CERTIFICATIONS

Caltrans 24 Hour Training for Water Pollution Control Managers

AFFILIATIONS

Riverside-San Bernardino Counties Branch, American Society Of Civil Engineers

Coachella Valley Branch, American Public Works Association

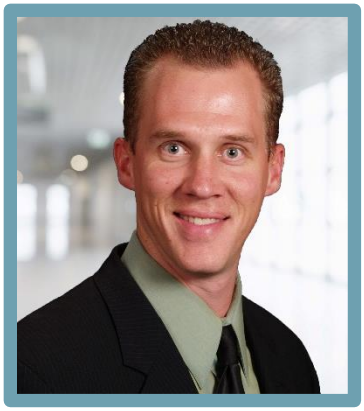
Mr. Ledbetter has over 19 years of professional experience in the civil engineering industry. He has handled various critical and challenging projects from planning through design and implementation; all while ensuring that projects are executed as per specification in the stipulated time with quality. He has a well-rounded background with experience in: preparation and analysis of street and utility improvement plans and specifications including drainage, potable and non-potable water and wastewater, utility master planning including computer modeling, analysis, and report preparation; water supply planning including feasibility studies, urban water management plans, water supply assessments and verifications; storm water compliance reporting including water quality management plans and storm water pollution prevention plans and; and grant writing for various State and Federal agencies.

DETAILED PROJECT EXPERIENCE

- **Regional Water Reclamation Program, Mission Springs Water District, CA** – Mr. Ledbetter is providing program management services for the development and construction of the District's Regional Water Reclamation Program (RWRP). The RWRP includes planning, design, and construction of a regional wastewater treatment plant, interceptor conveyance system, and local wastewater collection systems. Mr. Ledbetter is managing the completion of the RWRP, including: participation and management of funding acquisition; staff, board, consultant, funding agencies, and public coordination and communications; assessment district formation; State Revolving Fund (SRF) and grant application processing; State invoicing and reporting; environmental compliance processing; preliminary engineering preparation; plans, specifications, and cost estimates (PS&E) preparation; bidding and construction; and all related services to successfully complete the RWRP.
- **Horton Wastewater Treatment Plant Tertiary Filtration System, Desert Hot Springs, CA** – Mr. Ledbetter was the project manager for the preparation of Preliminary Design Report and estimates for the construction of an Title 22 tertiary treatment facility for the District's existing Horton Wastewater Treatment Plant. The report defined the feasibility and cost effectiveness to alleviate existing and future secondary effluent disposal deficiencies at the Plant. The analysis focused on the installation of tertiary filters to reduce suspended solids prior to land disposal. In addition, the report evaluated the ability to use the proposed tertiary filters along with disinfection facilities to meet Title 22 recycled water standards in the future.
- **Horton Wastewater Treatment Plant Odor Control, Desert Hot Springs, CA** - Mr. Ledbetter is the project manager for the

preparation of plans, specifications, and estimates for the construction of an odor control system for the District's existing Horton Wastewater Treatment Plant. The proposed vapor phase odor control system will service the influent pump station and headworks facilities. The project will significantly reduce odor emissions to neighboring residential developments. The project includes coordination with the Regional Water Quality Control Board, Air Quality Management District, other agencies, vendors, and consultants. Services include records research, coordination with agencies, vendors, and consultants, design, cost estimating, technical and benefit cost analysis, regulatory agency coordination, permitting, bidding, construction management, construction staking, and inspection.

- **I-15 Sewer Lift Station, Hesperia, C**A - Mr. Ledbetter was the project manager for the preparation of a sewer lift station design to accept wastewater flows from existing and proposed developments at Interstate 15 and Ranchero Road, and the surrounding community of approximately 110 acres. The analysis included defining the tributary area, calculating existing, near-term, and ultimate wastewater flows (0.94 MGD, 1.78 MGD, and 2.56 MGD, respectively), calculating head loss, selecting pumps, and designing the wet well and piping system. TKE identified two self-cleaning high efficiency 25 hp wastewater pumps with variable frequency drives. The pumps were selected based on its peak efficiency (76%) under ultimate head and flow conditions, while maintaining good efficiency (65%) under initial head and flow conditions.



TERRY RENNER, P.E., Q.S.D.

TKE Engineering, Inc.

EDUCATION

BS, CIVIL ENGINEERING, CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

CERTIFICATIONS

CALTRANS SWPPP CERTIFIED QSP/QSD TRAINING

AFFILIATIONS

AMERICAN PUBLIC WORKS ASSOCIATION

AMERICAN COUNCIL OF ENGINEERING COMPANIES OF CALIFORNIA
AMERICAN SOCIETY OF CIVIL ENGINEERS

REGISTRATIONS

REGISTERED CIVIL ENGINEER,
PE 69984 (CA)

QUALIFIED SWPPP DEVELOPER AND PRACTITIONER #24329

Mr. Renner is the Senior Vice President of TKE and has 21 years of experience in civil engineering infrastructure projects, including drainage improvements, transportation improvements, sewer and water improvements, facilities improvements and recreation improvements. He has managed numerous projects and has delivered projects for the Cities of Calimesa, Fontana, Rialto, Upland, Riverside, and Redlands. As a project manager, Mr. Renner has been responsible for design production, supervising a staff of engineers and drafters, coordinating work between the production team and the client, and for submitting all deliverables in a timely manner. He has successfully delivered a wide variety of complex and challenging projects and is dedicated to ensuring that the plans produced by TKE continue to exceed industry standards.

DETAILED PROJECT EXPERIENCE

- **Regional Conveyance Trunk Sewer, Desert Hot Springs, CA** - Mr. Renner is the QA/QC manager overseeing the completion of a preliminary engineering analysis evaluating potential service areas, trunk sewer alignments, wastewater flow rates, lift station capacity analysis, and other preliminary design criteria needed to identify the preferred alignment of the Regional Conveyance Trunk Sewer and potential flow diversions to the Regional Water Reclamation Facility (RWRF). Mr. Renner is continuing to provide QA/QC for the final design and contract documents for the preferred sewer alignment from the intersection of Dillon Road and Avenida Manzana to the RWRF. The project includes coordination with developers, other agencies, Regional Water Quality Control Board, and other consultants. Services include Preliminary Engineering, Opinion of Probable Cost, Planning System Alternatives, Sewer Hydraulic Modeling Analysis, Design, Topographic Surveying, and Preparation of Plans, Specifications, and Estimates.
- **Manganese Treatment Facility and 0.5 MG Reservoir Project, City of Huntington Park, CA** – Mr. Renner was the Project Manager, Design Engineer and Construction Manager for this project, which TKE prepared plans, specifications, and estimates for the construction of a grant funded 70-foot tall welded steel reservoir replacement project and a fully redundant manganese filtration plant capable of flowrates up to 1500 gpm in the City of Huntington Park. The project included the removal of a structurally deficient steel reservoir and construction of the proposed welded steel reservoir including a ring footing with 45-foot deep 3-foot diameter caissons to combat liquefaction issues. The reservoir removal and replacement is located within fifteen feet of an existing 70-foot tall 2 million gallon steel reservoir to be protected during construction.
- Jurupa Hills Lift Station Replacement, Rubidoux Community Services District, City of Jurupa Valley, CA – This project consisted of the

replacement of an existing 300 gpm lift station, site demolition and abandonments, electrical and backup power tie-ins and easement document preparation at the Jurupa Hills Country Club Golf Course. Mr. Renner was the project manager in charge of all project activities. This included hydraulic calculations, site layout, specification preparation, survey and electrical sub-consultant coordination, management of assistant engineers and AutoCAD drafters, and project billing.

- **Groundwater Quality Protection Program Areas H and I Sewer Project, Desert Hot Springs, CA** - Mr. Renner is the QA/QC manager for the preparation of bidding documents for two areas in MSWD's Groundwater Quality Protection Program (GQPP), a septic to sewer conversion program. The Project includes approximately 25,000 linear feet of 8" vitrified clay pipe sewer improvements, including 676 4" service laterals. Once complete, MSWD will abate approximately 465 existing septic tanks that are impacting groundwater quality. The project includes records research, conventional topographic surveying, coordination with agencies, hydraulic calculations, preliminary design, cost estimating, geotechnical investigation, environmental coordination, preparation of construction plans and specifications, permit acquisition, and grant funding administration.
-

KRISTINE MACALMA, E.I.T

TKE Engineering, Inc.

EDUCATION

B.S, CIVIL ENGINEERING, CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

AFFILIATIONS

INLAND EMPIRE, WOMEN IN TRANSPORTATION (WTS)

RIVERSIDE-SAN BERNARDINO COUNTIES BRANCH, AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

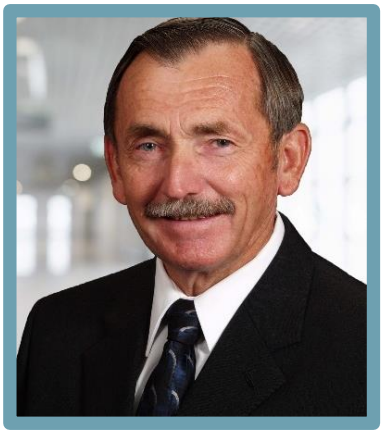
Ms. Macalma is a Project Manager at TKE and has over 5 years of experience in assisting in engineering drafting and design. Her experience includes transportation improvements, street improvements, utility research, grading plans, construction management assistance, grant preparation, preliminary and final design drawings, specifications and engineer's cost estimates, and water and wastewater facilities including pipelines and water storage reservoirs. Ms. Macalma has been an integral part of projects successfully completed for the City of Calimesa, City of Highland, City of Yucaipa, City of Hesperia, City of Adelanto, City of Fontana, City of Upland, and City of Wildomar.

DETAILED PROJECT EXPERIENCE

- **On-Call Engineering Services**, *City of Hesperia* – TKE provides on-call civil engineering services to the City, including City Engineer. TKE managed more than $20 million in public improvement projects. Ms. Macalma has been involved in engineering design of street improvement projects, helping to prepare material for grant applications, preliminary cost estimates, and hydrology studies. She was also involved in the City Wastewater Treatment Plant Investigation.
- **Horton Wastewater Treatment Plant Odor Control,** *Desert Hot Springs, CA* **-** Ms. Macalma was the project engineer for the preparation of plans, specifications, and estimates for the construction of an odor control system for the District's existing Horton Wastewater Treatment Plant. The proposed vapor phase odor control system will service the influent pump station and headworks facilities. The project will significantly reduce odor emissions to neighboring residential developments. The project includes coordination with the Regional Water Quality Control Board, Air Quality Management District, other agencies, vendors, and consultants. Services include records research, coordination with agencies, vendors, and consultants, design, cost estimating, technical and benefit cost analysis, regulatory agency coordination, permitting, bidding, construction management, construction staking, and inspection.
- **Regional Conveyance Trunk Sewer**, *Desert Hot Springs, CA* – Ms. Macalma was the project engineer involved in the completion of a preliminary engineering analysis evaluating potential service areas, trunk sewer alignments, wastewater flow rates, lift station capacity analysis, and other preliminary design criteria needed to identify the preferred alignment of the Regional Conveyance Trunk Sewer and potential flow diversions to the West Valley Water Reclamation Facility (WVWRF). TKE is also responsible for final design and contract documents for the preferred Regional Conveyance Trunk Sewer alignment from the intersection of Dillon Road and Avenida Manzana to the WVWRF. The project includes coordination with developers, other agencies, Regional Water Quality Control Board, and other consultants. Services include Preliminary Engineering, Opinion of Probable Cost, Planning System Alternatives, Sewer Hydraulic

Modeling Analysis, Design, Topographic Surveying, and Preparation of Plans, Specifications, and Estimates.

- **San Bernardino Avenue Treatment Plant Sewer Improvement,** *City of Fontana , CA*– Ms. Macalma was the project engineer for the preparation of plans, specifications, and estimates for the construction of the San Bernardino Avenue Treatment Plant Sewer located in the City of Fontana north of Interstate 10 between Commerce Drive and Mulberry Avenue. The project included approximately 1,100 linear feet of 18-inch vitrified clay sewer pipe, including four sewer diversion manholes, a channel crossing and connection to the existing lift station. The facility construction was required to abandon a privatized treatment plant and divert flows to the San Bernardino Avenue Lift Station which conveys flows to IEUA's Regional Plant No. 4. The project included connection to the existing lift station wet well and required the lift station to modify the high-water level. Services included records research, preliminary engineering design, potholing coordination, hydraulic modeling, permitting, coordination with agencies, bidding services, and construction assistance.



RON MUSSER, P.L.S.

TKE Engineering, Inc.

CERTIFICATIONS

PROFESSIONAL LAND SURVEYOR, LS 4230 (CA)

AFFILIATIONS

AMERICAN COUNCIL OF ENGINEERING COMPANIES OF CALIFORNIA

CALIFORNIA LAND SURVEYORS ASSOCIATION

Mr. Musser has over 53 years of experience in performing field and office surveying and plan checking services for public and private projects including drainage, roadway and highway projects. He has performed design topographic surveying and construction staking on all of TKE's respective design and construction management projects and map checking over the past 15 years. In addition, he has prepared easement deeds, grant deeds, records of survey, parcel maps and tract maps in San Bernardino County, Riverside County, San Diego County, Orange County and Los Angeles County. He has performed boundary, topographic, ALTA, and precise level surveys as well as Global Positioning Surveys. Mr. Musser currently provides topographic mapping and map checking services to the City's of Calimesa, Upland, Azusa, Hesperia, Adelanto, Wildomar, Palm Desert, Pico Rivera and El Monte.

DETAILED PROJECT EXPERIENCE

- **Groundwater Quality Protection Program Areas H and I Sewer Project, Desert Hot Springs, CA** – Mr. Musser provided topographic design survey, and the preparation of survey documents for two areas in MSWD's Groundwater Quality Protection Program (GQPP), a septic to sewer conversion program. The Project includes approximately 25,000 linear feet of 8" vitrified clay pipe sewer improvements, including 676 4" service laterals. Once complete, MSWD will abate approximately 465 existing septic tanks that are impacting groundwater quality. The project includes records research, conventional topographic surveying, coordination with agencies, hydraulic calculations, preliminary design, cost estimating, geotechnical investigation, environmental coordination, preparation of construction plans and specifications, permit acquisition, and grant funding administration.
- **Regional Conveyance Trunk Sewer, Desert Hot Springs, CA** - Mr. Musser provided topographic design survey, Mr. Musser is continuing to provide Survey for the final design and contract documents for the preferred sewer alignment from the intersection of Dillon Road and Avenida Manzana to the RWRF. The project includes coordination with developers, other agencies, Regional Water Quality Control Board, and other consultants. Services include Preliminary Engineering, Opinion of Probable Cost, Planning System Alternatives, Sewer Hydraulic Modeling Analysis, Design, Topographic Surveying, and Preparation of Plans, Specifications, and Estimates.
- **San Bernardino Avenue Trunk Sewer, City of Fontana, CA** - Mr. Musser provided topographic design survey .This project consisted of approximately 19,500 linear feet of 48-inch and smaller vitrified clay and reinforced concrete pipe sewer, two siphons, including bore and jacked pipe and casings, and numerous diversion gates for flow

diversion. The trunk sewer was constructed on San Bernardino Avenue between Cypress Avenue and Mulberry Avenue. The facility was constructed to convey 25 million gallons of wastewater to a proposed lift station, which will convey the water to IEUA's regional plant number 4. TKE provided project and construction management and inspection services. In addition, TKE provided construction staking and topographic surveying throughout the completion of the project.

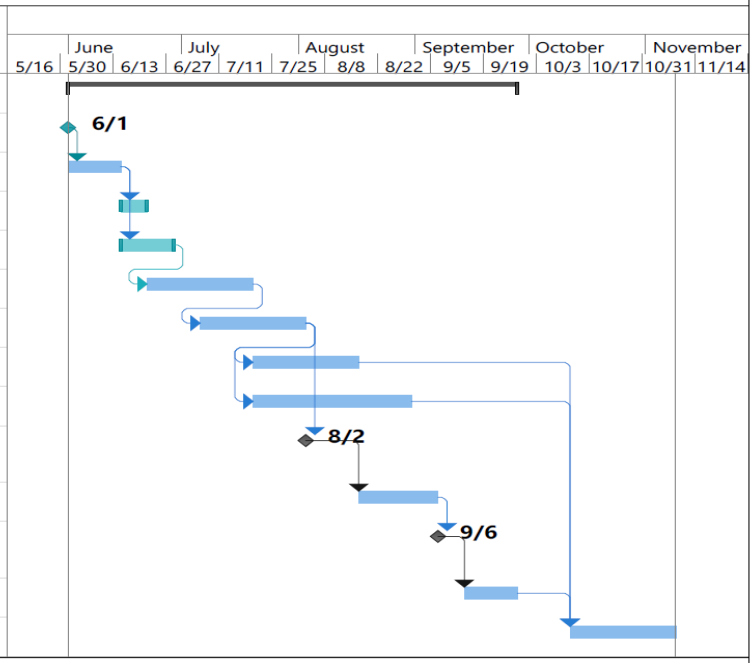
- **Upland Basin, City of Upland, CA-** Mr. Musser provided topographic design survey, aerial target placement, ALTA survey, Parcel Map preparation and construction staking for the 1300 acre-foot flood control and aquifer recharge basin project that included DSOD jurisdictional facilities, inlet and outlet facilities, and related work. The project included preparation of basin, street improvements, storm drain, spillway, and structural detail construction documents (drawings, specifications, and estimates), hydrology and hydraulic analyses, environmental compliance, storm water pollution prevention plan preparation, right-of-way acquisition, aerial mapping, and related civil engineering services.
- **Fontana City Wide Water/Wastewater Engineering, City of Fontana, CA** – Mr. Musser served as Project Surveyor on this project to improve water supply reliability and increase wastewater service area for the residents of the City of Fontana. The components include, recycle water direct reuse and recharge, enhanced storm water capture and recharge, imported water development, exchange water agreements and sewer analysis. TKE has performed extensive research, preliminary design and coordination with agencies to assist in the elimination of high maintenance basins and sewer lift stations, development of storm water and recharge basins, sewer service and recycled water service to residents, businesses and City facilities throughout the City of Fontana.
- **Jurupa Street Recycled Water Main Project, Ontario Municipal Utilities Company, City of Ontario, CA** – Mr. Musser was the Project Surveyor for this project, which TKE prepared design, utility coordination, utility verification, plans, specifications, estimates and coordination with local businesses for the construction of approximately 4,700 linear feet of 8" recycled water main and related appurtenances. The project constructed an infill recycled water main to connect a previously constructed recycle water main which was currently serving potable water to the existing recycled water system.

1. PROJECT SCHEDULE

A sample project schedule related to On-Call Construction Management Services for the proposed Project is provided below.

MIssion Springs Water District
Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project
Design Schedule

ID	Task Name	Duration	Start	Finish
1	**Design Phase**	**85 days**	**Tue 6/1/21**	**Mon 9/27/21**
2	Kick Off Meeting	0 days	Tue 6/1/21	Tue 6/1/21
3	Records Research	10 days	Tue 6/1/21	Mon 6/14/21
4	Design Surveying	5 days	Tue 6/15/21	Mon 6/21/21
5	Base Construction Drawings	10 days	Tue 6/15/21	Mon 6/28/21
6	Hydraulic Analysis	20 days	Tue 6/22/21	Mon 7/19/21
7	60% Design	20 days	Tue 7/6/21	Mon 8/2/21
8	Environmental Compliance	20 days	Tue 7/20/21	Mon 8/16/21
9	Permit Acquisition	30 days	Tue 7/20/21	Mon 8/30/21
10	*Design Review Meeting + 2 Week Plan Check*	*0 days*	*Mon 8/2/21*	*Mon 8/2/21*
11	90% Design	15 days	Tue 8/17/21	Mon 9/6/21
12	*Design Review Meeting + 1 Week Plan Check*	*0 days*	*Mon 9/6/21*	*Mon 9/6/21*
13	Final Bid Documents	10 days	Tue 9/14/21	Mon 9/27/21
14	**Bidding Assistance**	**20 days**	**Tue 10/12/21**	**Mon 11/8/21**



Project: Horton Effluent Filters
Date: Thu 4/8/21

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

Page 1

1. BUDGET

TKE's fee proposal/budget have been submitted electronically on planet bids as directed in the RFP.

1. CONTRACT TERMS

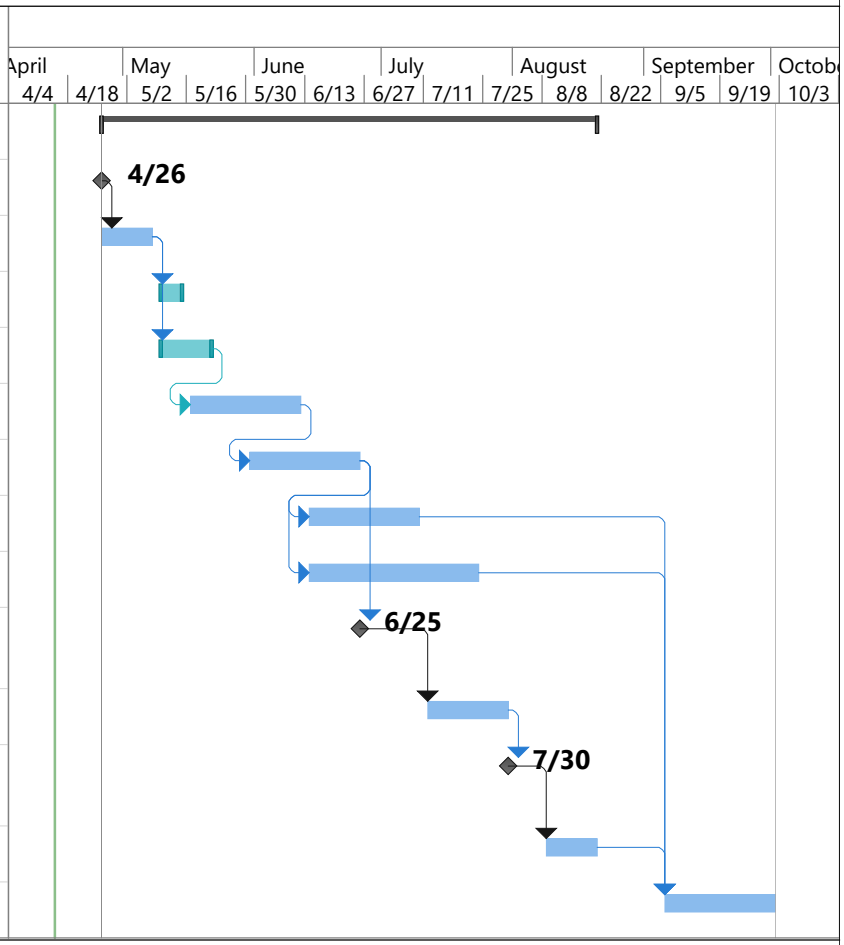
TKE agrees to execute a MSWD "Agreement for Professional Services" (Exhibit A) and agrees to submit insurance certificates and endorsements as outlined in Exhibit A. TKE understands MSWD will provide the agreement to TKE for execution if TKE is the selected firm.

Prepared by:

TKE Engineering, Inc.
2305 Chicago Ave.
Riverside, CA, 92507

MIssion Springs Water District
Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project
Design Schedule - REVISED

ID	Task Name	Duration	Start	Finish
1	**Design Phase**	**85 days**	**Mon 4/26/21**	**Fri 8/20/21**
2	Kick Off Meeting	0 days	Mon 4/26/21	Mon 4/26/21
3	Records Research	10 days	Mon 4/26/21	Fri 5/7/21
4	Design Surveying	5 days	Mon 5/10/21	Fri 5/14/21
5	Base Construction Drawings	10 days	Mon 5/10/21	Fri 5/21/21
6	Hydraulic Analysis	20 days	Mon 5/17/21	Fri 6/11/21
7	60% Design	20 days	Mon 5/31/21	Fri 6/25/21
8	Environmental Compliance	20 days	Mon 6/14/21	Fri 7/9/21
9	Permit Acquisition	30 days	Mon 6/14/21	Fri 7/23/21
10	*Design Review Meeting + 2 Week Plan Check*	*0 days*	*Fri 6/25/21*	*Fri 6/25/21*
11	90% Design	15 days	Mon 7/12/21	Fri 7/30/21
12	*Design Review Meeting + 1 Week Plan Check*	*0 days*	*Fri 7/30/21*	*Fri 7/30/21*
13	Final Bid Documents	10 days	Mon 8/9/21	Fri 8/20/21
14	**Bidding Assistance**	**20 days**	**Mon 9/6/21**	**Fri 10/1/21**



Project: Horton Effluent Filters
Date: Thu 4/15/21

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

EXHIBIT B

Mission Springs Water District

Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project

Consulting Engineering Fee Breakdown

Task No.	Task	Principle In Charge Hours	Principle In Charge $	Project Manager Hours	Project Manager $	Project Engineer Hours	Project Engineer $	Assistant Engineer/Designer Hours	Assistant Engineer/Designer $	Clerical Hours	Clerical $	Survey Crew Hours	Survey Crew $	Total $
Design														
1	Kick Off Meeting		$ -	4	$ 620	4	$ 580	2	$ 250	2	$ 160		$ -	$ 1,610
2	Records Research		$ -	4	$ 620	8	$ 1,160	4	$ 500	4	$ 320		$ -	$ 2,600
3	Surveying		$ -	2	$ 310		$ -	4	$ 500	2	$ 160	12	$ 2,820	$ 3,790
4	Base Drawings		$ -	8	$ 1,240	24	$ 3,480	40	$ 5,000	4	$ 320	2	$ 470	$ 10,510
5	Hydraulic Analysis	4	$ 660	36	$ 5,580	64	$ 9,280	80	$ 10,000	4	$ 320		$ -	$ 25,840
6	60% Design	8	$ 1,320	24	$ 3,720	40	$ 5,800	64	$ 8,000	4	$ 320		$ -	$ 19,160
7	Environmental Coordination		$ -	4	$ 620	8	$ 1,160	8	$ 1,000	2	$ 160		$ -	$ 2,940
8	Permit Acquisition	2	$ 330	8	$ 1,240	16	$ 2,320	8	$ 1,000	4	$ 320		$ -	$ 5,210
9	90% Design	4	$ 660	16	$ 2,480	32	$ 4,640	64	$ 8,000	2	$ 160		$ -	$ 15,940
10	Final Design	2	$ 330	8	$ 1,240	16	$ 2,320	24	$ 3,000	2	$ 160		$ -	$ 7,050
11	Bidding Assistance		$ -	8	$ 1,240	12	$ 1,740	4	$ 500	2	$ 160		$ -	$ 3,640
	Subtotal:	20	$ 3,300	122	$ 18,910	224	$ 32,480	302	$ 37,750	32	$ 2,560	14	$ 3,290	$ 98,290
													Reimbursables (@3%)[1.]:	$ 2,949
													Total:	$ 101,239
													Rounded Total:	**$ 101,200**

Rates:

Principle In Charge	$ 165 /HR
Project Manager	$ 155 /HR
Project Engineer	$ 145 /HR
Assistant Engineer/Designer	$ 125 /HR
Clerical	$ 80 /HR
2-Man Survey Crew	$ 235 /HR

Notes:

1.) Reimbursables Include Cost for Prints, Copies, Mileage, Etc.

TKE Engineering, Inc.

EXHIBIT C

Term, Early Termination & Notice

Engineering Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project

A. Term of Agreement

This professional services agreement shall be effective upon approval by the parties thereof and shall expire one hundred sixty (160) days from the effective Agreement DATE therein. This contract also terminates and replaces any previous agreements between the District and TKE Engineering, Inc. for Engineering Design Services for the Horton Wastewater Treatment Plant Tertiary Effluent Filters Construction Project in force prior to the effective date of this agreement.

B. Early Termination of Agreement

This agreement may be terminated at any time upon a thirty (30) day written Notice from either party, and without fault or claim for damages by either party.

C. Notice

All correspondence and Notices will be sent to the following addresses as noted below for Mission Springs Water District and TKE Engineering, Inc.

OWNER

Attn: Luiz Santos
Mission Springs Water District
66575 Second Street
Desert Hot Springs, CA 92240
lsantos@mswd.org

CONSULTANT

Attn: Steve Ledbetter
TKE Engineering, Inc.
2305 Chicago Avenue
Riverside, CA 92507
sledbetter@tkeengineering.com