

COACHELLA VALLEY WATER DISTRICT
PROFESSIONAL SERVICES AGREEMENT
TASK ORDER NO. 3

This Task Order No. 3 ("Task Order") is entered into this ____ day of _____ 2023 by and between Coachella Valley Water District ("CVWD") and Leighton Consulting, Inc. ("Consultant").

RECITALS

A. On or about December 15, 2022 CVWD and Consultant executed that certain Professional Services Agreement ("Agreement").

B. The Agreement provides that the parties would enter into a Task Order to make changes to or authorize certain work set forth in the Scope of Services (as defined in the Agreement). The purpose of this Task Order is to make changes to or authorize work on the terms and conditions set forth herein.

NOW, THEREFORE, the parties hereto hereby agree:

1. Section 1.1 of the Agreement is hereby amended to include those services listed on Exhibit "1" attached hereto and by this reference incorporated herein.

2. Section 2.1 of the Agreement is hereby amended to increase the amount to be paid by CVWD to Consultant as more particularly set forth on Exhibit "1."

3. In the event this Task Order authorizes additional work or confirms work set forth in the Task Order but not authorized, Consultant shall perform the services listed in Paragraph 1 above pursuant to the schedule set forth on Exhibit "1."

4. Consultant acknowledges that the compensation (time and cost) set forth herein comprises the total compensation due for the work defined in this Task Order. The signing of this Task Order acknowledges full mutual accord and satisfaction for the work and that the stated time and/or cost constitute the total equitable adjustment owed the Consultant as a result of the authorized work.

5. Except as amended or supplemented herein or in previous task orders, the terms and conditions of the Agreement shall remain in full force and effect. Notwithstanding the immediately preceding sentence, the Agreement shall be interpreted in a manner consistent with the intent of this Task Order.

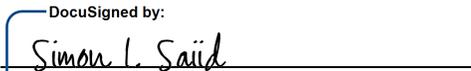
IN WITNESS WHEREOF, CVWD and Consultant have caused this Task Order No. 3 to be executed as of the day and year first above written.

"CONSULTANT"

"CVWD"

LEIGHTON CONSTULTING, INC., a
California Corporation

COACHELLA VALLEY WATER DISTRICT, a
public agency

By: 

By: _____

Name: Simon I. Saïd, GE

Name: _____

Its: Department Leader

Its: _____

EXHIBIT "1"

TO

TASK ORDER NO. 3

A. Description of Services Included, Deleted or Authorized.

Consultant shall provide soil and concrete testing services for the Avenue 66 Transmission Water Main, Phase 1B, Phase 2, and Lincoln Street Water Main Project (Project ID: DW2105). The scope of services includes the tasks that are outlined in Consultant's proposal dated October 11, 2023, attached hereto and incorporated herein by this reference.

B. Increase, Decrease, or Confirmation of Amount to be Paid to Consultant.

Services shall be billed based on the hourly rate sheets included in the Agreement, for an amount not-to-exceed \$201,169.

C. Time to Perform Services Listed Herein.

Services shall commence immediately upon execution of this Task Order by both parties and conclude when construction of the project is completed.



Proposal to Provide

Support Services during Construction for Avenue 66 Transmission Water Main, Phase 1B, Phase 2, and Lincoln Street Water Main Project

Prepared for



OCTOBER 11, 2023



Leighton Consulting, Inc.

Coachella Valley Water District
51501 Tyler Street
Coachella, CA 92236-3601

October 11, 2023

Subject: Proposal to Provide Support Services During Construction for Avenue 66 Transmission Water Main, Phase 1B, Phase 2, and Lincoln Street Water Main Project

Leighton Consulting, Inc., a Verdantas Company (Leighton) is ready and qualified to provide support services during construction for the Avenue 66 Transmission Water Main, Phase 1B, Phase 2, and Lincoln Street Water Main Project. Our experience working for water districts and utilities throughout Southern California over the past 62 years has enabled us to refine our technical and business approaches to deliver high quality and cost-efficient geotechnical services on time and on budget, with demonstrated value. We appreciate this opportunity to continue partnering with the District to deliver quality deliverables to the community that you serve.

With long-standing roots in Coachella Valley, Leighton has provided geotechnical engineering and materials testing services for hundreds of projects in the region, including numerous projects for CVWD. Our proposed team has worked together in the Greater Coachella Valley Area for more than 15 years. We have a thorough understanding of and relationships with Federal, State and local regulators and stakeholders, which will reduce the potential for unanticipated requirements. We also have the tools and in-house resources to perform all work required for each of the Project Tasks.

With a team of 180 employees across our eight offices, all in Southern California, Leighton's focus for the past 62 years has been on supporting public agencies with our services. Our services for the District will be mobilized out of our Palm Desert office with support from our Temecula office and laboratory. The Leighton team will be led by registered professionals that have demonstrated exemplary performance on similar projects in the Coachella Valley in the recent past. Bashir Saiid, PE, will be our Project Manager and will serve as the primary point of contact to CVWD. Simon Saiid, PE, GE will provide quality review, principal oversight, and geotechnical engineering input as needed. Our leadership team will work closely with CVWD personnel, attend meetings, and provide timely progress reports throughout the duration of your project.

Bashir Saiid, PE

Project Manager / Primary Contact
(760) 346-6113 | bsaiid@leightongroup.com

Simon Saiid, PE, GE

Principal in Charge
(951) 252-8013 | ssaiid@leightongroup.com

Local Office: 41945 Boardwalk, Suite V, Palm Desert, CA 92211 // (760) 776-4192
Support Office: 41715 Enterprise Circle N, Suite 103, Temecula, CA 92590 // (951) 296-0530

Respectfully submitted,
LEIGHTON CONSULTING, INC.

A handwritten signature in blue ink, appearing to read "Simon I. Saiid".

Simon I. Saiid, PE, GE

Senior Principal Engineer | Department Leader, Temecula/Palm Desert Office



TABLE OF CONTENTS

1.	General Information	1
2.	Project Team Qualifications	4
3.	Understanding the Project and Approach to Performing the Required Services	11
4.	Fee Proposal and Other Cost Considerations	14
5.	Project Schedule	15



JOINS



For 62 years, Leighton has delivered industry leading geotechnical engineering, environmental consulting, and materials testing and inspection services that help you, our clients, move projects forward in support of our local communities. Joining Verdantas will allow us to build on our outstanding reputation, deepen our clients relationships, broaden our geographic reach, and expand the capabilities and innovative solutions we bring to your projects.

Verdantas is a people focused company with a passion for “Building a Better Tomorrow”



Verdantas brings a legacy of excellence, a reputation of honesty and integrity, and is dedicated to inclusion, diversity, and collaboration. Collectively, the Verdantas team is comprised of experts in engineering consulting, the environment and its supporting infrastructure who are committed to a people-focused future.

Verdantas specializes in

- *Geological and Geotechnical Engineering (with the addition of Leighton)*
- *Hydrology, Hydraulics, and Fluids*
- *Infrastructure Design*
- *Process Engineering*
- *Site and Roadway Civil Engineering*
- *Environmental Assessment and Remediation*
- *Environmental Health and Safety*
- *Natural Resources and Environmental Planning*
- *Sustainability*
- *Digital Insights and Solutions*

1 | General Information

LEIGHTON Consulting, Inc. (Leighton) is an award-winning geotechnical engineering firm, recognized nationally by Engineering News-Record (ENR) as a 2023 Top Design Firm, that provides geotechnical and materials testing and special inspection services, as well as turnkey geotechnical and environmental engineering.

With a 62 year history of providing local municipalities with geotechnical engineering, testing, inspection, and environmental services, a team of 180, and eight offices strategically located throughout Southern California, **Leighton has the in-house resources to perform all work required for each of the Project Tasks** for the Coachella Valley Water District (CVWD). Based on our past experience in this area, we have a comprehensive understanding of the local geotechnical/geologic issues and are very familiar with CVWD’s engineering standards and construction specifications. For 62 years, Leighton has provided services to water districts and other public works agencies for a myriad water/wastewater storage and transmission projects including:

- Water Tanks and Reservoirs
- Water Booster Stations
- Sewer Lines
- Sewage Lift Stations
- Groundwater Replenishment Facilities
- Potable and Recycled Water Pipelines
- Storm Drains and Channels
- Desalination Plants and Facilities
- Detention Basins

Our local experience gives Leighton engineers, geologists, and Soils Technicians an incomparable history and basis for understanding CVWD site issues, constraints, and construction expectations. Throughout our company, we take pride in approaching each project with creative and critical thinking to provide our clients with the best value while solving the challenging local issues involving geologic and soil conditions. Our technical competency is evidenced by 50 awards for engineering excellence, and successful completion of projects up to \$1 billion in construction value.



Our Palm Desert office—within 17 miles from CVWD headquarters and much of your service area—will take the lead on providing the required services. Leighton's nearby Temecula office has an in-house laboratory that has been audited and approved by AASHTO, Caltrans, State of California Division of State Architect, (DSA), U.S. Navy, and U.S. Army Corps of Engineers. We provide standard ASTM testing results and can respond with additional testing methods modified to meet specific field and/or contract conditions. Our laboratories participate bi-yearly in Cement and Concrete Reference Laboratory (CCRL) Sample Proficiency Testing and consistently achieve the highest ratings.

Leighton has performed soil and materials testing services on numerous water and wastewater pipelines, water treatment and pump station facilities, and regional water reclamation facilities. Leighton has also provided similar geotechnical services for other local municipal water districts including those listed in the box below.



Local Project Offices

41945 Boardwalk, Suite V
Palm Desert, CA 92211
760.776.4192

Support Office + Lab

41715 Enterprise Circle N, Suite 103,
Temecula, CA 92590 // 951.296.0530

Project Manager/Contact

Bashir Saiid, PE

Project Manager / Primary Contact
(760) 808-4186 |

bsaiid@leightongroup.com

Principal-in-Charge

Simon Saiid, PE, GE

Principal in Charge
(951) 252-8013 |

ssaiid@leightongroup.com

Water Districts Served

Antelope Valley-East Kern Water Agency • Apple Valley Ranchos Water Company • Basin Water Inc. • California Department of Water Resources • California Department of Water Resources • California Water Service Company • Carlsbad Municipal Water District • Chino Basin Municipal Water District • Chiriaco Summit Water District • Coachella Valley Water District • Corona Department of Water and Power • Cucamonga Valley Water District • Del Dios Mutual Water Company • Devore Water Company • **Eastern Municipal Water District** • El Toro Water District • Elsinore Valley Municipal Water District • Encina Wastewater Authority • Foothill Municipal Water District • Golden State Water Company • Helix Water District • Indian Wells Valley Water District • Irvine Ranch Water District • Joshua Basin Water District • La Habra Heights County Water District • Laguna Beach County Water District • Leucadia Wastewater District • Liberty Utilities (Park Water) Corp. • Los Angeles Department of Water and Power • Meeks and Daley Water Company • Metropolitan Water District of Southern California • Mission Springs Water District • Mojave Water Agency • Moulton Niguel Water District • Myoma Dunes Mutual Water Company • Olivenhain Municipal Water District • Orange County Water District • Padre Dam Municipal Water District • Rainbow Municipal Water District • Rancho California Water District • Riverside County Flood Control and Water Conservation District • San Antonio Water Company • San Gabriel County Water District • San Gabriel Valley Water Company • San Geronio Pass Water Agency • South Coast Water District • South Orange County Wastewater Authority • Southern California Water Company • Temescal Valley Water District • Three Valleys Municipal Water District • Trabuco Canyon Water District • Valley Center Municipal Water District • Valley County Water District • Ventura County Watershed Protection District • Walnut Valley Water District • Water Replenishment District of Southern California • West Basin Municipal Water District • West Valley Water District • Western Municipal Water District • Western Riverside County Regional Wastewater Authority • Whitewater West Industries • Yorba Linda Water District • Yucaipa Valley Water District



The Leighton Difference

Our staff is very familiar with engineering practices and specifications for water infrastructure projects and understands that geotechnical engineering, and material testing services are critical to the success of all construction and design projects. Our successful history providing these services to CVWD and other water districts demonstrates our ability to provide the following:



Extensive local resources. Leighton has longstanding roots in Coachella Valley, having provided geotechnical engineering and materials testing services for hundreds of projects throughout the region. We have a deep roster of locally experienced field Soils Technicians, ICC deputy inspectors, and laboratory personnel, as well as three southern California laboratories. Our close proximity to your service area and available resources will allow us to manage the required work more efficiently.



Practical solutions to geotechnical constraints. With a project team rich in local geotechnical and geological experience, we can provide practical and cost-effective solutions to any geotechnical, geologic, or materials challenges that may arise. We have a solid reputation and excellent relationships with personnel at various local cities and state agencies.



Communication and responsiveness. The foundation of our approach is our commitment to thorough and effective communication and responsiveness. Our communications systems keep you informed of the latest developments and progress on your projects. As Project Manager, Bashir will be your point of contact, will respond directly to your requests and inquiries and will immediately communicate and meet with the project team to address any unforeseen issues.



Job site collaboration. Leighton implements a proactive approach to all projects by attending construction meetings and reviewing bid documents and submittals as necessary to provide clarification or solutions. We will work with CVWD's inspectors and project manager/engineer regarding scheduled field soil testing and resolve any pending issues to keep the project on time and alleviate unnecessary activities.



Cost effectiveness/budget control. Our approach is to provide a thorough review of the project documents and include sufficient time for our engineers and technician/inspectors to perform the necessary services and be able to foresee or deal effectively with arising issues. We consistently provide our clients cost savings by minimizing construction delays and change orders related to unexpected soils and materials issues. As a standard in-house procedure, our project managers always closely monitor field activities with an eye toward mitigating redundant field inspection and testing time to stay within budget.



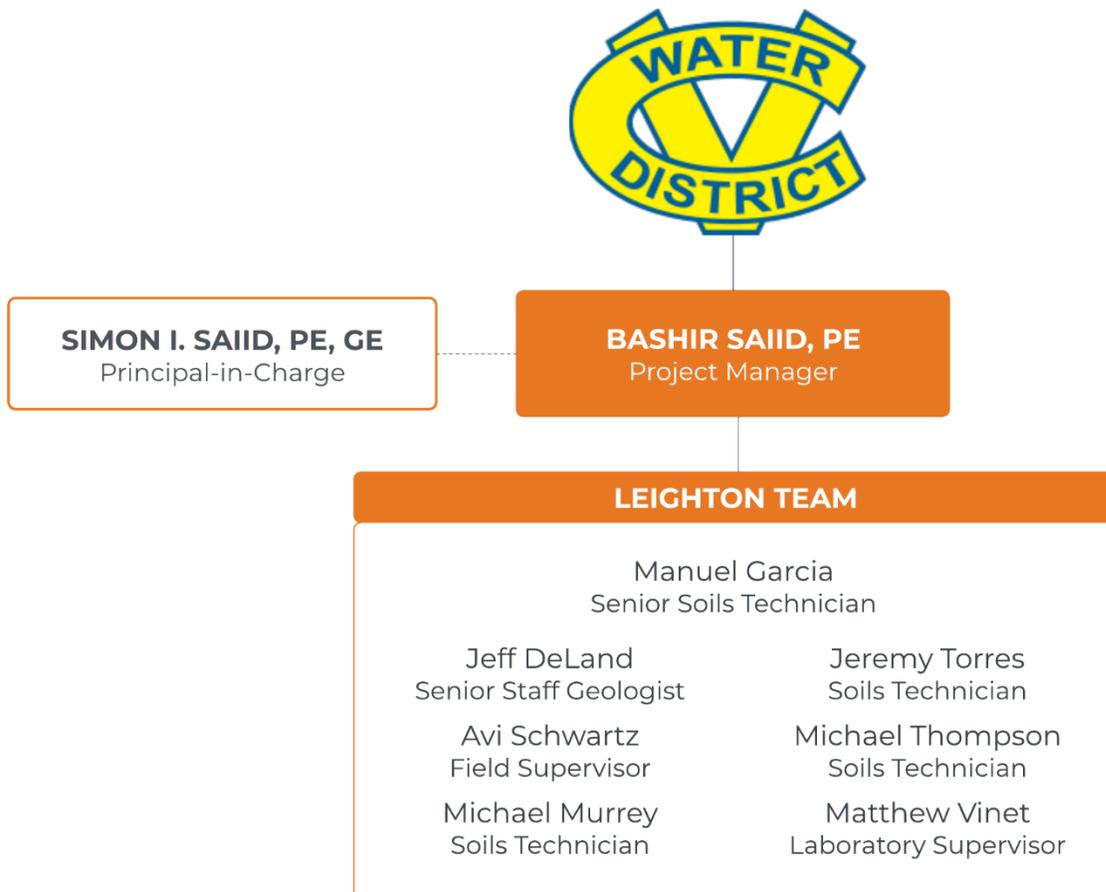
Reporting. Leighton has experience and tested operating procedures in-place to provide you with services you need in an efficient and economical manner. We use MetaField as a networked/integrated Field Information Management System (FIMS) and Laboratory Information Management System (LIMS). This eliminates the need for paper in the field, laboratory and/or office; although we can print out anything needed at any time. This system allows us to e-mail data typically as a PDF, or post data on a web page for your independent and secure access, real time.



2 | Project Team Qualifications

Our assigned personnel for this project are very familiar with the safe practices required when working around all types of construction equipment that will be utilized on this project, including equipment for roadway construction and trench excavation. Our field personnel have years of similar construction work experience and are up to date on relevant industry standards of practice for the execution of quality materials testing services. **Their recent experience during the construction of SR-111 and UPRR Grade Separation Project makes them uniquely qualified for this project and familiar with soils conditions on this site.** Our selected field personnel are able to understand and interpret project construction plans and specifications and applicable standards for Public Works Construction (Greenbook, Caltrans Standard Plans and Specifications; and California Occupational Safety and Health Administration (OSHA) Construction Safety Orders. Our field technicians have repeatedly demonstrated their ability to interact professionally with contractors, engineers, inspectors, and the public at large. They typically coordinate with other project team members; promote quality customer service and a professional image of the District; and respond promptly and courteously to requests. All of our technicians work under the responsible charge of Mr. Bashir Saïid who is a registered professional civil engineer.

The team that has been specifically selected for this project and expected role is provided in the chart below. The following pages contain detailed resumes for the primary staff and certifications for all laboratory and field staff. Key staff will be available to the extent proposed for the duration of the required services. Leighton will make no changes in key staff without prior written consent from the District.





A Snapshot of Leighton's CVWD Team and their Role

Below we have identified key and support personnel. Resumes for key personnel, including projects in which they provided a primary role within the last five years, are provided on the pages that follow.

Key Personnel



Years of Exp: 17

BASHIR SAIID, PE // PROJECT MANAGER + PRIMARY POINT OF CONTACT

CA Civil Engineer – 93187 // BS, Mathematics (minor in Geology)

- Verify that our deliverables fully meet project requirements
- Attend project team meetings and respond to any geotechnical/materials testing related questions.
- Provide QC review of field and laboratory test reports.
- Perform project management and provide progress reports and budget control.



Years of Exp: 34

SIMON SAIID, PE, GE // PRINCIPAL IN CHARGE

CA Geotechnical Engineer – 2641 // CA Civil Engineer – 62375 // MS, Civil Engineering // BS, Civil Engineering

- Provides senior review and technical support as needed.
- Ensures Leighton has adequate resources assigned.
- Meet with PM as needed to discuss project progress and required staffing.



Years of Exp: 19

MANUEL GARCIA // LEAD SOILS TECHNICIAN

Nuclear Gauge Certification, OSHA CFR 1910.120 40-Hour Training // BS, Civil Engineering

- Responsible for daily observation and testing of compacted fill materials
- Communicate with contractor and District inspector regarding planned daily construction activities and scheduling.
- Prepare daily reports and communicate with Leighton project manager regarding any site issues.

Field Staff + Technicians

- *Jeff DeLand, Sr. Staff Geologist*
- *Avi Schwartz, Field Supervisor*
- *Michael Murrey, Soils Technician*
- *Jeremy Torres, Soils Technician*
- *Michael Thompson, Soils Technician*
- *Matthew Vinet, Laboratory Supervisor*

Responsibilities / Proposed Duties

Our team of support staff will provide the following for the proposed contract.

- *Geotechnical observation and compaction.*
- *Soils verification and QC Laboratory testing*
- *Prepares and submits daily field reports.*
- *Attend site safety and progress meetings.*



34

Years of Industry Exp.

17 Years with Leighton



MS, Civil Engineering,
Rensselaer Polytechnic
Institute - 1989

BS, Civil Engineering,
Rensselaer Polytechnic
Institute - 1987



CA Geotechnical Engineer
#2641

CA Civil Engineer #62375

Simon Saiid, PE, GE

Principal-in-Charge

Simon Saiid has engineering design and construction supervision experience for the civil and geotechnical aspects of projects related to infrastructure, public facilities, and land development. Mr. Saiid is responsible for geotechnical engineering analyses and quality control. He is practiced in geotechnical site investigations, shallow and deep foundation design, buttress and structural landslide mitigation, seismic hazard evaluations and mitigation design, grading control, ground improvement, pipelines, pavement design, and forensic evaluations.

SR-111 and UPRR Grade Separation Project, Community of Mecca, Coachella Valley Area, CA (PN B8-0664). Project manager/geotechnical engineer during construction of a new 5-span bridge over the Union Pacific railroad (UPRR) tracks, State Route 111, and Hammond Avenue, in the community of Mecca. Leighton provided all materials testing services for all aspects of the project including testing of soils, HMA and structural concrete. Leighton maintained close coordination with project CM and addressed wet soils condition during preparation of footing subgrade for retaining walls and installation of water and sewer pipeline. Our timely response was greatly appreciated by all project team members.

Whitewater Channel Lining, La Quinta, CA. Geotechnical engineer provided geotechnical engineering recommendations and performed QA testing of slope construction/concrete lining of Whitewater Channel associated with the construction of Adams Street Bridge and La Quinta High School. Responsibilities included addressing sloughing conditions of cut slopes during construction to allow for cost effective procedures and compliance with CVWD standards.

CVWD's Highway (SR) 86 Pump Station, Oasis Area, Riverside County, CA. Project manager/geotechnical engineer for a proposed Pump Station near the northwest shore of the Salton Sea. The project entails the design and construction of a new pump station and connecting pipelines. Due to loose surficial fill soils and potentially liquefiable saturated sand layers, a cost-effective ground improvement measure consisting of a combination of an over-excavation of near surface soils and placement of a Geogrid reinforcement layer was recommended to mitigate the potential for excessive differential settlement.

CVWD's Proposed Chlorination System Upgrade Project, Water Reclamation Plant Nos. 7 and 10, Cities of Indio and Palm Desert, CA. Project Manager/ Geotechnical Engineer performed a subsurface investigation and provided geotechnical recommendations for design and construction of the proposed improvements.

Hexavalent Chromium Treatment Facilities, Well Sites 12, 16, 17, 18, 19 and Resin Regeneration Facility, Coachella Water Authority (CWA), Coachella, CA. Project Manager/Geotechnical Engineer performed a subsurface investigation and provided geotechnical recommendations for design and construction of the proposed improvements which included the addition of a treatment facility for the use of Strong-Base Anion Exchange Technology (SBA) or alternative treatment technology at five well sites (Wells 12, 16, 17, 18 and 19).

MSWD's Terrace Way Reservoir Tank Site, Desert Hot Springs, County of Riverside, CA. Project Manager/ Geotechnical Engineer responsible for a subsurface investigation for the design and construction of proposed reservoir improvements including safety upgrades, drainage structures, retaining walls, and minor pavement.



17

Years of Industry Exp.

15 Years with Leighton



BS, Mathematics (Geology
minor), University at
Albany



CA - Civil Engineer # 93187

CPN Nuclear Gauge
Certificate

Bashir Saiid, PE

Project Manager

Bashir has more than 17 years of performing construction soils and materials testing as well as geotechnical engineering. He serves as key personnel providing project management, safety planning, field soils classification and data collection, lab test results evaluation, geotechnical analysis, and report preparation. His development and growth from a field technician to a senior staff engineer allows him to understand the full project life cycle and support Leighton's turnkey geotechnical and materials services.

CVWD's Sewer Pipeline Rehabilitation Project, Coachella Valley Area, Riverside County, CA. Engineer for a rehabilitation project of two pipeline segments located at the Esmeralda Resort and PGA West Development in the cities of Indian Wells and La Quinta, respectively. The results of the investigation indicated the presence of regional subsidence phenomena in this area. Geotechnical recommendations were provided to reduce future settlement of the new/replacement pipelines.

CVWD's Proposed Morongo Creek Channel, Palm Springs, CA. Staff Engineer for Geotechnical Exploration in support of design for the Morongo Creek Channel. Provided site coordination, field classification and sampling of soils.

Joshua Basin Water District Water Supply Pipeline, Joshua Tree, CA. Staff Engineer for Geotechnical Investigation for a 6-mile pipeline. Provided site coordination, field classification and sampling of soils, as well as PID readings of soil samples. The investigation also included data analysis, design parameters and geotechnical recommendations. The project also included trenching and designing for future water ponds.

Water Reclamation Plant Nos. 4, 7, and 10 Chemical System Upgrade Project, Indio, CA. Staff Engineer for field investigation and report data including summary of geologic conditions. Geotechnical exploration and report for installation of sulfur dioxide gas scrubbers at three water reclamation plants. Scrubbers are to be founded on pad type foundation exerting minimal loads. Water Reclamation Plants Nos. 4, 7, and 10 are located in the Cities of Thermal, Indio, and Palm Desert, respectively.

West Valley Sewer Conveyance Project, Desert Hot Springs, CA. Geotechnical exploration for 16,500 linear feet (LF) of dual 12-inch diameter Force Main and 33-inch and 36-inch diameter gravity sewer pipelines. Field exploration included sixteen (16) hollow-stem auger borings to a maximum depth of 31.5 feet. The pipeline will generally be installed at a depth of 6 to 24 feet below ground surface.

EVMWD Manhole 3004 Evaluation of Settlement, Lake Elsinore, CA. Staff engineer for an investigation associated with MH 3004 soils collapse. The results of the evaluation indicated the presence of loose fill and void near MH that was caused by prior collapse within the manhole. Recommendations for compaction grouting were provided to prevent future pavement distress/collapse.

**19**

Years of Industry Exp.

19 Years with LeightonBS, Civil Engineering,
Arizona State University

Nuclear Gauge Certification

OSHA CFR 1910.120 40-
Hour Training

Manuel Garcia

Lead Soils Technician

Manuel has 19 years of experience performing soils and materials testing and inspection. Manuel is a resident of the City of Indio and very knowledgeable with the local requirements as it relates to soil conditions. He has experience with local agencies throughout Riverside County, as well as with other public infrastructure, commercial and residential developments.

SR-111 and UPRR Grade Separation Project, Community of Mecca, Coachella Valley Area, CA (PN B8-0664). Senior Soils Technician during construction of a new 5-span bridge over the Union Pacific railroad (UPRR) tracks, State Route 111, and Hammond Avenue, in the community of Mecca. Manuel provided field observations and compaction testing during preparation of footing subgrade for retaining walls and installation of water and sewer pipeline. His experience on site soils on this project is very relevant and beneficial to CVWD upcoming project.

2.5 MG Verano Reservoir 3570-1, Cathedral City, CA. Soils Technician provided geotechnical and materials testing services during construction of a 2.5-million-gallon reservoir, including site grading, water pipeline and connections trench backfill

EMWD, Murrieta Road Transmission Pipeline, Murrieta, CA. Soils technician for 6,800 lineal feet of 36-inch diameter transmission pipeline and related appurtenances along Murrieta Road between the Perris II Desalter and La Piedra Road. This upgrade will allow more conveyance from the Desalter to the surrounding service area within the Perris Valley South Pressure Zone.

EMWD, Potable Well #38 Replacement, San Jacinto, CA. Soils technician. This project repurposed the existing Well 28 building into a disinfection building and constructed a new building for Well 38 with associated piping, site walls and site improvements including asphalt drive areas and Edison vault. The new structures were primarily single-story CMU wall buildings with metal roofing.

EMWD, Roripaugh Offsite Water MHA, Temecula, CA. Soils Technician for installation of approximately 2,442 lineal feet (LF) of 12-inch diameter PVC pipeline with appurtenances. The proposed pipeline will be located within Murrieta Hot Springs Road at depths of approximately 5 to 16 feet below existing street grades.



Support Personnel

Jeffrey Deland // Senior Staff Geologist

Years of Experience: 20

- Education:** ▪ BS, Geology, California State Polytechnic University, Pomona
- Certifications:** ▪ Nuclear Gauge Certification
- 40-Hour HAWWOPER

Mr. DeLand has 20 years of experience in engineering geology, observation, testing, documenting, and reporting on work performed by contractors involved in earthwork grading, and foundation and utility construction. His experience includes preliminary geotechnical investigations, rock rippability studies, rock slope stability analysis, environmental site assessments, groundwater contamination investigations, and environmental remediation.

Avi Schwartz // Field Supervisor

Years of Experience: 23

- Education:** ▪ BS, Geology, San Diego State University
- Certifications:** ▪ CA Professional Geologist - 7856
- Nuclear Gauge Certification
- OSHA CFR 1910.120 40-Hour Training

Mr. Schwartz' experience in engineering geology includes geotechnical feasibility for planning purposes and preliminary geotechnical investigations to develop grading and foundation recommendations for site-specific public and private sector projects, infrastructure and large acreage master-planned developments. Mr. Schwartz has experience in detailed field mapping, fault investigations, aerial photographic analyses, subsurface investigation, analysis of geotechnical data and the coordination of field personnel and equipment.

Michael Murrey // Soils Technician / Geologist

Years of Experience: 15

- Education:** ▪ BS, Geology & Environmental Geology, California State University, San Bernardino

Michael is a recent graduate with more than two years of experience with Leighton and a bachelor's degree in both Geology and Environmental Geology. During his time with Leighton, he has worked on numerous projects in the Greater Coachella Valley area providing soils testing and geologic studies.

Jeremy Torres // Soil Technician / Geologist

Years of Experience: 2

- Certifications:** ▪ Nuclear Gauge Certification
- Caltrans Certifications: 125, 216, 231
- OSHA CFR 1910.120 40-Hour Training

Mr. Torres has more than 2 years of experience providing geotechnical field exploration and testing services. He has been involved with numerous developments for commercial utility, residential, transportation, and institutional projects. His geotechnical experience includes field observations and compaction testing during rough grading, trench backfill and roadway improvements for numerous projects for public agencies and private developers.



Mike Thompson // Soils Technician

Years of Experience: 35

- Certifications:**
- Caltrans Testing Method: 125 AGG – Sampling Aggregates
 - CFR 1910.120 OSHA 40-Hour Training, 8-Hour Refresher Training, and 8-Hour Supervisor Training

Mr. Thompson has worked on a number of large and complex multi tract grading projects, public works and transportation projects providing field testing of soils, aggregate, concrete, asphalt sampling and testing. During his time with Leighton (>20 years), he has worked on more than a 100 projects in the Greater Coachella Valley area providing soils and materials testing services.

Matthew Vinet // Laboratory Supervisor

Years of Experience: 12

- Education:**
- BS, Civil Engineering, California State Polytechnic University, Pomona
- Certifications:**
- ACI Concrete Level I Laboratory Technician
 - ACI Concrete Grade I Field Testing Technician
 - ACI Concrete Strength Testing Technician
 - CALTRANS 105, 106, 201, 202, 206, 207, 217, 226, 227, 229, 304, 309, 366, 382

Matthew has more than a decade of professional experience performing a variety of soil and material testing procedures. His responsibilities include performing testing procedures in accordance with current standards, reviewing and finalizing data, communicating results with clients and project managers, ensuring lab equipment is calibrated and managing laboratory staff. Matt support of field staff by providing comprehensive and detailed reports neatly and on a time.



3 | Understanding the Project and Approach to Performing the Required Services

Project Understanding and Approach

Project Description: The Project consists of installing approximately 26,763, linear feet of 30-inch, 24-inch, 18-inch, 12-inch, 8-inch, and 6-inch diameter water main pipes with restrained joints, including valves, fittings, polyethylene encasement, backfill and compaction of backfill, surface restoration and all necessary appurtenances. The pipeline work also includes excavation of jacking and receiving pits, shoring of trenches and pits as required, pipe jacking operations, and all related backfill and compaction. Portions of the pipeline will cross above ground the Coachella Valley Stormwater Channel, Buchanan Street Channel and Lincoln Street Channel within a steel casing with pipe bridge supports, rip rap removal and replacement, and concrete slope protection as indicated in the Contract Documents. We also understand that the soil and concrete testing services will be required during the installation of mainline piping, and concrete foundations for the above ground carrier pipe concrete supports, PRS concrete pad, and channel concrete slope protection.

Project Review: Our first task will consist of a thorough review of project plans and specifications and fully understand field and laboratory testing requirements/scope. We will also discuss project schedule and sequencing with District Inspector and contractor so we can plan our resources accordingly.

Value Engineering (optional): Value engineering may not be prudent for all projects, but often leads to cost savings and improvement in project value, particularly for construction of underground utilities. If requested by the District, we can provide such service for this project for minimal additional cost. Geotechnical value engineering can be provided for projects where the potential benefit of cost savings and/or improved value outweighs the cost of additional geotechnical review and analyses. Such services are typically provided for projects for which we are not the original Geotechnical Engineer of Record, such as this project, where we can review the provided geotechnical recommendations with a different or new perspective. We can often provide revised recommendations to reduce costs and improve quality, especially on this project where we have had direct and very relevant construction experience with subsurface conditions during construction of underground utilities associated with the recently completed *SR-111 and UPRR Grade Separation Project*.

Potential Safety Issues and/or Risks: As the case in any trench excavation project, safety issues are always the main concern for construction workers and inspectors. Our field personnel have the experience and required training to be an asset to you safety team due to their experience with similar soils conditions and shallow groundwater table.

Geotechnical Concerns: Due to anticipated clayey soils conditions and shallow groundwater table, stabilizing bottom of excavation, shoring, and compacting very moist clayey soils may require special construction measures. Our staff are accustomed to such geologic conditions and will be able to promptly respond to any unexpected field condition.

Quality Assurance/Quality Control (QA/QC): Leighton has a quality assurance program, consisting ultimately of principal review of all deliverables before submittal to our clients or oversight agencies, that has proven to be successful. Quality control is implemented in each step of our deliverables production. The quality of our services is controlled using a continuous improvement process based on feedback from our staff and thorough discussions during our in-house monthly training meetings. The quality of our



laboratory is controlled using certification programs from California Division of the State Architect, Caltrans (various districts), AASHTO Materials Reference Laboratory (AMRL), and others. These quality control procedures are part of our standard operation, and our project manager is responsible for compliance.

Deliverables: Leighton reports of compaction and materials testing and field and laboratory test results indicating compliance with project plans, specifications, and geotechnical recommendations will be provided as required. These reports will be reviewed and distributed to the project team as needed. Field reports documenting our field observation and testing results will be provided daily to your field representative.

Project Management and Budget Control

Budget Control | To estimate cost and budget for a specific task order, we use a work breakdown structure (WBS) that mirrors the tasks comprising the scope of work. The WBS is generated with desktop software that identifies current unit costs for labor and outside services. A well-planned scope of work is the first step in controlling project costs and fees for engineering services.

Leighton's project management software (Deltek Vision) is an interactive real time tool that provides desktop dashboard resource planning and allocation for project forecasting as well as tracking of accrued charges and budget. The project manager can track work progress and charges on a weekly basis and compare them to the task and overall project budget alerting him to milestones. Invoicing is done directly from the project management system and timesheet database, and available on the project manager's dashboard. Leighton will invoice monthly and at milestone certifications.

Using real-time accounting, our project manager can have a snapshot of costs at any time. Our project manager will work closely with the District to manage costs and keep District personnel informed about our progress and the remaining budget for a given task order. We will not exceed an agreed-upon budget without advanced written notice from appropriate District personnel. To the extent desired by the District, we will also communicate with you to keep you aware of our progress on authorized tasks, including schedule and budget projections (as appropriate).

Field Control | Leighton uses MetaField as a networked and integrated Field Information Management System (FIMS) and Laboratory Information Management System (LIMS). These management systems eliminate the need for paper in the field, laboratory, and/or office; although, we can print and submit hard copies of any forms or documents that you require. Our field staff is equipped with company-provided cell phones, networked laptops, tablets and Bluetooth printers (when necessary). This system allows us to send or post data on a web page for your independent and secure access, in real time.

Field staff will be mobilized from our Palm Desert office, with support from our other Southern California offices, if need be. Field staff personnel are dispatched using MetaField, which e-mails their assignments to their phone and/or tablet, so they can see the site location, site-specific contact persons, and prior data acquired for that site. Field staff either accepts or declines assignments based on their current work backlog, and scheduling is viewed on a MetaField calendar for project managers to see. Soil compaction testing reports will be submitted in CVWD's document management program, MasterWorks. Reports will include, but not limited to, geotechnical results, opinions, renderings, photos, certificates of materials tested.



Assumptions

Our budget is based on normal daylight workday shifts of 8 hours per day, 40 hours per week, Monday through Friday except holidays. We assume that for the mainline pipeline, 200 linear feet of pipeline will be installed per day (133 construction days). Compaction tests will be performed at random depths, and at random intervals not to exceed 300 feet, as directed by your field inspector. Overtime is not included in our budget. Overtime work (over 8 hours per day, weekends or holidays). Our estimated budget is based primarily on provided schedule of hours/tasks provided in the RFP. However, the actual amount of time, and our associated fees, will be dependent on weather, exposed subsurface conditions, requests of the District and actual contractor's schedule, sequencing, pace and efficiency. As such, our services will be performed based on time-and-expense basis and we assume that the District will approve all changes orders for any additional work.



4 | Fee Proposal and Other Cost Considerations

A resource allocation matrix broken down by tasks is provided in Table 1 below. This table list correspondent hours and rates for staff assigned to the project including anticipated laboratory testing and all reimbursable expenses.

Leighton Consulting, Inc.

Table 1 Estimated Fees

CVWD Avenue 66, Phase 1B, Phase 2, and Lincoln Street Water Main Project
Geotechnical Observation and Testing

Proposal # 042.P000019740

TASK DESCRIPTION	RATE	UNITS	COST	
Pre-Construction Meeting/Project Review				
Senior Project Engineer	Project Setup	\$198.00 / hour	3	\$594.00
Field Supervisor	Precon Meeting	\$139.00 / hour	3	\$417.00
Project Administrator/Word Processor		\$77.00 / hour	2	\$154.00
			SUBTOTAL	\$1,165.00
Field Observation and Sampling				
Field Soils/Material Tester (Prevailing Wage)	Trench Backfill (133 days @ 200 LF/day)	\$134.00 / hour	1064	\$142,576.00
Field Soils/Material Tester (Prevailing Wage)	AC overlay/Connections (4 weeks part time)	\$134.00 / hour	80	\$10,720.00
Field Soils/Material Tester (Prevailing Wage)	Concrete Sampling (2 sets of 10 cylinders)	\$134.00 / hour	16	\$2,144.00
Vehicle Usage	Truck/Equipment	\$16.00 / hour	1160	\$18,560.00
Field Supervisor	Field Qc/Dispatch	\$139.00 / hour	32	\$4,448.00
			SUBTOTAL	\$178,448.00
Laboratory Testing				
Atterberg limits (ASTM D4318) 3 points		\$150.00 / each	2	\$300.00
Particle size - Sieve only 1½ inch to #200, (ASTM D6913/CTM 202)		\$135.00 / each	8	\$1,080.00
Sand Equivalent (SE, ASTM D2419/CTM 217)		\$105.00 / each	6	\$630.00
Modified Proctor compaction 4 inch mold (Methods A & B ASTM D1557)		\$220.00 / each	8	\$1,760.00
Modified Proctor compaction 6 inch mold (Method C ASTM D1557)		\$245.00 / each	2	\$490.00
R-Value (AASHTO T190/ASTM D2844/CTM 301) untreated soils/aggregates		\$310.00 / each	2	\$620.00
Sulfate screen (Hach®)		\$30.00 / each	2	\$60.00
Extraction by ignition oven, percent asphalt (AASHTO T308/ASTM D6307/CTM 382)		\$150.00 / each	3	\$450.00
Maximum density - Hveem (CTM 308)		\$200.00 / each	3	\$600.00
Pick-up & delivery – (weekdays, per trip, <50 miles from Leighton office)		\$90.00 / each	12	\$1,080.00
Concrete cylinders compression (ASTM C39 6" x 12") (4" x 8")		\$35.00 / each	20	\$700.00
			SUBTOTAL	\$7,770.00
Project Management/Report				
Senior Principal	Senior Review	\$293.00 / hour	8	\$2,344.00
Senior Project Engineer	Results and Data Review with CVWD PM	\$198.00 / hour	24	\$4,752.00
Senior Project Engineer	Progress Meetings (15 @ 1 hour each)	\$198.00 / hour	15	\$2,970.00
Senior Staff Engineer	Field Data Review	\$156.00 / hour	12	\$1,872.00
Project Administrator/Word Processor	Admin Support	\$77.00 / hour	24	\$1,848.00
			SUBTOTAL	\$13,786.00
			TOTAL ESTIMATED COST	\$201,169.00



5 | Project Schedule

We understand that the construction of this project is expected to take approximately 500 Calendar Days to complete (by April 30, 2025). The award of a construction contract is expected to take place by November 14, 2023.

Leighton personnel assigned to this project are ready to start immediately working on this project upon notification and already familiar with site geologic conditions and testing requirements. We request at least two working days advance notice when scheduling our field personnel at the commencement of construction; work thereafter may be scheduled with one working day (minimum 24 hour) notice. We anticipate our personnel will be onsite full time or periodically for observation and testing, or as requested by your Inspector. The assigned personnel will be available for the duration of the project.