

CONSULTANT AGREEMENT

THIS AGREEMENT is made this **27** day of **September** 2022, by the GARDEN GROVE SANITARY DISTRICT, a California special district ("DISTRICT"), and **SA Associates**, a California Corporation ("CONSULTANT").

RECITALS

The following recitals are a substantive part of this Agreement:

1. This Agreement is entered into pursuant to Board authorization dated **September 27, 2022**.
2. DISTRICT desires to utilize the services of CONSULTANT to provide **Civil Engineering Design Services of Garden Grove Sanitary District Sewer System Rehabilitation Plan Phase 1 - Sewer Main Replacement Project No. 4 (CP 1329000)**
3. CONSULTANT is qualified by virtue of experience, training, education and expertise to accomplish services.

AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **Term of Agreement:** This Agreement shall cover services rendered from date of this Agreement until the services are completed, compensation reaches the not to exceed amount, or sooner terminated per Section 3.5
2. **Services to be Provided:** The services to be performed by CONSULTANT shall consist of the services as further specified in CONSULTANT'S proposal attached hereto as **Exhibit A** and incorporated herein by reference. CONSULTANT agrees that is provision of Services under this agreement shall be within accepted accordance with customary and usual practices in CONSULTANT'S profession. By executing this Agreement, CONSULTANT warrants that it has carefully considered how the work should be performed and fully understands the facilities, difficulties, and restrictions attending performance of the work under this agreement.
3. **Compensation.** CONSULTANT shall be compensated as follows:
 - 3.1 Amount. Compensation under this Agreement shall be per fee schedule included in the Proposal.
 - 3.2 Not to Exceed. Compensation under this Agreement shall not exceed **\$245,000**.

- 3.3 Payment. For work under this Agreement, payment shall be made per monthly invoice. For extra work not a part of this Agreement, a written authorization by DISTRICT will be required.
- 3.4 Records of Expenses. CONSULTANT shall keep complete and accurate records of payroll costs, travel and incidental expenses. These records will be made available at reasonable times to DISTRICT.
- 3.5 Termination. DISTRICT and CONSULTANT shall each have the right to terminate this Agreement, without cause, by giving thirty-(30) days written notice of termination to the other party. If DISTRICT terminates the project, then the provisions of paragraph 3 shall apply to that portion of the work completed.

4. **Insurance Requirements**

- 4.1 Commencement of Work CONSULTANT shall not commence work under this Agreement until all certificates and endorsements have been received and approved by the DISTRICT. All insurance required by this Agreement shall require the carrier or agent to notify the DISTRICT of any material change, cancellation, or termination at least thirty (30) days in advance.
- 4.2 Workers Compensation Insurance For the duration of this Agreement, CONSULTANT and all subcontractors shall maintain Workers Compensation Insurance in the amount and type required by law, if applicable. The insurer shall waive its rights of subrogation against the DISTRICT, its officers, officials, agents, employees, and volunteers.
- 4.3 Insurance Amounts CONSULTANT shall maintain the following insurance for the duration of this Agreement:
 - a) Commercial general liability in the amount of \$1,000,000 per occurrence; (claims made and modified occurrence policies are not acceptable); Insurance companies must be admitted and licensed in California and have a Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT;
 - b) Automobile liability in the amount of \$1,000,000 per occurrence; (claims made and modified occurrence policies are not acceptable) Insurance companies must be admitted and licensed in California and have a Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT.
 - c) Professional liability in the amount of \$1,000,000 per claim; Insurance companies must be acceptable to DISTRICT and have an AM Best's Guide Rating of A-, Class VII or better, as approved by the DISTRICT. If the policy is written on a "claims made" basis, the policy shall be continued in full force and effect at all

times during the term of the agreement, and for a period of three (3) years from the date of the completion of services provided. In the event of termination, cancellation, or material change in the policy, professional/consultant shall obtain continuing insurance coverage for the prior acts or omissions of professional/consultant during the course of performing services under the term of the agreement. The coverage shall be evidenced by either a new policy evidencing no gap in coverage, or by obtaining separate extended "tail" coverage with the present or new carrier.

An Additional Insured Endorsement, **ongoing and completed operations**, for the policy under section 4.3 (a) shall designate DISTRICT, its officers, officials, employees, agents, and volunteers as additional insureds for liability arising out of work or operations performed by or on behalf of the CONSULTANT. CONSULTANT shall provide to DISTRICT proof of insurance and endorsement forms that conform to DISTRICT's requirements, as approved by the DISTRICT.

An Additional Insured Endorsement for the policy under section 4.3 (b) shall designate DISTRICT, its officers, officials, employees, agents, and volunteers as additional insureds for automobiles owned, lease, hired, or borrowed by CONSULTANT. CONSULTANT shall provide to DISTRICT proof of insurance and endorsement forms that conform to DISTRICT's requirements, as approved by the DISTRICT.

For any claims related to this Agreement, CONSULTANT's General Liability and Automobile Liability insurance coverage shall be primary insurance as respects to DISTRICT, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the DISTRICT, its officers, officials, employees, agents, or volunteers shall be excess of the CONSULTANT's insurance and shall not contribute with it.

If CONSULTANT maintains higher insurance limits than the minimums shown above, CONSULTANT shall provide coverage for the higher insurance limits otherwise maintained by the CONSULTANT.

5. **Non-Liability of Officials and Employees of the DISTRICT.** No official or employee of DISTRICT shall be personally liable to CONSULTANT in the event of any default or breach by DISTRICT, or for any amount, which may become due to CONSULTANT.
6. **Non-Discrimination.** CONSULTANT covenants there shall be no discrimination against any person or group due to race, color, creed, religion, sex, marital status, age, handicap, national origin or ancestry, in any activity pursuant to this Agreement.

7. **Independent Contractor.** It is understood and agreed that CONSULTANT, including CONSULTANT's employees, shall act and be independent contractor(s) and not agent(s) or employee(s) of DISTRICT, and that no relationship of employer-employee exists between the parties. CONSULTANT's assigned personnel shall not obtain or be entitled to any rights or benefits that accrue to, or are payable to, DISTRICT employees, and CONSULTANT shall so inform each employee organization and each employee who is hired or retained under this Agreement. DISTRICT is not required to make any deductions or withholdings from the compensation payable to CONSULTANT under the provisions of this Agreement, and is not required to issue W-2 Forms for income and employment tax purposes for any of CONSULTANT's assigned personnel. CONSULTANT hereby expressly assumes all responsibility and liability for the payment of wages and benefits to its assigned personnel, and all related reporting and withholding obligations. CONSULTANT hereby agrees to indemnify and hold DISTRICT harmless from any and all claims or liabilities that DISTRICT may incur arising from any contention by any third party, including, but not limited to, any employee of CONSULTANT or any federal or state agency or other entity, that an employer-employee relationship exists by reason of this Agreement, including, without limitation, claims that DISTRICT is responsible for retirement or other benefits allegedly accruing to CONSULTANT's assigned personnel.
8. **Compliance With Law.** CONSULTANT shall comply with all applicable laws, ordinances, codes and regulations of the federal, state and local government. CONSULTANT shall comply with, and shall be responsible for causing all contractors and subcontractors performing any of the work pursuant to this Agreement, if any, to comply with, all applicable federal and state labor standards, including, to the extent applicable, the prevailing wage requirements promulgated by the Director of Industrial Relations of the State of California Department of Labor. The DISTRICT makes no warranty or representation concerning whether any of the work performed pursuant to this Agreement constitutes public works subject to the prevailing wage requirements.
9. **Disclosure of Documents.** All documents or other information developed or received by CONSULTANT are confidential and shall not be disclosed without authorization by DISTRICT, unless disclosure is required by law.
10. **Ownership of Work Product.** All documents or other information developed or received by CONSULTANT shall be the property of DISTRICT. CONSULTANT shall provide DISTRICT with copies of these items upon demand or upon termination of this Agreement.
11. **Conflict of Interest and Reporting.** CONSULTANT shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.
12. **Notices.** All notices shall be personally delivered or mailed to the below listed addresses, or to such other addresses as may be designated by written notice. These addresses shall be used for delivery of service of process.

(a) Address of CONSULTANT is as follows:

SA Associates
1130 West Huntington Drive, Unit 12
Arcadia, CA 91007

(b) Address of DISTRICT is as follows (with a copy to):

Engineering:	General Counsel
Garden Grove Sanitary Dist.	Garden Grove Sanitary District
P.O. Box 3070	P.O. Box 3070
Garden Grove, CA 92840	Garden Grove, CA 92840

13. **CONSULTANT'S Proposal.** This Agreement shall include CONSULTANT'S proposal, Exhibit "A" hereto, which shall be incorporated herein. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.
14. **Licenses, Permits and Fees.** At its sole expense, CONSULTANT shall obtain a **Garden Grove Business License**, all permits and licenses as may be required by this Agreement.
15. **Familiarity With Work.** By executing this Agreement, CONSULTANT represents that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all visible conditions there; and (3) it understands the facilities, difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any latent or unknown conditions materially differing from those inherent in the work or as represented by DISTRICT, it shall immediately inform DISTRICT of this and shall not proceed, except at CONSULTANT'S risk, until written instructions are received from DISTRICT.
16. **Time of Essence.** Time is of the essence in the performance of this Agreement.
17. **Limitations Upon Subcontracting and Assignment.** The experience, knowledge, capability and reputation of CONSULTANT, its principals and employees were a substantial inducement for DISTRICT to enter into this Agreement. CONSULTANT shall not contract with any other entity to perform the services required without written approval of the DISTRICT. This Agreement may not be assigned voluntarily or by operation of law, without the prior written approval of DISTRICT. If CONSULTANT is permitted to subcontract any part of this Agreement, CONSULTANT shall be responsible to DISTRICT for the acts and omissions of its subcontractor as it is for persons

directly employed. Nothing contained in this Agreement shall create any contractual relationship between any subcontractor and DISTRICT. All persons engaged in the work will be considered employees of CONSULTANT. DISTRICT will deal directly with and will make all payments to CONSULTANT.

18. **Authority to Execute.** The persons executing this Agreement on behalf of the parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the parties are formally bound.
19. **Indemnification.** To the fullest extent permitted by law, CONSULTANT agrees to indemnify and hold harmless DISTRICT and its elective or appointive boards, officers, agents, and employees from any and all liabilities, reimbursement of reasonable related expenses, or damages of any nature, including reimbursement of reasonable attorneys' fees, for injury or death of any person, or damages of any nature, including interference with use of property, to the extent found to be arising out of the negligence, recklessness and/or intentional wrongful conduct of CONSULTANT, CONSULTANT'S agents, officers, employees, subcontractors, or independent contractors hired by CONSULTANT in the performance of the Agreement. CONSULTANT'S responsibility to protect, defend, and hold harmless DISTRICT, shall not apply to the negligence, recklessness and/or wrongful conduct of DISTRICT or any of its elective or appointive boards, officers, agents, or employees.

This hold harmless agreement shall apply to all liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONSULTANT.
20. **Modification.** This Agreement constitutes the entire agreement between the parties and supersedes any previous agreements, oral or written. This Agreement may be modified only by subsequent mutual written agreement executed by DISTRICT and CONSULTANT.
21. **Waiver.** All waivers of the provisions of this Agreement must be in writing by the appropriate authorities of the DISTRICT and CONSULTANT.
22. **California Law.** This Agreement shall be construed in accordance with the laws of the State of California. Any action commenced about this Agreement shall be filed in the central branch of the Orange County Superior Court.
23. **Interpretation.** This Agreement shall be interpreted as though prepared by both parties
24. **Preservation of Agreement.** Should any provision of this Agreement be found invalid or unenforceable, the decision shall affect only the provision interpreted, and all remaining provisions shall remain enforceable.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS THEREOF, these parties hereto have caused this Agreement to be executed as of the date set forth opposite the respective signatures.

**"DISTRICT"
GARDEN GROVE SANITARY DIST.**

Dated: _____, 2022

By:

General Manager

ATTEST

**"CONSULTANT"
SA Associates**

Secretary

By: _____

Title: _____

Dated: _____, 2022

Dated: _____, 2022

APPROVED AS TO FORM:

If CONSULTANT/CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a partnership, Statement of Partnership must be submitted to DISTRICT

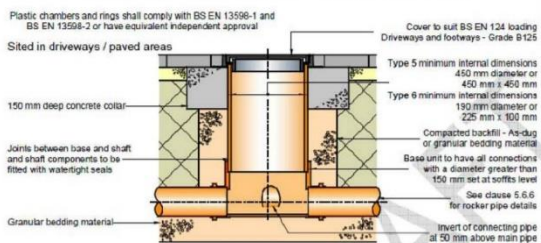
General Counsel

Dated: _____, 2022

**CITY OF GARDEN GROVE
PROPOSAL FOR
CIVIL ENGINEERING DESIGN SERVICES
OF GARDEN GROVE SANITARY DISTRICT
SEWER SYSTEM REHABILITATION PLAN PHASE I
SEWER MAIN REPLACEMENT PROJECT NO. 4**



FIGURE 10
TYPICAL ACCESS CHAMBER DETAIL - TYPE 5 and 6 (Flexible material detail)
Maximum depth from cover level to soffit of pipe 1 m, non entry



JULY 14, 2022



July 14, 2022

Jessica Polidori, Associate Engineer
City of Garden Grove Sanitary District
Public Works Department
13802 Newhope Street
Gardena, CA 92843

Subject: Proposal for Civil Engineering Design Services of Garden Grove Sanitary District Sewer System Rehabilitation Plan Phase I – Sewer Main Replacement Project No. 4

Dear Ms. Polidori:

In accordance with your Request for Proposal, we are pleased to submit our proposal to provide Design, Services of Garden Grove Sanitary District Sewer System Rehabilitation Plan Phase I – Sewer Main Replacement Project No. 4.

SA Associates is principal-owned firm, committed to engineering excellence and principal involvement. We are incorporated in the State of California. Project management and contract performance is personally directed by our principal who is a thoroughly experienced, licensed Professional Engineer with the State of California. We provide complete civil engineering services for municipalities, public and private water agencies, sanitary districts, and flood control districts. SA Associates' experience was gained through providing engineering services to several cities and agencies in the greater Los Angeles area for over 33 years.

We have been responsible for the design and construction of over 179 miles of sewer lines, totaling a construction cost of approximately \$56 million for several agencies in the greater Los Angeles area, including sewer rehabilitation projects for the cities of Alhambra, Arcadia, Baldwin Park, Cerritos, Compton, Cypress, Hermosa Beach, Inglewood, La Habra, La Palma, Long Beach Water Lynwood, Monterey Park, Norwalk, Pomona, Santa Monica, South Pasadena, Whittier, and Long Beach Water Department.

For the City of Manhattan Beach, we are currently preparing plans for Cycle 3 Sewer Infrastructure Improvements for approximately 1,160 FL of sewer reaches in various parts of the City. For the City of Monterey Park, we prepared plans and specifications for 91 spot repairs and 9,730 ft. of CIPP installation in various locations throughout the City, and also provided the design of Sewer and Water Improvements along Atlantic Boulevard.

Mr. Shahnawaz Ahmad, President of SA Associates and corporate officer, is the person authorized representative of the firm. He can be contacted at 626.821.3456 or by e-mail at sahmad@saassociates.net.

Our proposal is valid for 90 days from the date of this submission.

Thank you for the opportunity to submit our proposal. Should you have any questions or require any further information, please do not hesitate to contact the undersigned.

Very truly yours,

A handwritten signature in black ink that reads 'Shahnawaz Ahmad'.

Shahnawaz Ahmad, P.E., President
626.821.3456
sahmad@saassociates.net

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(OUR FEE PROPOSAL IS A SEPARATE SEALED ENVELOPE)

SECTION I: COMPANY OWNERSHIP DESCRIPTION

INTRODUCTION TO SA ASSOCIATES

SA Associates was established in May, 1989 as a principal-owned engineering firm with offices in Los Angeles and Orange Counties. SA Associates is a California Corporation. Our services cover a broad spectrum of engineering from investigation and feasibility reports to design, construction administration, and construction observation. SA Associates' experience was gained through providing engineering services to several cities and agencies in the greater Los Angeles area for the past 33+ years. All of SA Associates completed (or currently ongoing) projects are for public agencies. Our team of engineers and professionals are aware of the requirements of most public agencies and are familiar with public procedures.

Our main fields of specialty are:

- Wastewater Facilities Projects
- Water Supply Projects
- Civil Engineering
- Construction Management and Construction Inspection Services
- Feasibility Studies
- Flood Control and Drainage Projects
- Surveying Services

We have been responsible for the design and construction of over 179 miles of sewer lines, totaling a construction cost of approximately \$56 million for several agencies in the greater Los Angeles area, including sewer rehabilitation projects for the cities of Alhambra, Arcadia, Baldwin Park, Cerritos, Compton, Cypress, Hermosa Beach, Inglewood, La Habra, La Palma, Long Beach Water Lynwood, Monterey Park, Norwalk, Pomona, Santa Monica, South Pasadena, Whittier, and Long Beach Water Department.

For the City of Manhattan Beach, we are currently preparing plans for Cycle 3 Sewer Infrastructure Improvements for approximately 1,160 FL of sewer reaches in various parts of the City. For the City of Monterey Park, we prepared plans and specifications for 91 spot repairs and 9,730 ft. of CIPP installation in various locations throughout the City, and also provided the design of Sewer and Water Improvements along Atlantic Boulevard.

Our office locations are as follows:

CORPORATE OFFICE	ORANGE COUNTY OFFICE
1130 West Huntington Drive, Unit 12 Arcadia, CA 91007 Tel: 626.821.3456 Fax: 626.445.1461	1661 N. Raymond Ave, Suite 100 Anaheim, CA 92801 Tel: 714.871.9083 Fax: 714.871.3652

Two of our Engineers (Jorge Lovo and Adam Roesch), CAD Designers, and QA/QC person are based out of our Anaheim Office. Currently, they are still working from home due to COVID. They effectively communicate with each other online and through our Dropbox file sharing system. Our Anaheim staff may return to the office in the near future.

Our Project Manager, Mr. Shahnawaz Ahmad is based out of the Arcadia office. Our third Engineer, Raul Garibay, is also based in Arcadia.

SUBCONSULTANTS

We will be utilizing the services of the following subconsultants:

GEOTECHNICAL

GEO-ADVANTEC, INC.

457 W. Allen Avenue, Suite 113

San Dimas, CA 91773

909.305.0500

Shawn Ariannia, Ph.D., P.E., G.E, Principal

sariannia@geoadvantec.com

Geo-Advantec, Inc. (GAI) is a geotechnical engineering consultant that offers comprehensive services in various areas of geotechnical engineering, engineering geology, geotechnical earthquake engineering, and during construction services including materials testing and special inspections. Their laboratory is accredited by Caltrans, AMRL, CCRL, DSA, and the city of Los Angeles. Their technicians and inspectors are certified by ICC, ACI, Caltrans, County of Los Angeles, and City of Los Angeles and are qualified to perform on public works as well as DSA projects.

POTHOLING

BESS TESTLAB, INC.

1508 E. Francis Street, Unit A

Ontario, CA 91761

909.510.5535

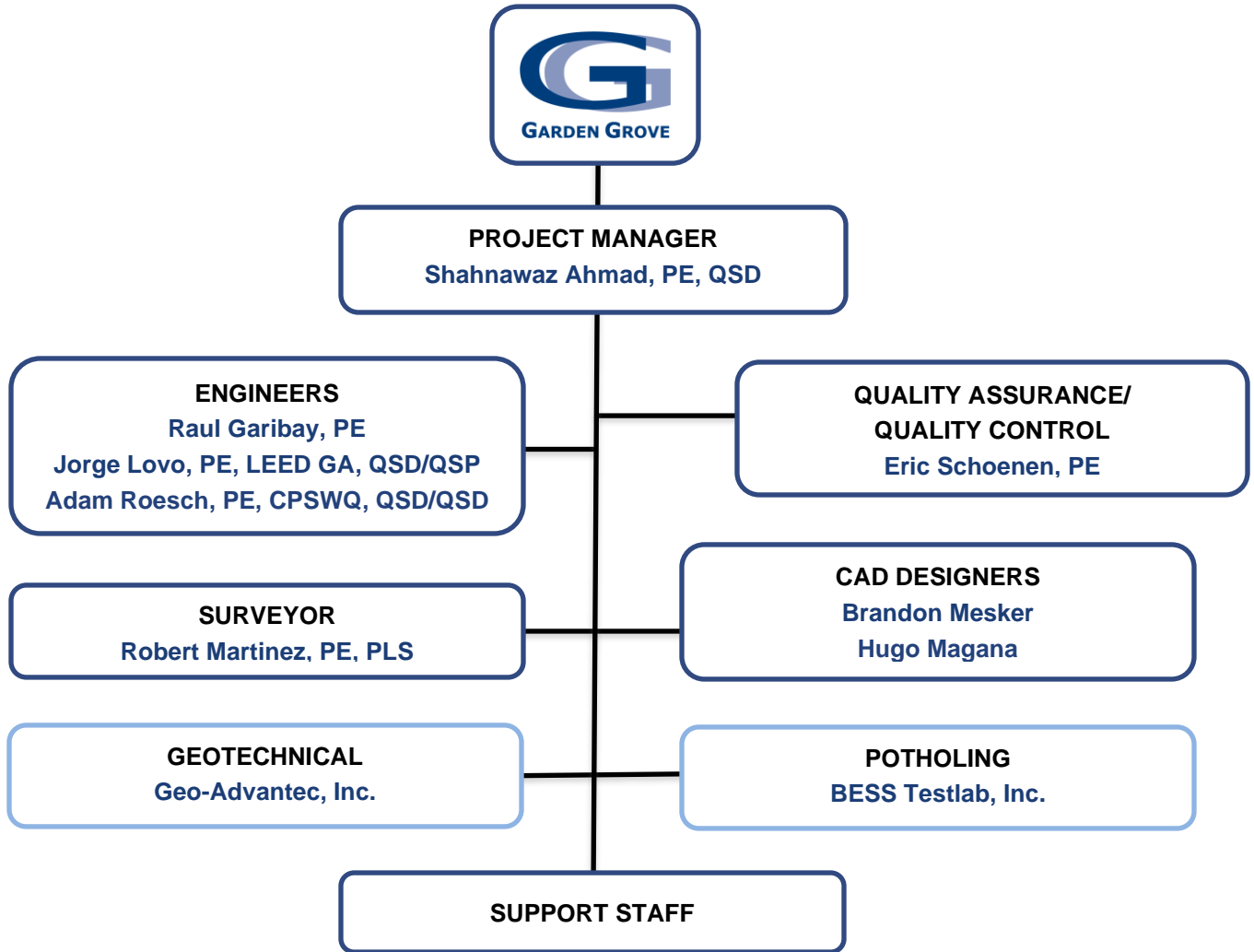
Don Whitman, Project Manager

donald@besstestlab.com

Bess Testlab, Inc. (BESS), is a CPUC certified MBE/DBE company that provides solutions to mitigate the underground utility related risks associated with the design and construction of civil and infrastructure projects. They have been in operation since 1967 and provide a complete range of Subsurface Utility Engineering Services (SUE) to both private and public companies throughout Northern and Southern California.

SECTION II: PROJECT TEAM

ORGANIZATION CHART



Resumes for our Project Team follow.

SHAHNAWAZ AHMAD, P.E., QSD
Project Manager

Mr. Ahmad founded SA Associates in 1989, creating a civil engineering firm focused on city, county and municipal agencies. Mr. Ahmad has over 40 years of experience.

Currently, he is involved with projects on water and sewer system master planning; water resources; water supply and treatment; water reuse; wastewater collection, treatment, and disposal; storm drainage; design of water and wastewater treatment plants, water pipelines, sewers, pumping stations, wells, storage reservoirs, and water reclamation systems; studies of water and wastewater treatment processes; and industrial waste problems.



PROJECT EXPERIENCE

Civil Engineering Design

City of Alhambra
 City of Anaheim
 Boy Scouts of America
 Central Basin Municipal Water District
 City of Chino
 City of Irvine
 City of Monterey Park
 City of Huntington Beach
 City of Inglewood

Kinneloa Irrigation District
 Long Beach Water District
 City of Manhattan Beach
 City of Monterey Park
 City of Norwalk
 City of Ontario
 City of Pomona
 City of Sierra Madre
 City Whittier

EDUCATION:

University of Karachi, Pakistan,
 B.E., Civil Engineering
 University of California,
 Berkeley, M.S., Sanitary
 Engineering

REGISTRATION:

Registered Civil Engineer,
 California
 No. 23712

MEMBER:

American Academy of
 Environmental Engineers,
 Diplomate
 American Public Works
 Association
 American Society of Civil
 Engineers
 American Water Works
 Association
 California Water Environment
 Association
 Southern California Water
 Utilities Association
 Water Environment Federation

Construction Management

City of Azusa
 City of Alhambra
 City of Bellflower
 City of Burbank
 City of El Monte
 City of Fontana
 City of Glendale
 City of Glendora
 City of Lawndale
 Long Beach Water Dept.
 County of Los Angeles, DPW

City of Manhattan Beach
 City of Monterey Park
 City of Norwalk
 Orange County Public Works
 City of Pomona
 City of San Bernardino
 City of San Marino
 City of Santa Monica
 City of Whittier

CITY OF ALHAMBRA

- . Main Street Sewer Replacement – Project Manager, Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8” sewer main is located on the westbound lanes of Main Street. The City’s Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.
- . Valley Blvd-Almanson Sewer Project Construction management and inspection services for 3,500 ft. of 4” & 14” main replacement.

CITY OF ANAHEIM

- . Pepper Creek Way, Fern Haven Lane and Hadrians Crossing Water Main Replacement – Plans, specifications and cost estimates for 1,500 linear feet of PVC Water Main Replacement from cast iron pipe.
- . Baja & Solomon Drives Water Main Replacement – Plans, specifications and cost estimates for 1,557 ft. of 8” PVC Water Main Replacement

- Country Glen Way Water Main Replacement - Plans, specifications and cost estimates for 5,300 linear feet of 6" and 8" PVC C-900 pipe in multiple side streets.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans and specifications, and estimate of probable construction costs for 24,600 linear feet of 8" – 20" recycled pipeline.

CITY OF INGLEWOOD

- Project Manager for preparation of plans and specifications for the upgrade/repair of segments of the existing 8" to 15" vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP.

CITY OF MANHATTAN BEACH

- Currently preparing plans and specifications for approximately 1,160 LF of sewer reaches throughout the City for the Cycle 3 Infrastructure Improvements Project.
- Prepared plans and specifications for 2,150 ft. of 6" and 8" CIPP & VCP sewer reaches throughout the City, including 25 point repairs for the Cycle 2 Infrastructure Improvements Project.

CITY OF MONTEREY PARK

- Currently providing project coordination for construction management and inspection services for the Centralized Groundwater Treatment System (CGTS) for the Delta Plan, located in the city of Rosemead. The CGTS consists of advanced oxidation (AO) involving ultraviolet (UV) and hydrogen peroxide to destroy volatile organics (VOCs) and 1,4-dioxene, downstream liquid-phase granular activated carbon (LGAC) to absorb any residual contaminants.
- Water & Sewer Improvements Atlantic Boulevard – Project Manager, Preparing plans & specifications for water & sewer main improvements on Atlantic Blvd. from W. Hellman Avenue to W. Newmark Avenue with a 12-inch ductile iron water main of approx. 2,030 ft. length, and about 2,450 ft of 12-inch HDPE sewer via pipe bursting. Sewer will also be improved along Garvey Ave., from its intersection with Atlantic Blvd. to Ynez Ave., with approx. 650 ft of 16-inch HDPE via pipe bursting and 900 ft of 18-inch VCP via open trench. striping restoration.

CITY OF NORWALK

- FY 2017/18 Sewer Main Repair Project – Project Manager, provided design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement.

CITY OF SAN FERNANDO

- Update the City's Sanitary Sewer Management Plan to comply with the requirements mandated by the State Water Resources Control Board (SWRCB) Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems Order No. 2006-0003 DWQ.

CITY OF SIERRA MADRE

- Preparation of a Sewer Plan for the Replacement of Sanitary Sewer and Repair of Pavement Settlement in West Grand View Avenue and the repair of approximately 750 sq. ft. of asphalt pavement which had settled in the location of the sewer replacement. The work included replacement of one sewer manhole and the replacement of two reaches (total length of approximately 400 ft.) of 8 inch VCP sewer with 10 inch VCP along with the reconnection of one branch sewer main and seven house laterals

CITY OF WHITTIER

- Sewer Main Phase I Project – Project Manager, Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows

RAUL GARIBAY, P.E.
Engineer

Mr. Garibay has over 39 years of experience in water related projects. He retired from the City of Pomona after serving as Supervising Water Resources Engineering.

PROJECT EXPERIENCE

CITY OF MONTEREY PARK

Currently providing Construction Management and Inspection services for the Centralized Groundwater Treatment System (CGTS) for the Delta Plan, located in the city of Rosemead. The CGTS consists of advanced oxidation (AO) involving ultraviolet (UV) and hydrogen peroxide to destroy volatile organics (VOCs) and 1,4-dioxene, downstream liquid-phase granular activated carbon (LGAC) to absorb any residual contaminants.

CITY OF POMONA

- Supervised engineering group in the Water Resources Department
- Participated in interview boards for other municipalities
- Developed and implemented Sanitary Sewer Management Plan
- Conducted sewer and water plan reviews for private and public projects; reviews included compliance checks with current health regulations and inspection of field installations
- City's liaison on various water committees such as Chino Basin Watermaster, Three Valleys MWD, and Six Basins Board
- Developed and Implemented 2005 Urban Water Management Plan
- Project Manager for Water and Sewer Master Plan
- Reviewed developers' water and sewer utility plans
- Project Manager for various water and sewer related projects: ranged from pipeline to treatment plants
- Liaison with the California Department of Health Services

CITY OF BURBANK

As Planning and Engineering Manager:

- Supervised team that coordinated with outside developers on construction and planning projects
- Planned, coordinated, and negotiated with other city departments to ensure integration with their projects Liaison on other city departments on the widening of Interstate 5 project

CITY OF PASADENA

As a Civil Engineer for the City of Pasadena:

- Project Manager for Water Master Plan
- Developed and Utilized Department's Water Hydraulic Modeling
- Participated in multi-departmental group that developed the City's GIS Base map
- Reviewed building plans for impacts on the water system
- Created plans and specifications of water pipeline projects
- Participated on engineering review hiring boards for various cities
- Presented analysis of water system hydraulic model to public Planning Committee to support for upcoming water projects
- Co-City representative for the Raymond Basin Management Board
- Developed and negotiated water system interconnection with neighboring water agencies
- Developed and procured annual storage groundwater rights with basin agencies to ensure the City's annual groundwater rights
- Project Manager for the water quality laboratory rehabilitation
- Investigated and implemented improvements to water quality laboratory processes

EDUCATION:

Loyola Marymount University,
Los Angeles, BS Civil
Engineering, 1982
Cal State University Los
Angeles, MS Business
Administration

REGISTRATION:

Registered Civil Engineer,
California, No. C43304

CERTIFICATION:

Water Treatment Operator,
Grade IV, No. 19408

Water Distribution Operator,
Grade II, No. 29625

**JORGE LOVO, P.E., LEED GA, QSD/QSP,
Engineer**

Mr. Lovo has over 21 years of experience designing and managing a variety of infrastructure projects. Project types range from streets, roadways, sewers, storm water, to water-related projects. The water related include water, wastewater, recycled water, and storm water facilities including conveyance, water quality & treatment, pump stations, and storage.

He provides technical leadership on small to large sized projects; supporting teams winning new business; interacting with clients, agencies and other consulting firms; preparing detailed engineering calculations, CAD drawings, estimates, master planning, facilities condition assessment, construction support, preparation of plans, specifications and others documents for permitting and construction. His expertise lies mostly with city, municipal and agency projects. He is adept at working with municipalities and understands their process.



PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Main Street Sewer Replacement – Engineer, Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8” sewer main is located on the westbound lanes of Main Street. The City’s Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.

CITY OF ANAHEIM

- Dale designed the widening of the portion of Dale Street adjacent to the properties at 517, 519, and 523 N. Dale Avenue. The work involved widening the roadway just in front of the properties from 30 feet to 45 foot right-of way in order to implement and maintain the City’s Master Plan of Arterial Highways.

BOY SCOUTS OF AMERICA

- Trask Scout Camp Water System Rehabilitation and Enhancement Project - Design services for design-build project at the Boy Scouts camp in the city of Monrovia foothills.

CITY OF CHINO

- Quadrant I Water Main Replacement – Engineer, Plans and specifications for approximately 10,940 feet of city-wide segment replacements with 8” C900 PVC pipe. In addition, the project consists of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans and specifications, and estimate of probable construction costs for 24,600 linear feet of 8” – 20” recycled pipeline.

CITY OF INGLEWOOD

- Engineer for preparation of plans and specifications for the upgrade/repair of segments of the exiting 8” to 15” vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP

EDUCATION:

B.S. Civil Engineering
University of Hawaii

REGISTRATION:

Registered Civil Engineer,
California
No. C75632
Registered Civil Engineer,
Canada
Board of Professional
Engineers

CERTIFICATION:

LEED Green Associates – Green
Building Certification Institute,
ID No. 10779963
Construction Management,
University of Quebec, Canada
Professional Studies in
Technique of
Architecture, College of Old
Montreal

Qualified SWPPP Developer
(QSD)
Qualified SWPPP Practitioner
(QSP)
Certificate No. 25596

CITY OF MANHATTAN BEACH

- . Currently preparing plans and specifications for approximately 1,160 LF of sewer reaches throughout the City for the Cycle 3 Infrastructure Improvements Project.
- . Prepared plans and specifications for 2,150 ft. of 6" and 8" CIPP & VCP sewer reaches throughout the City, including 25 point repairs for the Cycle 2 Infrastructure Improvements Project.

CITY OF MONTEREY PARK

- . Water and Sewer Improvements Atlantic Boulevard - Plans and specifications for a 12" 2,030 feet ductile iron main, replacement of laterals, new fire hydrants/services, valves, abandonment of existing mains, tie-in to existing system, pre/post CCTV videos, paving and striping restoration.
- . Sewer Spot Repairs and CIPP Installation – Engineer, Prepared plans and specifications for 91 spot repairs and 9,730 ft. of CIPP installation in various locations throughout the City. The project involved review of CCTV videos to verify the work involved.

CITY OF NORWALK

- . FY 2017/18 Sewer Main Repair Project – Engineer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Where there are short sections of pipe that have broken and/or missing pipe walls, trenchless technology may be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining. When there are short sections of pipe that need to be repaired, a sectional liner, which can fix sections of pipe for a length of up to 4 ft. is recommended because it resolves the problem in an economically efficient manner while minimizing resident inconvenience

CITY OF ONTARIO

- . Water Main Replacement – Plans and specifications for 25,430 ft. of 2" -12" water mains at 30 locations. The new mains will be 8" -12" in diameter. The scope also includes a new 450 linear ft. water main, along with replacement of service laterals, fire hydrants and related appurtenances.

CITY OF SIERRA MADRE

Water Main Replacement – 2020 Water Main Replacement Project. Replacement of 20,300 linear feet of 4, 6, 8 & 10" pipe throughout the City with PVCO.

HUGO MAGAÑA
CAD Designer

Mr. Magana is a Designer/Draftsman/Technician. He graduated with a Mechanical Engineering degree. He is well versed in the use of AutoCAD and GIS software. Mr. Magana is currently providing technical and CAD assistance on various street, sewer, and water projects.

PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Main Street Sewer Replacement – AutoCAD Designer, Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8” sewer main is located on the westbound lanes of Main Street. The City’s Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans and specifications, and estimate of probable construction costs for 24,600 linear feet of 8” – 20” recycled pipeline.

CITY OF CHINO

- Quadrant I Water Main Replacement – AutoCAD Designer, Plans and specifications for approximately 10,940 feet of city-wide segment replacements with 8” C900 PVC pipe. In addition, the project consists of the replacement of the replacement or reconnection of existing service laterals and reconnections to the existing water mains.

CITY OF INGLEWOOD

- AutoCAD Designer for preparation of plans and specifications for the upgrade/repair of segments of the exiting 8” to 15” vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP

CITY OF MANHATTAN BEACH

- Sewer Infrastructure Improvements – AutoCAD Designer, Plans and specifications for various sewer reaches throughout the City.
- Providing technical support for preparation of the City’s Risk & Resilience and Emergency Response Plans.

CITY OF MONTEREY PARK

- Water & Sewer Improvements Atlantic Boulevard – AutoCAD Designer, Preparing plans & specifications for water & sewer main improvements on Atlantic Blvd. from W. Hellman Avenue to W. Newmark Avenue with a 12-inch ductile iron water main of approx. 2,030 ft. length, and about 2,450 f.t of 12-inch HDPE sewer via pipe bursting. Sewer will also be improved along Garvey Ave., from its intersection with Atlantic Blvd. to Ynez Ave., with approx. 650 ft of 16-inch HDPE via pipe bursting and 900 ft of 18-inch VCP via open trench. Water and Sewer improvements will also include replacement of laterals, installation of new fire hydrants/services, valves, sewer manholes, abandonment of existing mains, tie-in to existing systems, pre/post CCTV videos, paving and striping restoration



EDUCATION:

California State University
B.S. Mechanical
Engineering
Rio Honda College
College of Engineering and
Technology
California State University,
Fullerton, College of
Engineering and
Technology

AFFILIATIONS:

- Engineers for a Sustainable World, Cal State Long Beach
- Center for Academic Support in Engineering and Computer Science, Cal State Fullerton
- Society of Mexican American Engineers and Scientists, Cal State Fullerton and Cal State Long Beach

- . Sewer Spot Repairs and CIPP Installation – AutoCAD Designer, Prepared plans and specifications for 91 spot repairs and 9,730 ft. of CIPP installation in various locations throughout the City. The project involved review of CCTV videos to verify the work involved.

CITY OF NORWALK

- . FY 2017/18 Sewer Main Repair Project – AutoCAD Designer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Where there are short sections of pipe that have broken and/or missing pipe walls, trenchless technology may be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining. When there are short sections of pipe that need to be repaired, a sectional liner, which can fix sections of pipe for a length of up to 4 ft. is recommended because it resolves the problem in an economically efficient manner while minimizing resident inconvenience

CITY OF SAN FERNANDO

- . Providing assistance in updating the City's 2013 Sanitary Sewer management Plan to comply with the requirements mandated by the State Water Resources Control Board Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ adopted on May 2, 2006.

CITY OF WHITTIER

- . Sewer Main Phase I Project – AutoCAD Designer, Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows

BRANDON MESKER
CAD Designer

Mr. Mesker received a Bachelor of Science in Civil Engineering at California State University, Long Beach. He is supporting the team on AutoCAD, research, and technical issues.

PROJECT EXPERIENCE

BOY SCOUTS OF AMERICA

- Preparation of a Watershed Sanitary Survey (WSS) for Sawpit Creek for the Track Scout Reservation System as a required document to grant a permit for water facilities improvements to the Camp, which is located Monrovia Canyon.

KINNELOA IRRIGATION DISTRICT

- Sierra Madre Villa & Villa Heights Water Main Improvement Project – Auto CAD support for plans, specifications, and cost estimates for the installation of approximately 1,360 linear feet (LF) of new 8” DIP to connect the existing 8” DIP in Sierra Madre Villa Avenue, just north of Windover Road, with the existing 8-inch DIP at the intersection of Villa Heights and Villa Heights Road. The portion of the proposed pipeline is located in an unincorporated area of Los Angeles.

CITY OF MANHATTAN BEACH

- Providing technical support for preparation of the City’s Risk & Resilience and Emergency Response Plans.

CITY OF MONTEREY PARK

- Water & Sewer Improvements Atlantic Boulevard - Plans and specifications for a 12” 2,030 feet ductile iron main, replacement of laterals, new fire hydrants/services, valves, abandonment of existing mains, tie-in to existing system, pre/post CCTV videos, paving and striping restoration.

CITY OF ONTARIO

- Water Main Replacement – Plans for 25,430 linear ft. of 2” -12” water mains at 30 locations. The new mains will be 8” -12” in diameter. The scope also includes a new 450 linear ft. water main, along with replacement of service laterals, fire hydrants and related appurtenances

CITY OF SAN FERNANDO

- Providing technical support for preparation of the City’s Risk & Resilience and Emergency Response Plans.
- Providing assistance in updating the City’s 2013 Sanitary Sewer management Plan to comply with the requirements mandated by the State Water Resources Control Board Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ adopted on May 2, 2006.

CITY OF SIERRA MADRE

- Providing technical support for preparation of the City’s Risk & Resilience and Emergency Response Plans.

CITY OF ANAHEIM

- Administrative Intern II Public Works Department Traffic and Transportation – As intern had field experience, conducted MUTCD research, plan checks and AutoCAD assistance. Also, Administrative Intern II Public Works Department Traffic and Transportation – As intern had field experience, conducted MUTCD research, plan checks and AutoCAD assistance.



EDUCATION:

B.S. Civil Engineering
California State
University Long Beach,
2020

Associates Degree
Arts and Humanities
Liberal Arts and
Sciences: Mathematics
and Natural Science

ADAM ROESCH, PE, CPSWQ, QSD/QSP
Engineer

Mr. Roesch serves as an assistant engineer for various projects, including water main, wells, sewer, storm, & street projects. Due to his knowledge of engineering principles, Mr. Roesch provides valuable engineering assistance to SA Associates. Also, due to his past and part-time experience in environmental engineering/water quality, Mr. Roesch provides valuable technical assistance, especially in areas related to NPDES permitting.

PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Main Street Sewer Replacement – Engineer, Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8” sewer main is located on the westbound lanes of Main Street. The City’s Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.

CITY OF ANAHEIM

- Prepared plans and specifications for the 8” Water Main Replacement in Country Glen Way for the replacement of 5,300 ft. of 6 & 8-inch ductile iron pipe and 6 & 8-inch polyvinyl chloride (PVC) pipe.

CENTRAL BASIN MUNICIPAL WATER DISTRICT

- Recycled Water Pipeline System Extension in the City of South Gate – Plans and specifications, and estimate of probable construction costs for 24,600 linear feet of 8” – 20” recycled pipeline.

CITY OF CHINO

- Prepared plans & specifications for the Quadrant I Water Main Replacement Project which consists of 10,940 ft. of 8” PVC pipe to improve the existing water system.

CITY OF INGLEWOOD

- Prepared plans for the Water Main Pipeline Improvement Plans Phase V Project. The project involved the installation of approximately 9,994 ft. of new 8-inch ductile iron pipe main in 2nd Avenue, 3rd Avenue, 4th Avenue, and 5th Avenue from Arbor Vitae Street to Manchester Boulevard.
- Prepared plans and specifications for the upgrade/repair of segments of the existing 8” to 15” vitrified clay pipe throughout the City to improve the existing sewer system under the Sewer Main Replacement Program Phase I. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP.

LONG BEACH WATER DEPARTMENT

- Prepared plans and specification for the East 27th Street and Via Passilo Cast Iron Water Main Replacement Project which consisted of the replacement of approximately 4,000 feet of 6” & 8” cast iron & ductile pipe.

CITY OF MANHATTAN BEACH

- Currently preparing plans and specifications for approximately 1,160 LF of sewer reaches throughout the City for the Cycle 3 Infrastructure Improvements Project.



EDUCATION:
California State University,
Long Beach
B.S. Civil Engineering

REGISTRATION:
Registered Civil Engineer,
California, No. 92220

Certified Professional in
Storm Water Quality
(CPSWQ)
Certificate No. 1022

Qualified SWPPP
Developer (QSD)
Qualified SWPPP
Practitioner (QSP)
Certificate No. 25508

SOFTWARE:
Microsoft Office
Adobe
Autodesk (AutoCAD)

- Prepared plans and specifications for 2,150 ft. of 6" and 8" CIPP & VCP sewer reaches throughout the City, including 25 point repairs for the Cycle 2 Infrastructure Improvements Project.

CITY OF MONTEREY PARK

- Water and Sewer Improvements Atlantic Boulevard - Plans and specifications for a 12" 2,030 feet ductile iron main, replacement of laterals, new fire hydrants/services, valves, abandonment of existing mains, tie-in to existing system, pre/post CCTV videos, paving and striping restoration.

CITY OF MANHATTAN BEACH

- Prepared plans for two sidewalk projects: 1) Cesar Chavez Blvd. in front of East Los Angeles City College (approximately 4,000 ft.) and 2) Emerson Ave. in front of Langley Sr. Center (approximately 1,300 ft.)

CITY OF NORWALK

- FY 2017/18 Sewer Main Repair Project – Engineer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP).

CITY OF ONTARIO

- Water Main Replacement – Plans and specifications for 25,430 ft. of 2" -12" water mains at 30 locations. The new mains will be 8" -12" in diameter. The scope also includes a new 450 linear ft. water main, along with replacement of service laterals, fire hydrants and related appurtenances.

CITY OF SIERRA MADRE

Water Main Replacement – 2020 Water Main Replacement Project. Replacement of 20,300 linear feet of 4, 6, 8 & 10" pipe throughout the City with PVCO.

CITY OF WHITTIER

- Sewer Main Replacement Phase I - Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements will address deficiencies in flow capacity and reduce the risk of overflows.

ERIC SCHOENEN, P.E.
Quality Assurance/Quality Control

Mr. Schoenen has over 30 years of experience with a mix of land surveying, design, plan check, conditions of approval, strategic planning, and capital improvement projects. He has over 16 years of experience working for a Water Utility Franchise. Experience includes budget estimating, scheduling, technical report writing, and City Council Agenda Reports. Responsible for coordination with professional consultants and staff to implement CIP projects as a project manager.

PROJECT EXPERIENCE

CITY OF ALHAMBRA

- Provided construction management and inspection services for the Valley Blvd/Almansor St. Sewer Replacement Project. The work included installation of approximately 1,380 ft. of 36" extra-strength VCP sewer along Almansor St. from San Marino Ave. to Valley Blvd. and approximately 1,830 ft of 30" extra-strength VCP sewer along Valley Blvd. from Almansor St. to Garfield Ave.
- Westmont Water Main – Construction management and inspection services for replacement of 3,500 ft. of 4" and 14" mains.

EDUCATION:
California Polytechnic University, Pomona
B.S. Civil Engineering, 1988
University of California, Riverside
Supervisory Excellence I and II, 1998

CENTRAL BASIN WATER DISTRICT

- Recycled Water Pipeline Extension in the City of South Gate – Engineer. The work consists of the preparation of Plans, Specifications, and Estimate of Probable Construction Costs for The Recycled Water System Extension in the City of South Gate, CA. This Project consists of the construction of approximately 24,600 linear feet (LF) of recycled pipeline varying in diameter between 8" and 20".

REGISTRATION:
Registered Civil Engineer, California
No. 52775

CITY OF GLENDORA

- Lorraine Avenue Water Main Project - Provided construction inspection services. Project included the installation of approximately 6,715 lineal feet of 12" and approximately 4,090 ft. of 16" ductile iron pipe and appurtenances, new water services, new fire hydrants, and 27 tie-ins to existing water lines.
- Laurel Avenue Water Main Replacement. - Provided construction inspection services Project included the installation of approximately 1,400 lineal feet of 8" ductile iron pipe and appurtenances, new water services, new fire hydrants, and 2 tie-ins to existing water lines.

LONG BEACH WATER DEPARTMENT

- Sewer Replacement - Provided construction management and inspection services for the rehabilitation of 10,600 ft. of sewer, including lining 4,971 ft. of sewer with 8" CIPP and multiple location-specific rehabilitation efforts for the District's Cement Sewer Rehabilitation/ Replacement Group 2 Project.

CITY OF MANHATTAN BEACH

- Sewer Infrastructure Improvements – Engineer, Plans and specifications for various sewer reaches throughout the City.

CITY OF MONTEREY PARK

- Sewer Replacement - Provided construction management services for repair or replacement of defective sewer sections utilizing the Cured-In-Place-Pipe (CIPP) method at 25 locations throughout the City.

CITY OF NORWALK

- FY 2017/18 Sewer Main Repair Project – Engineer, Engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer

system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Where there are short sections of pipe that have broken and/or missing pipe walls, trenchless technology may be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining.

CITY OF WHITTIER

. Sewer Main Phase I Project – Engineer, Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows

GEOTECHNICAL SUBCONSULTANT

Geo-Advantec Inc.

Geotechnical Engineering, Earthquake Engineering, Engineering Geology

SHAWN ARIANNIA, Ph.D., P.E., G.E.
PRINCIPAL GEOTECHNICAL ENGINEER

Geo-Advantec, Inc.
457 W. Allen Avenue, Suite 113
San Dimas, CA 91773
909.305.0500

EDUCATION

- B.S., Civil Engineering (1982), University of Tehran
- M.S., Civil Engineering (1985), University of Tehran
- Ph.D., Geotechnical Engineering, University of California, Los Angeles (UCLA)

REGISTRATION

- Registered Geotechnical Engineer: California, #2824
- Professional Civil Engineer: California, #65642
- Asphalt Mix Design Certification, Asphalt Institute
- Member of National Science Foundation (NSF) Review Panel, US
- Past President, ASCE Inland Empire Geotechnical Committee

EXPERIENCE HIGHLIGHTS

- 34 years of experience in Civil Engineering and Geotechnical Engineering Projects for Public and Private Clients
- Served as the Geotechnical Engineer of Record and completed more than 200 geotechnical study for DSA projects in California, including schools and community colleges
- Saved Hundreds of Thousand Dollars for Clients by Providing High Quality yet economic alternate geotechnical engineering Solutions
- High Extent of familiarity with all the tasks involved in transportation projects
- Vast knowledge and experience in Geotechnical Seismic Rehabilitation Study and Site-Specific Evaluations
- Extensive Experience in Pavement design, retrofit, and management projects with various cities in Southern California
- Geotechnical engineering for various transportation, bridge, parking structures and commercial buildings

Dr. Ariannia has more than 34 years of experience in design, supervision and technical management for projects in the structural and geotechnical fields. He possesses extensive and responsible experience in design, supervision, and technical management of major projects in both structural and geotechnical fields. He has been involved in major projects such as transportation/transit, highway and railroad bridges, tunnels, power plants, cooling towers, silos, and medium to high-rise multi story structures. The breadth of his experience includes geotechnical analysis, field and laboratory test management, slope stability and liquefaction analysis, seismic hazard evaluation, pile and earth retaining structures design, design and implementation of soils and slope stabilization, repair and retrofit methods relevant to soils, foundation, and structural behavior for different types of structures. During last two decades, he has actively practiced geotechnical engineering and consulting in southern California and has been the Geotechnical Engineer of Record for numerous roads, highways, and transportation projects, educational projects, multi-story buildings, and parking structures. He served as the principal geotechnical engineer for various types of projects including:

- Transportation, Pavement Engineering, Bridges, and Parking Structures
- Public Agencies, Cities, and Municipalities
- Schools and Educational Facilities
- Hospitals and Medical Facilities
- Aviation, Ports, and Harbors

SAMPLE EXPERIENCES

- Principal in charge of the geotechnical instrumentation and monitoring for Trunk Line South, Unit 4, Phase 2 for Los Angeles Department of Water and power (LADWP)
- Project manager and principal geotechnical engineer of recycled water pipeline system extension for various streets for Central Basin Municipal Water District and City of South Gate
- Principal geotechnical engineer of Valley Blvd. Sewer Replacement for the city of Alhambra
- Principal geotechnical engineer of the Beverly Blvd. New Water Main Replacement for the city of Whittier
- Project manager and principal geotechnical engineer of Yorba Substation site investigation project for the city of Anaheim

POTHOLING SUBCONSULTANT

DONALD WHITMAN, PROJECT MANAGER

Manager **YEARS OF EXPERIENCE:** 18 years



CSLB #817532 MBE/DBE Certified

Office: (909) 510-5535 C: 951.906-9821 | 1508 E Francis St Unit A | Ontario, CA 91761 | Donald@besstestlab.com

SUMMARY OF EXPERIENCE: Over 1,000 projects as sub-consultant, to Consultant Engineers, participant in Southern California; as subsurface Utility Project Coordinator/Project Manager

SPECIAL CERTIFICATIONS: Ground Penetrating Radar, Certified 40-hr hazmat training & Confined-Space Safety training, Caltrans and San Diego County Work Zone Traffic Control. Residential and Commercial Waste water lateral survey and CCTV documentation. Project Management Certification

Experience and Qualifications:

Subsurface Utility Designating, Locating & Documenting. Proactive Project Management skills include planning and coordination with utility companies, railroads, and local, state and federal agencies; Utility Surveys' daily functions and protocol. Aggressive Negotiator; as Liaison Utility Project Coordinator.

Experienced in field Quality Control, CGA "Best Practices", Traffic Control, All - Permit Acquisitions, OSHA Field Safety Meetings Facilitator. Practical hands-on, on-the-Job experience track record from completing projects ahead of schedule and under budget.

Donald Whitman's multi-task ability provided his unique and reliable skilled talents on Caltrans District 8 potholing on State Route 138 and Caltrans District 7 and Los Angeles County Design Engineers on the Highway 30 Extension Project. For utility records research, designating, locating, exposing existing subsurface utilities and documenting, or otherwise, mapping the underground utilities, Donald used non-destructive, minimally invasive damage prevention, air/vacuum soil-extraction process on other projects such as, San Diego's Mission Valley Light Rail, Kinder Morgan Energy gas pipelines, Praxair hydrogen plant facilities, City of Ontario's New Model Colony, City of Pomona Water & Sewer Capital Improvement Program and City of Riverside's Waste Water Treatment Plant Expansion.

Project Manager Roles: Extensive Utility location duties with Southern California Water Districts on Water Improvement Plans & Designs; Water Reclamation Pipelines, Waste Water Treatment Plants. Pipeline relocation projects. Yucaipa Valley Water District, San Diego County Water Authority Projects, Rancho California Water District, Eastern Municipal Water District. Inland Empire Utility Agency, Western Municipal Water District, San Bernardino Municipal Water District, Jurupa Community Services District, Rubidoux Community Services District, Metropolitan Water District, Imperial Irrigation District, Coachella Valley Water District

Project Manager – Capital Improvements Sewer & Water/Street Improvement Projects:

Cities within Donald's experience portfolio; Moreno Valley, Pomona, Corona, Chino, Riverside, Ontario, Colton, Redlands, Yucaipa, Fontana, Rialto, Rancho Cucamonga, Upland, Montclair, San Bernardino, every city in the Coachella Valley, Escondido, Carlsbad, San Diego, Chula Vista.

Project Manager, Sub-consultant Utility Conflict Assessment, Location and Documentation:

For multi-phase Otay Mesa Transmission Main Pipeline Project, San Diego County Water Authority. Subsurface utility designating/locating and potholing for utility conflicts for bridge design over flood zone. Site exploration for the new Morongo Tribal Casino project, in Cabazon, CA, Student Housing, University of California, Cal Poly, Pomona.

SA Associates projects:

Central Basin Municipal Water District – Recycled Water Pipeline
Extension City of Ontario – Water Main Replacement
Whitter – Beverly Boulevard Water

SECTION III: RELATED EXPERIENCE

RELATED EXPERIENCE: SEWERS

CITY OF ALHAMBRA

YEAR COMPLETED:	2019
CONSTRUCTION COST:	\$1,113,000
PROJECT MANAGER:	Shahnawaz Ahmad
ENGINEERS:	Jorge Lovo, Adam Roesh
CAD:	Hugo Magaña, Phong Tran
CITY CONTACT:	Dennis Ahlen, Deputy Director of Utilities
TEL/E-MAIL:	626.570.3274 dahlen@cityofalhabra.org
Main Street Sewer Replacement Project	
Replacement of approximately 1,858 LF of an existing 8-inch sewer main with a 12-inch sewer main on Main Street, between Bushnell Avenue and Atlantic Boulevard. The existing 8" sewer main is located on the westbound lanes of Main Street. The City's Sewer System Rehabilitation Plan identified this location as the highest priority for improvements due to its aging conditions and to improve sewage flow capacity in the area.	

COMPLETION DATE:	2016
CONSTRUCTION COST:	\$3,770,000
PROJECT MANAGER:	Shahnawaz Ahmad
ENGINEERS:	Phillip West, Adam Roesch
CONSTR. MGR./INSPECTOR:	Eric Schoenen
BACK-UP INSPECTOR:	Shannon Leonard
CITY CONTACT:	Dennis Ahlen, Deputy Director of Utilities
TELEPHONE / E-MAIL:	626.570.3274 / dahlen@cityofalhabra.org
Valley Blvd. – Almansor St. Sewer Replacement Project	
Provided construction management and inspection services for the Valley Boulevard - Almansor Street Sewer Replacement Project (Project). The work included installation of approximately 1,380 ft. of 36" extra-strength VCP sewer along Almansor St. from San Marino Ave. to Valley Blvd. and approximately 1,830 ft of 30" extra-strength VCP sewer along Valley Blvd. from Almansor St. to Garfield Ave.	

CITY OF INGLEWOOD

YEAR COMPLETED:	2017
ENGINEER'S ESTIMATE	\$1,528,000
CONSTRUCTION MANAGER:	Shahnawaz Ahmad
ENGINEERS:	Jorge Lovo, Adam Roesch
CAD:	Hugo Magana, Phong Tran
SURVEYOR:	On-Point Land Surveying, Inc.
CITY CONTACT:	Boytrese Osias, Sr. Engineer
TELEPHONE / E-MAIL:	310.412.5333 bosias@cityofinglewood.org
Sewer Main Replacement Project, Phase 1	
Prepared plans for the upgrade/repair of segments of the exiting 8" to 15" vitrified clay pipe throughout the City to improve the existing sewer system. In addition, the project consisted of the replacement or reconnection of existing sewer laterals within the project area as a result of the replacement of the existing VCP.	

CITY OF MANHATTAN BEACH

YEAR COMPLETED:	2022
ENGINEER'S ESTIMATE:	TBD
PROJECT MGR.:	Jorge Lovo
ENGINEER:	Adam Roesch
CAD:	Hugo Magana, Brandon Mesker
SURVEYOR:	Robert Martinez
CITY CONTACT:	Tim Birthisel, Sr. Civil Engineer
TEL/E-MAIL:	310.802.5368 tbirthisel@manhattanbeach.gov
Cycle 3 Sewer Infrastructure Improvements	
Currently preparing plans and specifications for approximately 1,160 LF of sewer reaches throughout the City.	

YEAR COMPLETED:	2021
ENGINEER'S ESTIMATE:	\$1,500,000
PROJECT MGR.:	Jorge Lovo
ENGINEERS:	Adam Roesch, Eric Schoenen, Mel Sukow
CAD:	Hugo Magana, Phong Tran
SURVEYOR:	Robert Martinez
CITY CONTACT:	Tim Birthisel, Sr. Civil Engineer
TEL/E-MAIL:	310.802.5368 tbirthisel@manhattanbeach.gov
Cycle 2 Sewer Infrastructure Improvements	
Prepared plans and specifications for 2,150 ft. of 6" and 8" CIPP & VCP sewer reaches throughout the City, including 25 point repairs.	

CITY OF MONTEREY PARK

YEAR COMPLETED:	2020
ENGINEER'S ESTIMATE:	\$1.78 M Sewer, \$720,000 Water, Combined cost \$2.5M
PROJECT MGR.:	Shahnawaz Ahmad
ENGINEERS:	Jorge Lovo, Adam Roesch
CAD:	Hugo Magana, Phong Tran
SURVEYOR:	Robert Martinez
CITY CONTACT:	Ziad, Mazboudi, Interim City Engineer
TEL/E-MAIL:	626.532.2018 zmazboudi@montereypark.ca.gov
Water & Sewer Improvements along Atlantic Boulevard	
Prepared plans & specifications for water & sewer main improvements on Atlantic Blvd. from W. Hellman Avenue to W. Newmark Avenue with a 12-inch ductile iron water main of approximately 2,030 ft. length, and about 2,450 ft. of 12-inch HDPE sewer via pipe bursting. Sewer will also be improved along Garvey Ave., from its intersection with Atlantic Blvd. to Ynez Ave., with approx. 650 ft of 16-inch HDPE via pipe bursting and 900 ft of 18-inch VCP via open trench. Water and Sewer improvements will also include replacement of laterals, installation of new fire hydrants/services, valves, sewer manholes, abandonment of existing mains, tie-in to existing systems, pre/post CCTV videos, paving and striping restoration.	

YEAR COMPLETED:	2018
ENGINEER'S ESTIMATE	\$720,000
PROJECT MGR.:	Shahnawaz Ahmad
ENGINEERS:	Jorge Lovo, Adam Roesch
CAD:	Hugo Magana, Phong Tran
CITY CONTACT:	Frank Lopez, Assistant City Engineer
TEL/E-MAIL:	626.307.1330 flopez@montereypark.ca.gov
Sewer Spot Repairs and CIPP Installation	
Prepared plans and specifications for 91 spot repairs and 9,730 ft. of CIPP installation in various locations throughout the City. The project involved review of CCTV videos to verify the work involved.	

CITY OF NORWALK

YEAR COMPLETED:	2019
ENGINEER'S ESTIMATE:	\$578,000
PROJECT MGR.:	Eric Schoenen
ENGINEERS:	Jorge Lovo, Adam Roesch
CAD:	Hugo Magana, Phong Tran
SURVEYOR:	On-Point Land Surveying, Inc.
CITY CONTRACT:	Julian Lee, now Director of Public Works with the City of Lawndale
TEL/E-MAIL:	310.973.3266 jlee@lawndalecity.org
FY 2017/18 Sewer Main Repair Project	
<p>Provided engineering design services to repair or replace (based on current condition) numerous segments of existing 8-inch to 18-inch sewer mains throughout the City to improve the existing sewer system as identified from a detailed investigation as a part of the 2014 Sewer System Management Plan (SSMP). The investigation consisted of a citywide CCTV survey of the existing sewer system to identify segments with defects. As a result, the City has identified 60 sewer reaches deemed as high priority for repair/replacement. Where there are short sections of pipe that have broken and/or missing pipe walls, trenchless technology may be employed to prepare the existing pipe to be acceptable to serve as a host pipe for CIPP lining. When there are short sections of pipe that need to be repaired, a sectional liner, which can fix sections of pipe for a length of up to 4 ft. is recommended because it resolves the problem in an economically efficient manner while minimizing resident inconvenience.</p>	

CITY OF SAN FERNANDO

YEAR COMPLETED:	2022
ENGINEER'S ESTIMATE:	\$25,000
PROJECT MGR.:	John Robinson
ENGINEERS:	Jorge Lovo, Adam Roesch
QA/QC:	Shahnawaz Ahmad
TECHNICIANS:	Hugo Magana, Brandon Mesker
CITY CONTACT:	Kenneth Jones, Management Analyst
TEL/E-MAIL:	818.898.1240 kjones@fcity.org
Sanitary Sewer Management Plan Update	
<p>Update of the City's Sanitary Sewer Management Plan to comply with the requirements mandated by the State Water Resources Control Board (SWRCB) Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems Order No. 2006-0003 DWQ</p>	

CITY OF SIERRA MADRE

YEAR COMPLETED:	2014
ENGINEER'S ESTIMATE:	\$205,300
PROJECT MGR.:	Shahnawaz Ahmad
CONSTRUCTION INSPECTOR.:	Eric Schoenen
CITY CONTACT:	Chris Cimino, Public Works Director
TEL/E-MAIL:	626.355.7135 x801 ccimino@cityofsierramadre.com
Sewer Plan for West Grand View Avenue	
<p>Preparation of a Sewer Plan for the Replacement of Sanitary Sewer and Repair of Pavement Settlement in West Grand View Avenue and the repair of approximately 750 sq. ft. of asphalt pavement which had settled in the location of the sewer replacement. The work included replacement of one sewer manhole and the replacement of two reaches (total length of approximately 400 ft.) of 8 inch VCP sewer with 10 inch VCP along with the reconnection of one branch sewer main and seven house laterals</p>	

CITY OF WHITTIER

YEAR COMPLETED	2019
ENGINEER’S ESTIMATE:	\$4,100,000
PROJECT MANAGER.:	Shahnawaz Ahmad
ENGINEERS:	Adam Roesch, Eric Schoenen
CAD DESIGNERS:	Hugo Magaña, Phong Tran
POTHOLING	BESS Testlab, Inc.
TRAFFIC CONTROL	JMDiaz, Inc.
CITY CONTACT:	Kyle Cason, Director of Public Works
TEL/E-MAIL:	562.567.9511 kcason@cityofwhittier.org
<p>Sewer Main Phase I Project Design services to replace a total of approximately 11,000 linear feet (LF) of existing 6-inch to 10-inch sewer main to new 8-inch to 16-inch diameter polyvinyl chloride sewer pipeline at various locations. Improvements address deficiencies in flow capacity and reduce the risk of overflows.</p>	

A table showing our sewer experience follows.

SEWER EXPERIENCE

No.	Agency	Project	Length (Feet)	Size (Inches)	Material	Constr. Cost (\$)	Complete (Year)	Services Provided					
								Site Study	Design	Cost Est.	Constr. Man.	Constr. Eng.	Constr. Inspec.
1	City of Manhattan Beach	Cycle 3 Sewer Main Improvements	1,160	6-18	VCP	TBD	2,022		X	X			
2	City of Manhattan Beach	Cycle 2 Sewer Main Improvements, including 25 point repairs	2,150	6 & 8	CIPP & VCP	1,400,000	2021		X	X			
3	City of Whittier	Sewer Main Phase 1	11,000	10	PVC	4,100,000	2,019		X	X			
4	City of Monterey Park	Sewer Improvements along Atlantic Boulevard	3,700	12	VCP	1,700,000	2019		X	X			
5	City of Manhattan Beach	Cyle 1 Sewer Main Replacement	430	24	CIPP	450,000	2019						X
6	City of Alhambra	Main Street Sewer Replacement	1,860	12	VCP	1,085,000	2019		X	X			
7	City of Norwalk	FY 2017/18 Sewer Main Repair Project	13,880	8-15	CIPP	578,000	2019		X	X			
8	City of Norwalk	FY 2016/17 Sewer Rehabilitation Project	7,400	8-12	CIPP	70,000	2018						X
9	City of Norwalk	FY 2015/16 Sewer Rehabilitation Project	8,900	8	CIPP	870,000	2017						X
10	City of Inglewood	Sewer Main Replacement, Phase I	5,300	8-15	VCP	1,500,000	2018		X	X			
11	City of Monterey Park	Sewer Spot Repairs & CIPP Installation	9,370	8	CIPP	707,000	2017						X
12	City of Alhambra	Valley Blvd./Almansor St. Sewer Replacement Project	3,210	30, 36	VCP	3,700,000	2016				X		X
13	City of Santa Monica	2014 Annual Wastewater Improvement Citywide	5,500	8	VCP	400,000	2015				X		X
14	City of Sierra Madre	Sewer Plan for West Grand View Avenue	400	8-10	VCP	241,000	2014		X	X			
15	City of Pomona	Sewer Pipeline Replacement Citywide (Phase II)	840	8	VCP	370,000	2014				X		X
16	Long Beach Water District	Cement Sewer Pipe Rehabilitation Replacement, Group 2	15,000	8	CIPP	315,000	2014				X		X
17	City of South Pasadena	Sewer Improvements on Arroyo Drive, Huntington Drive, Marengo Avenue and Meridien Avenue	4,200	4,6,8,10	VCP	620,000	2012				X		X
18	City of Pomona	Sewer Replacement D Project No. 586-86-18	800	8	VCP	204,000	2012				X		X
19	City of Arcadia	Baldwin Avenue Sewer Capacity Improvement Project	900	15	VCP	500,000	2012						X
20	City of Irwindale	Martin Road Sewer Lift Station	----	----	----	450,000	2010				X		X
21	City of Lynwood	Sewer Main Replacement Project in the intersection of Imperial Highway and Long Beach Boulevard	400	8	VCP	230,800	2009		X	X			
22	City of Norwalk	Replacement of the Pumps at the Curtis & King Sewer Lift-Station	----	----	----	150,000	2008						
23	West Basin Municipal Water District	Anza Avenue Recycled Water Lateral at Sepulveda Boulevard	200	6	PVC	66,000	2007						
24	City of La Palma	Sewer Master Plan for the City of La Palma	----	NA	NA	----	2005	X					
25	City of Cypress	Modification of Sewer System at the Intersection of Lincoln Avenue and Moody Street	300	8	VCP	300,000	2005		X	X			
26	City of La Habra	Rehabilitation of Two Mobile Home Parks	300	6	VCP	1,500,000	2004		X	X			
27	City of Hermosa Beach	Reconstruction/Rehabilitation of Sewer on Pacific Coast Highway between 24th Street and Gould Avenue	1,000	8	VCP	1,200,000	2003		X	X			
28	City of Hermosa Beach	Sewer Reconstruction for the City's Loma Area Improvements Project	2,700	6, 8, 12	VCP	570,000	2003		X	X			
29	City of Pomona	Sewage Pump Station No. 3 Replacement	2,400	10, 21	VCP	2,300,000	2002				X		X
30	City of South Pasadena	Sewer Repairs on Huntington Drive, Diamond Avenue, and Glendon Way	1,000	6, 8	VCP	200,000	2000		X		X		X
31	City of South Pasadena	Construction Engineering Services for Sewer System Improvement Phase I	1,500	6, 8	VCP	300,000	1999					X	
32	West Basin Municipal Water District	Design of Brine Line for the Carson Regional Recycling Water Plant	27,000	14	DIP	4,114,000	1999		X	X			
33	West Basin Municipal Water District	Design of PVC/Reclaimed Water Pipelines Water Mains for the El Segundo Lateral in the City of El Segundo	5,900	12	PVC	309,300	1998		X	X			
34	City of Arcadia	Deficiency Study of the Sewer and Drainage System and Preparation of Hydraulic Model Data Base for Trunk Sewer Lines	----	Various	Various	----	1998	X	X	X			
35	City of Compton	8-inch through 15-inch Diameter Sewer Mains	7,700	8, 15	VCP	1,200,000	1992		X	X			
36	City of Baldwin Park	8-inch Diameter Sewer from Merced Avenue along Ohio Street, Kenmore Avenue, and Private Property to Walnut Street	800	8	VCP	200,000	1992		X	X			
37	City of Compton	Prioritized Sewer Improvement Program for the entire 150 miles of the City's sewer system.	792,000	Various	Various	24,000,000	1991	X	X	X			
38	City of Cerritos	Construction of 7,700 feet of 6-inch Diameter Reclaimed Water Pipelines in Three Different Streets	7,700	6	PVC	350,000	1991		X	X			
TOTAL=			946,700	Feet	179	Miles	\$56,250,100						

SECTION IV: PROJECT UNDERSTANDING, APPROACH, AND SCOPE OF WORK

PROJECT UNDERSTANDING

It is our understanding that Garden Grove Sanitary District (District) is seeking to engage a professional engineering consultant to provide engineering design services for the Sewer System Rehabilitation Plan Phase I – Sewer Main Replacement Project No. 4 (Project).

We understand the District seeks to replace an approximate length of 5,100 linear feet (LF), including seven (7) spot repair locations, of existing 6-inch to 8-inch vitrified clay pipe (VCP) sewer mains along various streets throughout the City of Garden Grove (City) with new 6-inch, 8-inch, and 10-inch VCP. These locations have been identified for improvements based on the District’s 2017 Sewer System Rehabilitation Plan (SSRP). In addition, the work also consists of providing a street condition evaluation, which will include recommended street rehabilitation. **Figure 1** below shows the project limits. **Table 1** below shows the replacement limits for Project No. 4 per the District’s 2017 SSRP. As shown in **Table 1**, one location at Flower Street is identified to be upsized from 8-inch to 10-inch.



FIGURE 1: PROJECT LOCATIONS – SEWER REPLACEMENT

TABLE 1: SUMMARY OF PROPOSED REPAIR/REPLACEMENTS PER DISTRICT SEWER SYSTEM REHABILITATION PLAN

Street	US MH	DS MH	Exist. Pipe Size (inches)	Length (feet)	Repair Type
Emerson Ave	11387	11284	6	60	Replace
Russell Ave	11310	11311	6	415	Replace
Russell Ave	11309	11311	6	365	Replace
Andy Reese Ct	11382	11294	6	73	Replace
Central Ave	11072	11293	6	410	Replace

Street	US MH	DS MH	Exist. Pipe Size (inches)	Length (feet)	Repair Type
Brookhurst Ave/Andy Reese Ct	C/O10709	10702	6	108	Replace
Imperial Ave	10716	11316	6	355	Replace
Flower St	11298	11316	8	TBD	Spot Repair
Hope Street	11289	11293	8	320	Replace
Hope Street			8	TBD	Spot Repairs
Imperial Ave	11307	11308	6	415	Replace
Dakota Ave	11312	11314	6	TBD	Spot Repair
Central Ave	10708	11298	8	360	Replace
Central Ave	11292	11293	6	TBD	Spot Repairs
Larson Ave	C/O11070	11287	6	410	Replace
Alley/Andy Reese Ct	10702	11294	6	365	Replace
Larson Ave	10705	11296	6	360	Replace
Dakota Ave	10718	11318	6	355	Replace
Imperial Ave	11306	11308	6	305	Replace
Flower St	11318	11320	8	425	Replace & Upsize
Flower St	11297	11298	8	TBD	Spot Repairs
Total Replacement Length:				5,101	

The work for the Project includes spot repairs and replacing sections of existing sewer mains. The Project also consists of repair of intruding laterals and sewer manhole channels, root removal, installation of new manholes, and reconstruction of all house connections after replacement. The length of spot repairs for the various sewer segments will be determined based on our review of the CCTV inspection provided by the District. In terms of construction design services, the design work will consist of, but not be limited to, removal and replacement of existing piping and appurtenances, excavation/backfill, traffic control, sewer bypass, reconnection and/or replacement of existing sewer laterals, pavement repair, and post construction CCTV videos of newly installed VCP in accordance with District standards and the Project Specifications. In addition, any identified Asbestos Cement Pipe (ACP) water mains where the proposed sewer crosses shall be removed and replaced with C900 Polyvinyl Chloride (PVC) pipe.

Based on our past experience with sewer improvement projects, it is understood that paying attention to detail during the design phase and ensuring to illustrate and specify what construction is required reduces unnecessary burden and cost for all of the parties involved during the construction phase. Emphasizing the limits of start and stop times and the need for proper traffic control for arterial streets is important for public convenience.

The sewer design will generally consist of plan sheets and detail sheets of the proposed sewer main rehabilitation. If a reach requires manhole to manhole open trench replacement, then a typical plan and profile set will be provided for construction. Details depicting point repair construction will include method of connection to existing sewer main and/or manhole, trench backfill and compaction, and pavement repair. Based on the pre-design CCTV review, point repairs will be separated into categories of lengths for bidding purposes such as 0' to 12', 13' to 18', and 19' to 30'. This will provide some degree of certainty on prices in case the field conditions differ from what is evident from CCTV videos. A constructability review will be provided to ensure all the foreseeable construction tasks are included in the technical specifications, measurement and payment, and ultimately in the Bid Schedule.

Sewer flow bypass may be needed during open trench construction. The slope of the existing sewer reach will be determined, and the flow of each reach will be estimated based on the depth of flow and a peak factor. This data will be analyzed for situations where bypass pumping will be required. Sewer bypass shall be included in the plans and specifications.

PROJECT APPROACH

The SA Associates engineering team is committed to maximizing all of its resources to provide the most cost-effective design for the sewer main that satisfies the District’s needs. The SA Associates team has an outstanding track record of designing sewer main repair/replacements for various clients throughout southern California. Our most recent work includes the design of sewer main on Atlantic Boulevard for the City of Monterey Park. This project involves the sizing of sewer mains based on proposed developments on Atlantic Boulevard that includes developments of high-capacity hotels, condominiums, and mixed-use commercial businesses. We have also recently provided design services for the FY 2017-18 Sewer Main Repair Project for the City of Norwalk involving the replacement and repair of 60 sewer segments identified as high priority per their Sewer System Management Plan.

All proposed sewer mains shall conform to District Standards. We also expect coordination with the California State Water Resources Control Board Division of Drinking Water (DDW) for those instances where standard separations between the proposed sections of replacement sewer main and existing water main cannot be met due to site constraints (10 feet horizontal, wall to wall, from any parallel pipeline conveying potable water). We understand the importance of this coordination with DDW so the proposed project receives prompt approval. Our team has been successful in receiving such approvals in the recent past; however, in all cases, we will attempt to achieve the required 10-foot separation before going the route of seeking DDW approval for using alternate construction criteria.

SITE INVESTIGATION/PRELIMINARY OBSERVATIONS

Following our review of the RFP, we investigated the project sites to better understand the characteristics of each sewer main location, its potential impact to residential or commerce within the affected streets, as well as pinpointing the location of existing utilities and present conditions (i.e., valves, manholes, hydrants, etc.), separations to storm drains and water, pavement type and condition, traffic conditions, and other relevant surface features. Photos were taken for further evaluation and for record purposes.

Another crucial aspect for the design is the potential conflicts with the subsurface utilities. For the purpose of expediting the utility coordination process, **we have already conducted preliminary utility research** using DigAlert and obtained contact information for the utility companies. **Table 2** below provides a list of utility companies present within the project limits. We will perform additional research once awarded the project and receive the Notice to Proceed.

TABLE 2: SA ASSOCIATES UTILITY RESEARCH - COMPANIES WITHIN PROJECT VICINITIES

Agency	Name	Number	Email
Airtouch Cellular	John Crosse	714-751-5261	vzwresearch@cableeng.com
AT&T - Distribution	Cathy Hurtado	510-645-2929	ma2797@att.com
Cable Communications	Eric Burr	714-371-3849	eric.burr@cablecomllc.net
Clear Channel Outdoor	Fred Garcia Jr	310-755-7361	fredgarciajr@clearchannel.com
City of Garden Grove	Jon Ruiz	714-719-1295	jonr@ggcity.org
MCI - Verizon Business	Travis Van Wyk	800-289-3427	ASG.Investigationsteam@ASGInc.us
NextGlaven – Crown Castle	Nick Belinsky	800-654-3110	fiber.dig@crowncastle.com
RedFlex Traffic Systems	Chris Renzi	800-568-8405	crenzi@redflex.com
Southern California Edison – Distribution	Gilbert Aceves	909-548-7249	maprequests@sce.com
Southern California Edison – Transmission	Jack Neill	909-873-3263	jack.neill@sce.com
Southern California Gas Company - Distribution	Jason Sum Ryan Lopez	310-687-2011 714-634-5067	scg-comptonutilityrequest@semprautilities.com rlopez2@semprautilities.com
Spectrum Communications	Abraham Rodriguez	562-383-9963	dl-socal-charter-engineering@charter.com

KEY ISSUES/CONSTRAINTS/PROBLEMS TO BE ANTICIPATED DURING THE DESIGN & CONSTRUCTION

The Project is a complex but manageable project that involves multiple facets, including utility company coordination, District coordination, and private property owner coordination. Based on our review of the RFP, our site investigation, and our general understanding of the project requirements, we believe the following to be key project issues:

- Coordination with Homeowners and Outside Agencies as Necessary (Including Permitting)

Due to the location and impact of this Project, there will be some coordination with other agencies, and owners or representatives of impacted properties. It is important to note that none of the project locations are within homeowners' backyards; however, there is a location within an alley adjacent to homes and businesses. During the course of the design, we are prepared to coordinate with outside agencies and property owners as necessary. Concerning specification provisions for construction, we can provide for necessary Contractor coordination in the specifications. Also, it will be advantageous to ensure that the Bid Items include a thorough description of coordination requirements in the measurement and payment section to avoid the risk of change orders.

In addition, SA Associates will assist the District in obtaining approvals/permits needed to for this Project. Per the RFP, this includes Air Quality Management District's (AQMD) Rule 1166 permit. For open cut trench repair, we will coordinate and assist the District in obtaining approval from DDW for those instances where the standard 10-foot separation between the proposed sections of replacement sewer main and existing water main cannot be met due to site constraints. We have recent and extensive experience in working with DDW to obtain approvals when alternate construction criteria is needed.

- Utility Verification & Protection

Based on our experience with several recent sewer replacement projects on both the design and construction management side, we have the experience to ensure that utilities are located properly and protected during construction while minimizing risk of change orders to the District. The project limits may contain significant utility presence which affects excavation, backfill, and pipe installation. The utility situation is complex but manageable. To reduce costs associated with the protection of utilities and change orders during construction, the design will consider not only utility information provided from the District and underground utility companies, but also thorough field investigation and a strategic potholing plan if necessary. Any potholing performed shall include slurry backfill with permanent hot patch repair. Potholing during the design phase will be utilized to eliminate any uncertainty of the various underground utility depths within the proposed alignment. In addition, we will include a note in the plans for the Contractor to perform potholing at all utility crossings. It will also be advantageous to provide for utility protection in the Bid Items descriptions in the measurement and payment section of the specifications to emphasize utility protection and to avoid the risk of change orders.

- Safety of Public

Due to the close proximity to various commercial businesses, residential neighborhoods, and a school (St. Paul's Lutheran Church and School) within the project vicinity where the work is proposed, it is of importance to maintain pedestrian and vehicular safety. This is of utmost importance at locations where the existing sewer main is located within residential sidewalks and driveways. It will also be important to provide proper barriers to keep public out of the work areas. This can be covered in part on the plans, under the General Notes and in the specifications. It will also be advantageous to provide for public safety in Bid Items descriptions in the Measurement and Payment section of the specifications to emphasize public safety and avoid the risk of change orders.

- Traffic Control & Driveway Access

For the overall project, proper traffic control will be required to ensure that the Project does not pose safety concerns to the commuters and the public. This is especially important where construction will be in busy arterial streets such as Brookhurst Street. Per the RFP, traffic control plans will be under the responsibility of the Contractor which will be specified in the specifications and the project bid. Plans will also comply with all local, state, and federal standards. The specifications will also require the Contractor to allow access to driveways at all time during construction.

- Coordination with District

In order to facilitate the sewer rehabilitation work, it will be necessary to have close contact with District staff to assist in the interruption of sewer service during rehabilitation. To minimize customer complaints, it will be necessary to coordinate with the District and the Contractor to ensure that proper public notification is provided. We will ensure that the specifications provide for this coordination, including matters related to temporary sewer bypass and as directed/requested by the District in addition to the requirements of the specifications.

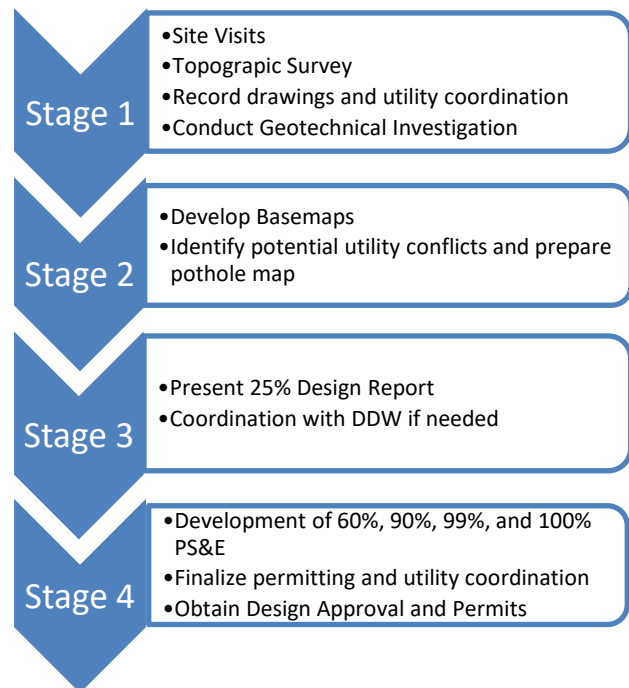
Based on the conclusions stated above and on the previous page, it is important that the design team reflect well on the values of the District. With this in mind, SA Associates is committed to providing quality staff members who are not only capable of satisfying the project tasks but who also have a track record of similar projects and working well with all impacted agencies and local residents/businesses.

TECHNICAL APPROACH

As your Consultant, SA Associates will provide quality resources to manage and complete the Project. We consider ourselves to be available not as contract representatives but as an extension of your staff. For our projects, we believe in developing and maintaining clear lines of communication between all project parties, being proactive in identifying construction issues, and working diligently toward resolution of issues. Based on this approach, you will be assured of a complete project that complies with your project designs and is in accordance with the standards of the industry.

Technical Approach

SA Associates' overall approach for your project is to provide hands on engineering in order to create robust contract documents and reduce the risk for change orders. This project has multiple features that will require proper construction sequencing to avoid delays in construction. With regard to streamlining the design phase of the Project, the key technical approach to be used by the design team is as follows:



1. Expedite coordination among all affected parties including utility information requests
2. Evaluate design alternatives immediately and present them to the District
3. Sequence project tasks to occur simultaneously where possible
4. Coordinate thoroughly throughout the entire project
5. Sequence meetings to occur at favorable days/times (i.e., meetings with District staff and other meetings with impacted agencies/personnel may occur simultaneously or subsequently)

SCOPE OF WORK

As defined in your RFP, we will provide design services as required under your scope of services, which will serve as the basis for this Project. We will execute each of these tasks through our proposed Scope of Work that includes the following major categories:

- Task I – Project Management and Meetings
- Task II – Preliminary Investigation and Research
- Task III – Preliminary Engineering
- Task IV – Final Engineering

TASK I – PROJECT MANAGEMENT AND MEETINGS

1. **Kick-Off Meeting:** Conduct a Kick-Off Meeting with District staff in order to introduce key staff members, learn the organization structure of the District's project team and discuss the project objectives. A meeting agenda will be prepared for the Kick-Off Meeting, and Meeting Minutes will be submitted to the District within five (5) working days and before distribution.
2. **Design Review Meetings:** Meet with District staff to review the design submittals and to obtain additional input. A total of five (5) review meetings will be scheduled with District staff. We will coordinate and meet with utility companies as necessary.

Notes: 1) Per the RFP, project management, meetings, and coordination shall be distributed amongst all other tasks and shall not have a fee affixed. Hours for Task I will be included in Tasks II through IV.

2) Due to the uncertainty of COVID-19 regulations and resurgences, it is anticipated that all meetings shall be virtual.

TASK II – PRELIMINARY INVESTIGATION AND RESEARCH

1. **As-Built Research, Site Investigation, & Review:** Analyze the existing as-builts, record drawings, and data pertinent to the Project. We will coordinate with District staff to obtain all available record drawings within the project limits, including record plans of all the City/District's owned utilities in those streets, and to ensure the District's recommendations, directions, and other requirements are taken into consideration during the design phase. We will perform additional site investigations as necessary to familiarize ourselves further with the project site, to verify the features on the base map, and to verify utility locations. The investigation will also aid in identifying any potential design and construction conflicts.
2. **Utility Research & Notification:** Conduct utility research and coordinate with utility companies to obtain as-built records and/or atlas maps in order to identify all utilities within the project limits. All utility information will be clearly delineated on the project base map, and documentation will be sent to each utility company requesting verification of location, size, and depth of facilities within the project limits. A Utility Notification Log will be kept to track utility company responses.
3. **CCTV Review:** Conduct an investigation of the CCTV videos of the sewer segments to identify the defects as mentioned in the District's SSRP and to provide an effective solution to remediate the defects. A list will be compiled identifying the sewer reach locations and the respective manhole ID, types of defects and location in the sewer main, and a recommended solution strategy for each defect. We will provide the list of recommended solutions to the District for approval.
4. **Geotechnical Investigation:** Soil testing will also be conducted during the preliminary phase of the Project. Based on the current project locations and lengths, **we assume nine (9) geotechnical borings** will be conducted for soil contamination.
 - **Deliverables:** Submit one (1) PDF copy and three (3) hard copies of the geotechnical investigation report to the District.

TASK III – PRELIMINARY ENGINEERING

1. **Surveying:** Conduct a topographic survey to obtain necessary design topography for open trench sewer main replacement. All surface features within the right of way shall be located by the survey, including all utilities, valve covers, water meters, manholes, vaults, pull boxes, hydrants, catch basins, etc., as well as, depicting rights-of-way, intersection description 100 feet beyond BCR/ECR points, edge of pavement, sidewalk, landscape, curb, gutter, cross gutters, any easement, utilities, monuments, stripe, and other items pertinent to a well-defined survey. The survey will also include elevations for flow line of existing sewers and storm drains in the project limits. Cross-section elevations shall be every 50 feet and at grade changes. In addition, pictures of the manhole base and channel will be taken with orientation of rim elevation to manhole base. The survey shall also provide baselines, bench marks, and all other basic survey control information. The basis of the vertical control shall be the most recent City benchmark elevations. All field topography shall be collected electronically using modern survey equipment for data processing and preparation of a digital AutoCAD file.

2. **Preliminary Design Report:** Prepare a preliminary design report at the 25% submittal stage. The preliminary plans will be plan view only (no profile). Sewer plan sheets will be scaled at 1" = 40' horizontal. The preliminary design report will also include permit requirements, schedule and costs, construction phasing, traffic impacts, construction method recommendations, requirements and sequence, and material recommendations.

TASK IV – FINAL ENGINEERING

1. **Design Plans:** Plans will be submitted on full-size (24x36) regular bond, edge-bound paper. The plan sheets will consist of plan & profile (for spot repairs and replacement), bypass pumping, and connection details. Sewer plan and profile sheets will be scaled at 1" = 40' horizontal and 1" = 4' vertical. Details will be 20 scale or less. At this point, we anticipate the Plans to have the following sheets shown in the table to the right.

Sheet Title	Sheet Count
Title Sheet	1
Notes, Legend, Vicinity Map	1
Plan & Profile (at 1" = 40')	6
Spot Repairs	2
Details w/ Bypass Pumping	2
Total Sheets	12

- **Deliverables:** Design Plan submittals will include 60%, 90%, 99%, and 100% stages for review and comment. Development of each design stage will address and incorporate all District and utility agency comments and concerns. Submittals will be in PDF and DWG formats. Seven (7) hard copies will be provided at the 60%, 90%, and 99% stages. Two (2) hard copies, including wet signed and sealed mylar, laser print, plans, will also be provided at the 100% stage.

2. **Project Specifications:** Prepare and submit specifications in accordance with the "Standard Specifications for Public Works Construction, 'Greenbook'" (Latest Edition) and with the District's Standard Plans and Specification. We will ensure that specifications clearly convey technical information for quality acceptance, performance characteristics, and permissible construction methods in line with the District's expectations, latest engineering practices, and local, state, federal regulations.

- **Deliverables:** Specifications will be submitted at 60%, 90%, 99%, and 100% stages. Submittals will be in PDF format. Two (2) hard copies will also be provided (one original wet signed and sealed set unbound and one set copied and bound). We will prepare bid and contract documents that easily convey to prospective contractors all bidding requirements and contractual obligations expected of the successful bidder.

3. **Engineer's Quantity & Cost Estimates:** Development of the Engineer's Quantity and Cost Estimates based on the Project design.

- **Deliverables:** Engineer's Quantity and Cost Estimates will be submitted at 60%, 90%, 99%, and 100% stages. Submittals will be in PDF and Microsoft Excel format. Hard copies will also be provided upon request.

4. **Permits/Approvals:** Our team will obtain applicable permits, including AQMD Rule 1166 permit, needed for the project. We will also assist the District in obtaining approval from the State (DDW) to install new sewer main segments at a distance less than the separation requirement from the existing water mains and other utilities if separation requirements are unable to be met.

5. **Potholing:** We will conduct potholing as necessary to verify/determine utility locations and depths, as well as pavement thickness. Per the RFP, **fifty (50) potholes will be assumed for this project.** Any potholing performed shall include hot patch repair. **A unit price for potholing has been included in the fee.**

6. **Hydraulic Tables:** Prepare hydraulic tables showing average, peak dry weather, peak wet weather flows including depths and ratio of depth to inside pipe diameter. Per the RFP, the District will provide the flow information needed to calculate the depths.

7. **Street Condition Evaluation:** Conduct an evaluation of the streets where the proposed sewer improvements will be located. In addition to identifying the existing conditions and anticipated impacts of construction, the evaluation will also include recommendations for street rehabilitation.

8. **Plan Interpretation & Bidding Assistance:** Assist the District in providing clarification to contract documents and responses to Requests for Clarification (RFC) and Request for Information (RFI) during the bidding phase. **Assume five (5) RFIs/RFCs.**

- ***Final Deliverables:*** 16-GB Micro SD card or USB memory stick with one file of 2019 (or newer) AutoCAD DWG without x-ref drawing files of the plans, PDF and Jpeg files of the plans, Microsoft Word of the specifications, and Microsoft Excel of the Engineer's Quantity and Cost Estimates will be submitted at the 100% stage.

Two (2) hard copies of a design notebook, signed and stamped, including pertinent correspondence, calculations, and quantity and cost estimates will be provided at the 100% stage.

Notes: 1) Per the RFP, traffic control plans are not included in the Scope of Work and will be under the responsibility of the Contractor.

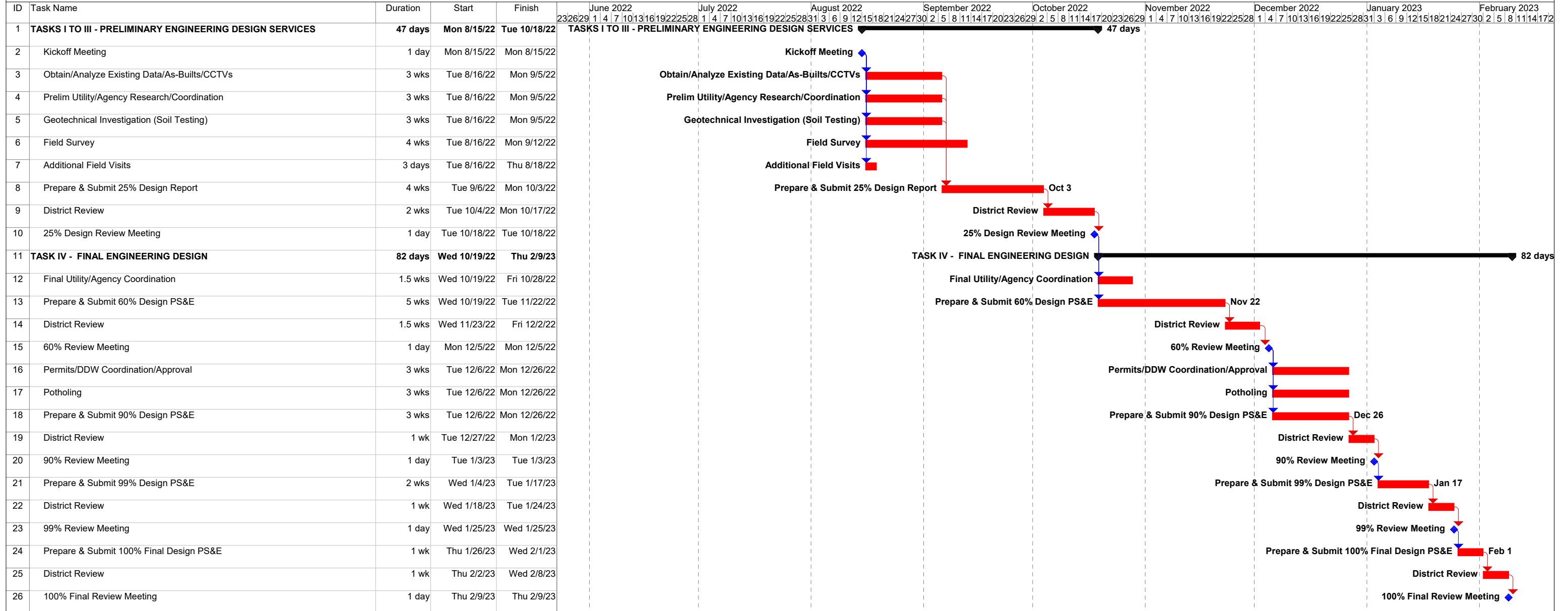
SECTION V: PROJECT SCHEDULE

We are ready to hit the ground running and begin design as soon as the Notice to Proceed is issued. We have set an assumed project kick-off meeting date of August 15, 2022 with a project completion date satisfying the approved bid set documents due date of February 13, 2023 outlined in the RFP. If the Notice to Proceed is issued at a different date, we will update our schedule accordingly.

We have included our project schedule in MS Project format shown on the following page.



**City of Garden Grove
Sanitary District Sewer System Rehabilitation
Plan Phase I - Sewer Main Replacement Project No. 4
Design Schedule**



SECTION VI: WORK HOURS ESTIMATE

Task No.	Item	PM	Engr.	CAD	QA/QC	CM	CI	Sec.	Hours
Task II	Preliminary Investigation and Research	9	40	20	0	0	0	14	83
Task III	Preliminary Engineering	12	20	10	4	108	0	6	160
Task IV	Final Engineering	69	176	136	24	0	0	31	436
Optional Extra Services - 10% of Tasks II, III, & IV									N/A
"NOT TO EXCEED" TOTAL FOR ALL TASKS		90	236	166	28	108	0	51	679



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CITY OF GARDEN GROVE

**CIVIL ENGINEERING DESIGN SERVICES
OF GARDEN GROVE SANITARY DISTRICT SEWER SYSTEM REHABILITATION PLAN PHASE 1 -
SEWER MAIN REPLACEMENT PROJECT NO. 4**

FEE PROPOSAL

Task No.	Item	PM	Engr.	CAD	QA/QC	Survey	CI	Sec.	Direct Costs	Total	
										Hours	\$
Task II	Preliminary Investigation and Research	9	40	20	0	0	0	14	\$843	83	\$46,000
Task III	Preliminary Engineering	12	20	10	4	116	0	6	\$472	168	\$39,000
Task IV	Final Engineering	69	176	136	24	0	0	31	\$1,029	436	\$128,000
Optional Extra Services - 15% of Tasks II, III, & IV										N/A	\$32,000
"NOT TO EXCEED" TOTAL FOR ALL TASKS		90	236	166	28	116	0	51	\$2,344	687	\$245,000

HOURLY CHARGE RATE AND EXPENSE REIMBURSEMENT SCHEDULE

Position	Hourly Rates
Project Manager	\$225.00
Engineer	\$165.00
Quality Assurance/Quality Control	\$195.00
CAD Designer	\$108.00
Surveyor (Two-Person Crew)	\$260.00
Secretary	\$ 98.00

Reimbursable In-House Costs

Photo Copies	\$ 0.15/each
Blueprints	\$ 0.50/S.F
Vehicle mileage, between engineer's office and project site and/or client offices, will be billed at	\$ 0.62/mile

Other Reimbursables

Reproduction, special photograph, printing, and any other services performed by subcontractor will be billed at	cost + 15%
Postage Delivery Service, Express Mail	cost + 15%

NOTE: All rates listed above are effective to December 31, 2022

