RFQ No. 20-02:

On-Call Engineering Design Services for Utilities (Sewer/Storm Drain)

CITY OF HERMOSA BEACH

September 21, 2020

Submitted By:

TAIT & Associates, Inc.
701 Parkcenter Drive
Santa Ana, CA
714-560-8200
www.tait.com

Submitted To:

City of Hermosa Beach
City Clerk Office
Attn: Andrew Nguyen
1315 Valley Drive
Hermosa Beach CA, 90254

TAIT
RISING TO THE CHALLENGE
701 N. Parkcenter Drive, Santa Ana, CA 92705
p:714/560/8200 www.tait.com

COVER LETTER

September 21, 2020

City of Hermosa Beach
City Clerk Office
Attn: Andrew Nguyen
1315 Valley Drive
Hermosa Beach CA, 90254

RE: Request for Qualifications (RFQ) #20-02, On-Call Engineering Design Services for Utilities (Sewer/Storm Drain)

Dear Mr. Nguyen,

TAIT & Associates, Inc. (TAIT) is pleased to submit the enclosed Statement of Qualifications (SOQ) in response to the City of Hermosa Beach's (City) RFQ for On-Call Engineering Design Services for Utilities (Sewer/Storm Drain).

TAIT at a Glance. At TAIT, we have provided innovative engineering solutions to our clients for more than 56 years, with local headquarters right here in Santa Ana, CA. We understand that public projects have their own specific issues, and with 200 associates, we have the right blend of professional engineers, architects, surveyors, environmental assessors, and construction personnel with the experience necessary to address critical and big picture concerns. Since TAIT was founded in 1964 in Orange County, we have built mature relationships with state and local agencies throughout Southern California, and consistently create successful partnerships with the agencies for which we work.

Expertise and Experience. TAIT's experienced personnel have expertise in the many facets of civil engineering, planning, and design services including: drainage, water quality, surveying, mapping, water, and waste water, utilities site development, roadway design, and Phase I and II environmental assessments. We have extensive relevant design experience, including recent projects such as the City of Santa Ana Civic Center and Bristol BMP Design, City of Diamond Bar's Drainage Improvement Project Phase 1 & 2, Port of Long Beach's Pier G Avenue North Sewer Line Improvement Project, and City of Newport Beach's Newport Heights Sewer and Alley Replacement Project, to name a few.

We are a selected consultant to provide On-Call Civil Engineering Services to the County of Orange—OC Public Works, OC Facilities, OC Parks, and the Orange County Sheriff Department—The Orange County Sanitation District, Cities of Newport Beach, Lake Forest, Irvine, Lake Elsinore, and Mission Viejo, as well as providing On-call Plan Check Services to OCPW, among other agencies. Recently, TAIT has been selected by the City of Santa Ana Public Works Division and Water Division to provide On-Call Civil Engineering Services to the City.

Project Team. TAIT has carefully analyzed and hand selected our proposed team for this on-call contract in order to provide the best services to the City. The leadership includes **Jacob Vandervis, PE, QSD/P** who is the Chief Operations Officer, will be the Principal-in-Charge/Quality Assurance and Quality Control Manager. He is also a certified QSD/P and is the best candidate to review the design documents for the City to ensure they are to the standards required and free of error prior to submittal to the City. **David Sloan, PE,** Vice President and Director of Engineering for TAIT will serve as Lead Project Manager for the City's projects. David's career has been rooted exclusively in the public sector. His background and experience with local federally funded public works projects will be invaluable to the City.

Bart Mink, PE, will serve as the Project Manager for Sewer Design with 22 years of experience. And **Daniela Malott, PE, QSD/P** will act as TAIT's Project Manager for Storm Drain Design for this contract. Daniela has spent her career focusing on a diversity of Stormwater Drainage and Water Quality design projects. Her extensive experience both in the public and private sector ranges from planning and design of large regional water quality and flood control basins, to development of Master Plans of Drainage and Water Quality Management Plans.

In addition to the noted Key Staff, TAIT boasts a wide array of 200 associates including Engineers, Architects, Surveyors, Storm Water Practitioners, Geologists, Contractor's, and quality design engineers. The City can be assured that the necessary support and availability of staff will be provided on each contract that is assigned to us. For our as-needed sub-consultants, we've teamed with tried and true partners who have worked with TAIT on numerous projects, including **P2S for pump station design**, **Chambers Environmental**, and **SoCal Geotechnical**.

Scope of Work. It is understood that this engineering proposal is for an on-call contract that includes potential design services for complex, regional sewer design projects, storm drain/stormwater capture and treatment projects, and other stormwater-related tasks as outlined in the Scope of Services, which includes hydrology and hydraulic computer modeling, stormwater analysis, preparation and review of Water Quality Management Plans (WQMP), technical feasibility and project impact analyses, construction documents (PS&E) and coordination for a variety of Stormwater Projects.

TAIT's noted diverse staffing and background in multifaceted projects are ideally suited for the City's wide range of anticipated needs and projects. Upon issuance of an RFP, TAIT will actively review the project requirements and will provide a project specific proposal for the City's consideration.

Commitment to Service. We aim to act as an extension of the City's staff and place an emphasis on Customer Service which has been and will remain one of TAIT's Corporate Goals **"To Completely Satisfy our Customers"**.

Jacob Vandervis is the authorized main point of contact for TAIT's services and can be reached in our Santa Ana office at phone number 714-560-8200 ext. 677, email jacobv@tait.com, and address 701 Park Center Drive, Santa Ana, CA, where the contract will be managed. We thank you for this opportunity to submit our qualifications and look forward to further discussing with you our capabilities and commitment to working with the City of Hermosa Beach.

TAIT's legal name is Tait & Associates, Inc., and we are a California Corporation (C0495510) headquartered at 701 Parkcenter Drive in the city of Santa Ana, CA.

Very truly yours,

TAIT & ASSOCIATES, INC.

Jacob Vandervis, P.E.
Chief Operations Officer and Vice President

FIRM PROFILE

TAIT is a Southern California based, family owned engineering firm founded by Dr. Kenneth E. Tait, P.E., established in 1964, and **incorporated in the State of California**. TAIT began as a design consulting engineering and land surveying firm dedicated to providing a range of quality services to our clients.

In the past **56 years**, TAIT has grown to have 9 offices throughout the Western United States, namely our headquarter office in Santa Ana and regional offices in San Diego, San Luis Obispo, Sacramento, Norco, Boise, Denver, Atlanta, and Dallas. We have approximately 200 associates who work together as a team to provide quality design services throughout the Western United States.

Our Corporate Headquarters—Santa Ana, CA

Each project presents new challenges, and we use them as an opportunity to learn something new and apply that knowledge to future projects. Whether it is a new technical approach, a better management system, or simply improving our communication with clients, the end result is always improved service while strengthening our existing relationships with our clients. Our goal is to determine our client's needs while acting as an extension of their staff. Our prime objective is to provide the highest quality professional and technical services in a responsive, cost effective, timely, and personalized manner.

Firm Capabilities

TAIT's multi-disciplined firm offers a full array of consulting services to public agencies and private development clients. More specifically, we offer project management, civil engineering, surveying, planning, entitlement, right of way engineering, and environmental investigation and remediation services. Within the Engineering Group, our in-house design and management services include:

- ✓ ***Storm Drain Design***
- ✓ ***Sewer Design***
- ✓ ***Hydrologic Calculations & Analysis***
- ✓ ***Preparation of Plan, Specifications and Estimates (PS&E)***
- ✓ ***Public Storm Drain Rehabilitation, and New Construction***
- ✓ ***Water Quality Design & Review (LID Plan, SWPPP, etc.)***
- ✓ ***Coordination with other Agencies***
- ✓ ***Structural Design & Architectural Services***
- ✓ ***Public Improvements and Development Plan Checking***
- ✓ ***Design Survey and Mapping Services***
- ✓ ***Construction Management, Inspection & Surveying Services***

A key component of TAIT's strength is based upon our ability to focus on solutions that are not only cost-effective, but are also constructible. We have specific expertise in public infrastructure development, water quality management plans, best management practices design, storm drain design, and environmental management. We also understand the tight time and money constraints under which our clients frequently operate, and strive to provide unique solutions that allow our client's projects to be completed on time and within budget.

Recent Relevant Experience

Some of the most recent projects that we are under contract for or have recently completed are:

- ✓ ***Bristol St & Civic Center Dr. WQ Improvements, City of Santa Ana (Water Quality)***
- ✓ ***Citywide Comprehensive Drainage Studies, City of Diamond Bar (H&H & Storm Drain)***
- ✓ ***Drainage Improvement Project Phase 1 & 2, City of Diamond Bar (H&H & Storm Drain)***
- ✓ ***Development Plans Drainage Analysis & Design, City of Diamond Bar (H&H & Storm Drain***
- ✓ ***Pier F-G Sewer Line Improvement, Port of Long Beach (Sewer & Roadway)***
- ✓ ***Newport Heights Alley & Sewer Replacement, City of Newport Beach (Sewer & Alley)***
- ✓ ***Irvine Campus Drive Pavement Rehabilitation, City of Irvine (Roadway Rehab & Reconst.)***
- ✓ ***Quadrant III Water Line Replacement, City of Chino (Water Distribution)***
- ✓ ***Street Overlay, Alley Reconst. & Cerritos Widening, City of Stanton (Roadway Rehab & Reconst.)***
- ✓ ***Portola Parkway Resurfacing Project, City of Lake Forest (Roadway Resurfacing)***
- ✓ ***FY13/14 Major Street Rehabilitation, City of Pomona (Arterial Rehabilitation)***
- ✓ ***SR 395 Regional Storm Drain Improvements, City of Victorville (H&H & Storm Drain)***
- ✓ ***Reagan & Peterson Park Parking Lot Rehabilitation, City of Diamond Bar (Parks & Recreation)***
- ✓ ***Library of the Canyons, OC Public Library (Site Design/Facilities)***
- ✓ ***OC Sheriff Headquarters Security Upgrades, OC Sheriff Department (Site Design/Facilities)***
- ✓ ***OCACF Facility Design, Survey, & Construction Staking, OC Animal Care (Site Design/Facilities)***
- ✓ ***Water Main Replacement Design Build Projects, Glendale Water & Power (Water Distribution)***
- ✓ ***Water Main Replacement Design Build Projects, Golden State Water District (Water Distribution)***
- ✓ ***Harbor Boulevard Street Reconfiguration, City of Garden Grove (Roadway Utilities)***
- ✓ ***A Town Street Widening & Sewer Improvements, City of Anaheim (Sewer & Roadway)***
- ✓ ***Tustin Metrolink Facility Redevelopment, OCTA (Transportation Facility)***
- ✓ ***On-Call Plan Checking Services, Orange County Public Works (Plan Checking)***
- ✓ ***Irvine USD Site Topography and Campus Expansion, City of Irvine (Design & Survey)***
- ✓ ***Irvine City Hall UST Replacement, City of Irvine (Site Design, Survey & Environmental)***

Company Location & Other Facts

As mentioned in our cover letter, Jacob Vandervis is the authorized main **point of contact** for TAIT & Associate's services and can be reached in our Santa Ana office at phone number 714-560-8200 ext. 677, fax number 714-560-8233, email jacobv@tait.com, and address **701 Park Center Drive, Santa Ana, CA, where the contract will be managed**. TAIT's **Federal Employer I.D. Number** is 95-2395818, and we have never had any failures or refusals to complete a contract.

Sub-Consultant Profiles

P2S – Pump Stations

P2S Engineering has brought forward-thinking, sustainable engineering solutions to California and beyond over 29 years. We take client dreams and make them reality with inventive, sustainable solutions fueled by the desire to make the future a better place. We believe innovative, responsible design is more than cost savings and efficiency, it's the promise of a brighter, greener future that begins today.

One-Stop Resource

P2S INC

- P2S ENG — Mechanical, Electrical, Plumbing & Technology Design
- P2S CX — Commissioning Services
- P2S CM — Construction Management

ENG Services

- Building systems design
- Central utility plants
- Utility master plans
- Infrastructure design
- Feasibility studies
- Energy audits

Our Staff by the Numbers

283 TOTAL EMPLOYEES

- **91** Professional Engineers
- **124** Mechanical Staff
- **20** Plumbing Staff
- **62** Electrical Staff
- **16** Technology Staff
- **59** LEED Accredited
- **7** CM Staff
- **16** Cx Agents

Project Design

104 LEED® PROJECTS

6 LEED® PLATINUM

6 NET-ZERO ENERGY

Federal Employer ID

33-0453611

Firm Information

Legal Name: P2S Inc. S-Corporation, Incorporated in CA 3/7/1991

Our Locations

Long Beach (HQ) // Irvine // Los Angeles // San Diego // San Jose // Seattle

CHAMBERS GROUP – ENVIRONMENTAL

Primary Point of Contact	Lisa Louie 5 Hutton Centre Drive, Suite 750, Santa Ana, CA 92707 Phone: 949-261-5414 Fax: 866-261-3100 llouie@chambersgroupinc.com
Firm Organization/Ownership	Chambers Group, Inc. Chambers Group is an S-Corporation and owned by Chambers Group, Inc. Employee Stock Ownership Trust
Federal Employer ID Number	33-0283470
Number of Years in Business	Chambers Group has provided environmental consulting services for 41 years Incorporated in the State of California, May 25, 1979

Celebrating 40 years of providing environmental consulting services, Chambers Group's corporate headquarters is in Santa Ana with regional offices in Glendale, San Diego, and Riverside, California. Chambers Group, a SBE is an Employee-Owned S-Corporation, incorporated May 25, 1979. Chambers Group has 56 active employees across a range of technical fields and supporting roles. Services include:

- CEQA and NEPA compliance
- Biological surveys and agency consultations
- Biological, Cultural, and Marine and Aquatic resources
- Construction mitigation monitoring
- Habitat restoration and revegetation
- Geographic Information Systems (GIS)
- Environmental planning and permitting

Chambers Group is known for providing technically proficient experts who are exceptionally responsive and communicative with our clients. Chambers Group has built this reputation on decades of experience preparing appropriate CEQA and NEPA documents for complex projects; preparing required resource agency permit applications, preparing mitigation plans; and monitoring construction activities for compliance.

Conducting environmental analyses and documentation for development projects, including complex and sensitive projects, is Chambers Group's specialty. They have built this reputation on decades of experience preparing appropriate CEQA and NEPA documents and technical studies. Chambers Group's staff has ongoing relationships with many State and local agencies, and the firm's 40-year presence in California has provided an understanding of evolving environmental legislation and meeting the stringent requirements of federal, State, and local regulatory agencies. Their team of technical experts will provide scientific objectivity, environmental expertise, defensible environmental analysis, and technical documentation to support our clients in meeting target strategic and long-range planning and community development goals.

SoCalGeo – Geotechnical

- Official name and address.

  Southern California Geotechnical, Inc. 22885 E. Savi Ranch Parkway, Suite E Yorba Linda, CA 92887

- Name, address, email, and telephone number of the consultant's primary point of contact.

  Gregory K. Mitchell, GE 2364, 22885 E. Savi Ranch Parkway, Suite E Yorba Linda, CA 92887, gkmitchell@socalgeo.com

- Type of business entity of consultant (corporation, company, joint venture, etc.). Please enclose a copy of the Joint Venture Agreement if entity is a joint venture.

  Corporation

- Federal Employer I.D. Number.

  33-0794704

- Number of years consultant has been in business under the present business name and has been providing geotechnical services.

  21 years.

Southern California Geotechnical, Inc. (SCG) is a consulting engineering firm providing geotechnical consulting services. SCG is a California corporation founded, owned, and operation by the principal engineers, the same engineers who perform or supervise all of our consulting services.

The company has been structured from the beginning as a streamlined organization with hands-on involvement by the principals of the company. The commitment of the founders is to provide responsive, cost-effective, and technically reliable service to our clients while fostering a stimulating professional environment for our employees. We understand the compressed timelines that most projects follow. Therefore, our focus is in providing the service that will allow your project to proceed in a timely, economical fashion.

The personal involvement of the owners means there are no extra layers of management to increase overhead or to cause unnecessary delays. Clients deal directly with the principals; thereby obtaining personalized service. Active participation by the principals also assures that our clients receive accurate, consistent recommendations from the most qualified experts in the firm.

SCG was established to provide consulting engineering services to clients in the commercial, residential, industrial, retail, and governmental fields. We are committed to offering the most responsive service available at competitive rates. The principals have always sought to earn an excellent reputation in the industry by maintaining the highest level of professional and ethical standards. Every member of the SCG team is dedicated to earning the trust and confidence of our clients by demonstrating our ability and integrity on each and every project we accept.

PROJECT UNDERSTANDING AND APPROACH TO SCOPE OF WORK

Statement of Project Understanding

Public Works engineering contracts require **careful planning**, **effective communication**, and **precise execution** in order to avoid costly contract change orders or delays during the construction phase. In an effort to ensure consistent and excellent services, TAIT employs our proven 5 step project management protocol (UNDERSTAND→ASSIGN→ PLAN→EXECUTE→QA/QC) on each assigned contract.

STEP 1 → UNDERSTAND:

Understanding the City's Needs

To best understand the projects specifics needs, we first focus on what the City's overall needs are for this contract and future contracts that will be required as part of the On-Call Contract. Based on our review of the City's RFQ, the following is our understanding of the City needs on this and future projects as compared to TAITs capabilities:

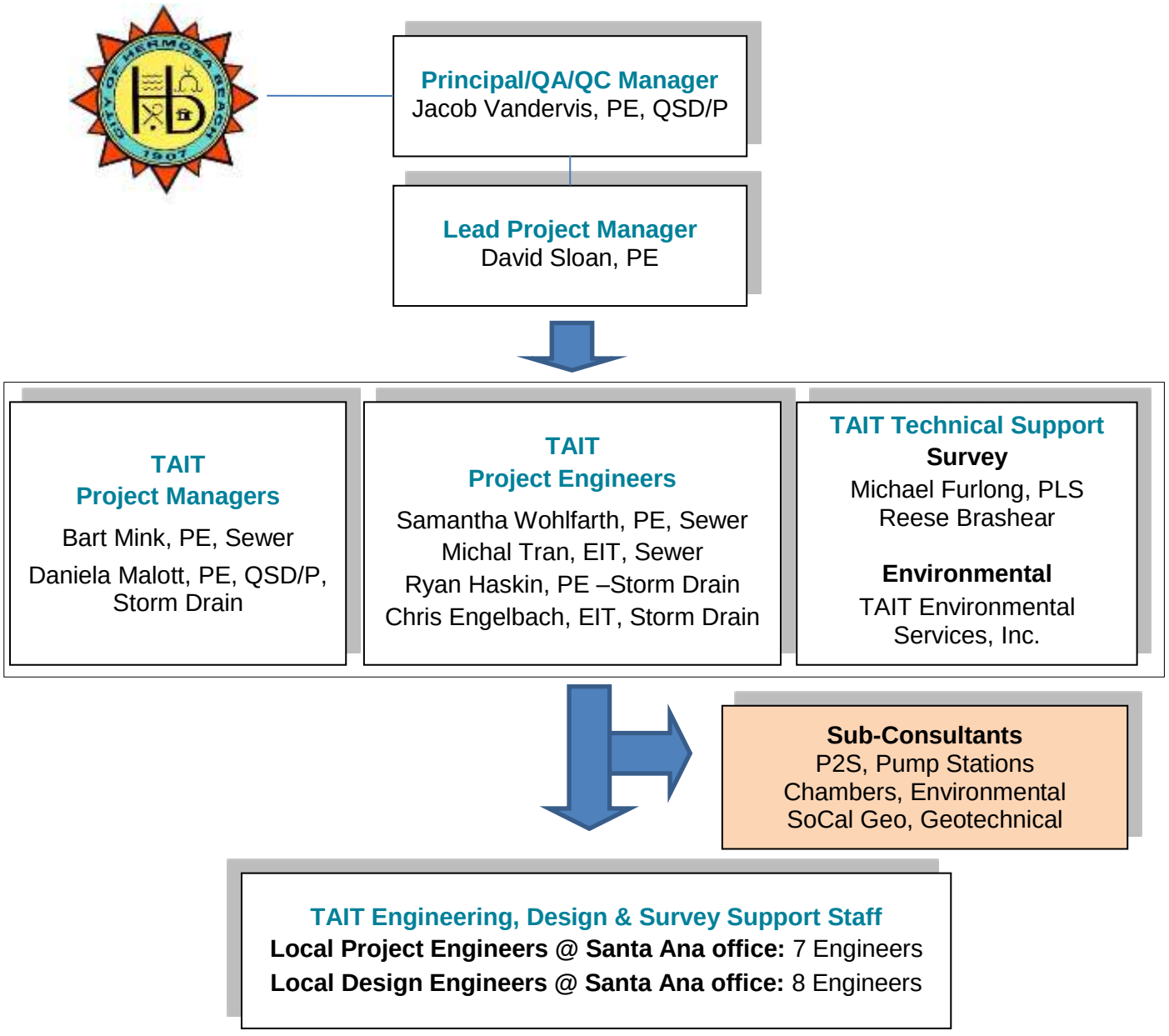
City of Hermosa Beach Needs:	The TAIT Team Has:
…a Consultant to design complex, regional sewer pipelines, and stormwater capture and treatment projects and perform other storm drain-related tasks.	…Over 56 years of extensive local public works design experience, understands the complexity of Regional Sewer and Basin Design, extensive work experience on sewer and storm water quality treatment, and understands the MS4 Permit requirements.
… It's assumed the City intends to seek local, State, and Federal grant moneys to fund regional sewer and storm drain projects and the selected firm shall comply with the funding agency's requirements.	…has previously worked with other Cities to secure local, State and Federal Grant money for their projects. Our project team will stay up to date and inform the City of upcoming grant opportunities as part of the on-call efforts. Additionally, Chambers group as part of the team will support and assist with environmental permitting processes.
…All proposals, plans, drawings, specifications, estimates, grant applications, modeling, studies, presentations, and/or reports will be subject to the final approval and satisfaction of the City.	…as our main goal to provide our clients with "**complete satisfaction**". With this approach in mind we strive to provide the best services and always ensure our quality of work meets our client's needs.
…a consultant to prepare detailed and accurate sewer and storm drain PS&E.	…successfully completed multiple recent local and federally funded street PS&E design contracts
…a consultant who can maintain the proposed project schedule.	… the staffing necessary to allocated the required resources to meet and exceed the City's scheduling needs
…a cost effective and high quality design.	…placed and emphasis on design and construction costs throughout the project life and is included in TAIT's QA/QC Program in order to ensure maximum value is retained by the City.

Organizational Chart

STEP 2 → ASSIGN:

TAIT will carefully reviewed the staffing needs and staff assignments for each project under this on-call. Of notable importance in our approach is to assign a project-specific Project Manager who will best meet the City's needs for the particular project assignment, and a Project Engineer who will assist and support from project inception to completion.

The chart below summarizes our key personnel and their expertise and positions for this contract.



Approach to Work Program (Required and Optional Tasks)

STEP 3 → PLAN (SCOPE OF WORK):

We will prepare and submit a clear and concise scope of work, project schedule, and fee proposal that includes all necessary tasks to successfully complete contracts under this on-call. Key considerations in the planning phase will include the funding source (local/state/federal) and associated permitting/documentation requirements, stakeholder requirements/needs, level of design detail desired by the City (plan/plan & profile), storm water quality requirements, coordination and meeting needs, and the overall scheduling needs. Upon selection of the design team for the contract, TAIT initiates the preparation of the detailed project scope of work tailored to the needs of the specific project requirements. (See Scope of Services section for additional details).

STEP 4 → EXECUTE:

Upon issuance of the Notice to Proceed, TAIT will actively and effectively execute the scope of work for each assign contract. Our assigned project manager will stay in constant contact with the City and will remain available and responsive to the City's needs through the life of this on-call contract. At the heart of each relationship and team member, is effective communication of the **roles & responsibilities**, **quality requirements** and **scheduling needs**.

As part of TAIT's approach to executing a project under this on-call contract, the selected Project Manager will work on developing a Project Management Plan (PMP) specific to the project. This PMP will layout:

- ✓ Project tasks.
- ✓ Assign team members to the task.
- ✓ Develop a schedule.
- ✓ List deliverables for each task.
- ✓ List budget for each task.

The team assigned to the project will diligently follow the PMP to ensure that deadlines and budgets are met, along with performing the best quality of work. The Project Manager will continuously monitoring the progress of each task and the status of the budget to ensure that each task is accomplished in a timely manner and within the budget.

Lastly, a key component for a successful project is communication. TAIT will maintain communication with the City, each internal team members and sub-consultants as applicable to the project, to ensure coordination efforts and completion of task is accomplish in a smooth and timely manner.

STEP 5 → QUALITY ASSURANCE/QUALITY CONTROL PROGRAM:

An important feature of our design process is our Quality Assurance/Quality Control (QA/QC) Program. TAIT has established **clearly defined quality control and quality assurance protocols** set in place in the office. As part of our scope of services and fee proposal, we have set aside time to ensure that quality control is incorporated in to the contract.

We discuss our QA/QC Program more in the Project Management Plan section of this SOQ.

Roles and Responsibilities for City Staff and Additional Services

The proposed TAIT project team is capable of handling the full scope of services requested in the RFQ and no exceptions are taken. With the decades of local, relevant project experience, we are confident in our selected team's ability to service the City on this contract. Key sub-consultants for relevant areas of work (MEP/Geotechnical/Environmental) have been listed and highlighted in the SOQ with relevant firm bios and key team member resumes. It is understood that based on the final scope of work on each project, additional sub-consultants may be required. Such sub-consultant work will be identified in the project understanding and assignment stages of our project management protocol listed above. Only key sub-consultants have been listed in this SOQ, however, TAIT has long standing working relationships with the following sub-consultants who will be requested for proposals on relevant projects. **Additional sub-consultant work that may be required on a contract include**:

- **CDPC:** Landscape Architect (for plant/site work or roadway work impacting medians)
- **TJW:** Traffic Engineer (if City requests traffic control plans or signal improvements are impacted
- **BTL:** GPR Investigation/Utility Potholing/CCTV Inspections (if data is not provided by the City)

Resources and assistance that is expected from the City on the assigned contracts are:

- City to provide available public roadway, utility, and right of way records
- City to provide sewer/storm drain master plans and supporting modeling data
- City to provide title report for site work (unless requested in the scope from consultant)

Prior to submittal of each proposal, TAIT will coordinate with City staff on any additional items to ensure roles and responsibilities on each job are made clear at the start of the project.

PROJECT MANAGEMENT PLAN

Scheduling

The Project Manager is responsible for efficiently directing the team and completing projects within the established budget and schedule. To accomplish this, the Project Manager must authorize and approve all time cards, work reports, change orders and expense sheets with the current modules of BST (most accepted applicable accounting system). The TAIT team is 100 percent committed to our clients for the duration of each project it undertakes.

Communications Approach

TAIT has built a reputation of successfully managing projects from concept to completion, with both **big company expertise and small company culture** dedicated to customer service. We know when to look for feedback from our clients and other approving agencies, especially when budget constraints restrict a project's direction. When multiple solutions or options are available, a request for input/feedback along with our recommended alternative is presented to our clients ensure that our client's sometimes limited resources and time is efficiently utilized.

Quality Assurance/Quality Control Program:

As noted previously, an important feature of our design process is our Quality Assurance/Quality Control (QA/QC) Program. TAIT has established **clearly defined quality control and quality assurance protocols** set in place in the office. As part of our scope of services and fee proposal, we have set aside time to ensure that quality control is incorporated in to the contract.

TAIT assigns a QA/QC Manager to each project to ensure reviews occur prior to making submittals to the reviewing agency and the City is provided a quality design. Mr. Jacob Vandervis, P.E. has been assigned to oversee TAIT's QA/QC Program for this on-call contract. TAIT's QA/QC Program focuses on the following four primary objectives:

- To ensure that a quality design has been provided by following our in-house design checklists
- To verify that different design disciplines have been coordinated
- To verify that the proposed improvements are constructible, and
- To verify that a cost effective analysis approach was followed in achieving the client's specific project goals and objectives.

TAIT utilizes a Total Quality Management approach. - TAIT's philosophy is that quality control begins at day one and does not end until the project is completed.

Quality Control is the responsibility of each and every team member. - It includes the selection of project team members who have demonstrated the ability to understand and apply the project objectives to achieve a specific goal. It requires continuous communications between all parties, and it includes self-checks during design and development of the project.

TAIT has developed internal design checklists. - Design checklists are used by our design team members as a component of our firm's design process and not solely part of the QC process.

Timely Quality Control Reviews are provided. - Before plans are submitted to outside parties, TAIT's QA/QC Manager or his designated QC team member conducts a thorough review to verify the quality, constructability and completeness of the submittal.

A typical TAIT QA/QC Program includes the following steps:

- **Project Manager (PM) Transmits Design Documents/Reports to the QA/QC Manager -** PM initiates the QC process as agreed upon project milestones.

- **QA/QC Manager conducts initial review -** The QA/QC Manager reviews the submittal with the PM to obtain project information and conducts a limited review on the submittal's completeness.

- **Review of the Submittal –** The submittal is reviewed using TAIT's internal checklists. Necessary corrections are identified on the submittal which is returned to the PM.

- **PM to Addresses QC Comments** - The QA/QC Manager and PM review the QC comments to set a course of action. Any proposed Value Engineering (VE) measures are reviewed to determine the appropriate next step (i.e.: implement the VE measure, review the VE measure with the City, or conduct additional analysis to determine the feasibility and potential cost savings). The reviewed submitted is then returned to the design team, who carefully makes corrections on plans, calculations and reports as needed.

PM finalizes Design Documents/Reports for Submittal to the Agency - The PM meets with the design team to monitor progress and verify incorporation of the QC comments into the design documents. Deviations from the QC comment are reviewed for acceptance.

EXPERIENCE AND QUALIFICATIONS

Summary of Relevant Projects

ON-CALL ENGINEERING CONTRACTS

Ex: Orange County Public Works—On-Call Land Planning and Engineering Services

County of Orange, CA

Since 2011, TAIT & Associates, Inc. (TAIT) was retained by the County of Orange to provide On-call Land Planning and Engineering Services. TAIT also assists OCPW - OC Planned Communities in the review of development applications for new planned communities in South County, and in the evaluation of County owned properties for redevelopment opportunities.

Other On-Call Engineering Contracts

- On-Call Engineering, City of Santa Ana Public Works & Water
- On-Call Engineering, City, County, & Port of San Diego
- On-Call Engineering, City of Newport Beach
- On-Call Engineering, City of Lake Forest
- On-Call Engineering, City of Irvine
- On-Call Engineering, Port of Long Beach
- On-Call Engineering, Orange County Sanitation District
- On-Call Surveying, SOCCCD
- On-Call Engineering, City of Lake Elsinore
- On-Call Engineering, City of Mission Viejo

Storm Drain Projects

BRISTOL STREET AND CIVIC CENTER DRIVE WATER QUALITY IMPROVEMENTS - SANTA ANA, CA

RELEVANT PROJECT ELEMENTS

- **WQMP Report**
- **BMP Design**

TAIT was selected by the City of Santa Ana as part of the Design On-Call Contract to provide civil engineering design services associated with water quality improvements on the Bristol Street and Civic Center Drive Improvement Project. TAIT was contacted by the city after the noted projects were designed and constructed (Bristol Street) or under construction (Civic Center Drive) for the roadway improvements for which water quality improvements were required to be retrofitted in to. TAIT worked closely with the City of Santa Ana on this project which required quick turnaround in order to review field conditions, design water quality systems that capture and treat equivalent volumes for the tributary area, and provided individual WQMP and BMP Plan improvement documents that allow bidding and construction of the required improvements. Of critical importance on this project was the review of existing utilities and potential conflicts with the required treatment units. Further, value engineering of the system to maximize the City's budget was critical on this job. Construction is anticipated in the summer of 2020.

Reference Contact:
Craig Foster, PE
20 Civic Center Plaza,
Santa Ana, CA 92701
(714) 647-5659
cfoster@santa-ana.org
Client:
City of Santa Ana
Construction Cost:
$300 K
Project Dates
Design: 2020
Construction: 2020
Key Staff
PIC/QA/QC: Jacob Vandervis
PM: David Sloan
PE: Daniela Malott

WQMP/BMP Design for the El Toro 20 Acre RV Storage Lease – Irvine, CA

Relevant Project Elements

- **WQMP Report and Design**
- **BMP Design**
- **Hydraulic Analysis**
- **Hydrology Study**

The County of Orange land lease project for the creation of a 20 acre RV storage site included a Water Quality Management Plan (WQMP) for the design of two Dry Extended Detention Basins to fulfill stormwater treatment requirements. The design utilized Water Quality Best Management Practices (BMP) and included cost estimates, coordination with the client, development of construction plans for the BMP's installation, and the design and approval of a connection to an existing Orange County Flood Control facility. Several alternatives and solutions for the type and configurations of BMP were analyzed and preliminary design was completed to determine the most optimal solution for the County. A hydraulic study was performed and included models for each basin during a 2-, 25-, and 100 -ear storm event. Final construction plans included BMP installation details, custom riser outlet details for each basin, and site specific construction specifications for BMP site elements.

Reference Contact:
Tim Nguyen, OCPW Project Management
Client:
Orange County Public Works
Construction Cost:
$2.5 M
Project Dates:
Design: 2019-2020
Construction: 2020
Key Staff
PIC/QA/QC: Jacob Vandervis
PM: David Sloan
PE: Ryan Haskin

Drainage Improvement Project Phase 1 & 2 – Diamond Bar, CA

Relevant Project Elements

- **Storm Drain Design**
- **BMP Design**
- **Hydraulics Study**

TAIT was hired by the City of Diamond Bar to provide design engineering and construction management services for Phase 1 & Phase 2 of the City's Drainage Improvement Project. This project included three separate areas: Brea Canyon Road – Parkway Drain System & Perforated Drain, Hipass Drive – Sub drain System, Low Flow Storm Drain & cross-gutters, Golden Springs – Sub drain System & Low Flow Storm Drain.

This project included extensive coordination with the City and the design team in order to recommend and implement final design scenarios for each location. Appropriate water quality treatment systems were implemented in all systems that have direct storm drain connection (modular wetland system), and the sub drain system and crossing were analyzed to avoid conflicts. During the construction phase, TAIT managed the contractor in order to review the field operations, respond to design related inquiries, updated designs based on final field needs, and successfully completed the construction project. The construction of this project was completed in 2018 within budget.

Reference Contact:
John Beshay
21810 Copley Drive
Diamond Bar, CA 91765
(909) 839-7043
JBeshay@DiamondBarCA.Gov
Client:
City of Diamond Bar
Construction Cost:
$400 K
Project Dates
Design: 2017-2018
Construction: 2018
Project Team:
PIC: Jacob Vandervis
PM/CM: David Sloan
IOR: Michael Delagarza
QA/QC: Todd Schmieder

Citywide Comprehensive Drainage Analysis & CIP Design Projections – Diamond Bar, CA

Relevant Project Elements

- **Street Flooded Width Study**
- **Hydraulic Analysis**
- **Hydrology Study**
- **CIP Plan**

TAIT was hired by the City of Diamond Bar to analyze, design and recommend pavement and drainage solutions for 11 locations throughout the City which currently experience groundwater seepage problems. The analysis included field investigations, geotechnical testing and reporting, pavement design, and the preliminary design and cost estimating for multiple design scenarios at each project location. The cost estimate included estimation of the design consultant fees as well as the construction costs for the ultimate design scenarios.

Extensive coordination was required on this contract with City, Utility, LACFCD Staff, and private residences in order to understand the existing conditions and to project the required design and permitting efforts for the design and construction phase. Upon completion of the report, the City will utilize TAIT's recommendations for future CIP budget and project planning efforts in order to justify the cost and importance of each location.

Reference:
Christian Malpica
Tel: 909-839-7042
Client:
City of Diamond Bar
Construction Cost:
Approx. $1.5 M
Project Dates
2014-2015
Project Team:
PIC: Jacob Vandervis
PM: David Sloan
PE: Michael Delagarza

El Toro Development Plans Drainage Analysis & Design – Irvine, CA

Relevant Project Elements

- **WQMP Reports**
- **Master Drainage Study**
- **BMP Design**
- **Property Survey**

TAIT is serving as the Civil Engineering Lead to Lowe Enterprises, the County's selected Developer for the County-owned properties, for the Phase 1 Preliminary Engineering and Environmental Support Services for a development of the County of Orange's "100-Acre Parcel" and "West Alton Parcel" areas on approximately 140 acres. The combined projects will provide nearly 3000 multi-family residential housing units, 200,000 SF of retail, a 200-room hotel and 1.8 million sf of commercial office space. Working with Lowe and the Project Architect, KTGY, TAIT has assisted in the development of the Site Plans, Master Drainage Studies, and Preliminary WQMPs for both areas.

Other TAIT engineering services have included property surveys, the preparation of encumbrance maps, and preliminary engineering design. Preliminary designs have included grading plans, street circulation plans, storm drain plans and technical reports, wet utility plans, and a feasibility studies. The documents have been developed to support the project's CEQA and Entitlement phase and construction was completed in 2018.

Reference Contact:
James Campbell, PM
445 Civic Center Dr. W.,
2nd Flr, Santa Ana, CA
(714) 567-7742
James.Campbell@ocgov.com
Client:
County of Orange
Construction Cost:
$40 M
Project Dates
2013-Present
Project Team:
PIC: Jacob Vandervis
PM: David Sloan
PE: Ryan Haskin

OC Animal Care Facility – Tustin, CA

Relevant Project Elements

- **WQMP Report**
- **Hydraulic Analysis**
- **Storm Drain Design**
- **Basin Design**

TAIT oversaw the preparation of rough and precise grading plans, street plans, sewer and water plans, fire water protection plans, Water Quality Management Plan (WQMP) and Storm Water Pollution Prevention Plan (SWPPP) for a 10-acre site on the former USMC Tustin Air Station. This County of Orange project is the first Design-Build project implemented by the County. TAIT was the Civil Engineering Consultant to Snyder Langston, the County's Design-Build Contractor. The contract was awarded in the spring of 2016 and a Rough Grading Permit was issued by the City of Tustin in July 2016 while the County Animal Care and the Design-Build Contractor finalized the building and kennel improvements. A Delta 1 Rough Grading Plan was developed to allow the Contractor to grade pads for the reconfigured Administration Building and dog kennels in October 2016. As part of the Design, TAIT had to coordinate the project's containment wall and fence locations and develop a site accessibility plan for the project. Construction of the $28 million facility completed in August 2018. The facility includes a 2-story 40,000 SF administration building with state of the art veterinary facilities, six dog kennels, special cat housing quarters, and a small corral.

Reference Contact:
Joe Seybold, Project Manager
1143 Fruit Street
Santa Ana, CA
(714) 667-4921
Joseph.Seybold@ocpw.ocgov.com
Client:
County of Orange
Construction Cost:
$28 M
Project Dates:
2016
Project Team:
PIC: Jacob Vandervis
PM: Todd Schmieder

Campus Drive Roadway Improvement Project – Irvine, CA

Relevant Project Elements

- **Street Flooded Width**
- **Storm Drain Design**

TAIT was selected by the City of Irvine to provide civil engineering and surveying on the Campus Drive Rehabilitation Project from Michelson Drive to University Drive. The project limits include a total of 4000 linear feet of arterial roadway rehabilitation and reconstruction on Campus Drive which is a 2 lane arterial roadway with bike lanes extending through the City of Irvine. The project includes the design of pavement rehabilitation strategies as well as the identification and replacement of non-ADA compliant curb ramps, sidewalk, replacement of damaged curb and gutter, re-grading of the low point of the roadway due to flooding and ponding issues, improvements of stormwater conveyance structures, and coordination with IRWD and UCI for right of way and wetlands protection. Careful attention was paid to the roadway profile which required modification in order to raise the low point of the roadway by more than 6". Plan and profile for the roadway was re-designed per CA Highway Design Manual standards, and extensive coordination conducted with the City to verify that the pavement replacement scenario is in line with the proposed and revised grades.

Reference Contact:
Darrell Hartman, PE
1 Civic Center Plaza,
Irvine, CA 92606
(949) 724-7556
dhartman@cityofirvine.org
Client:
City of Irvine
Construction Cost:
$2.6 M
Project Dates:
Design: 2017-2018
Construction: 2018
Project Team:
PIC: Jacob Vandervis
PM: David Sloan
QA/QC: Todd Schmieder
PE: Chris Engelbach

Sewer Projects

Pier G Avenue North Sewer Line Improvement Project – Port of Long Beach

As part of TAIT's On-Call Contract with the Port of Long Beach (POLB), TAIT was selected to provide civil engineering services for the review, recommendation, design, and construction support services for the Pier G Avenue North Sewer Line Improvement Project. The project limits spanned approximately 1/3 of a mile within Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current peak flow conditions. Extensive meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare detailed quality management plans and a basis of design report that outlined all project parameters.

Disciplines included within this project include civil, geotechnical, traffic, plumbing, and utility potholing/locating services, all of which required coordination and incorporation to the basis of design report.

In addition to the sewer improvement plans, this project also includes the rehabilitation and widening of pier G Avenue North as well as the Reconstruction of Pier G avenue South. TAIT was tasked with preparation of master traffic control plans and phasing concepts for the project in order to ensure POLB trucking operations were not impacted during the course of the project. Careful and detailed review of traffic sections and phasing alternatives have been conducted so as to minimize impacts.

This project is currently completing preliminary design and analysis and will enter in to construction drawing phase in July of 2018 upon POLB Management approval of the preliminary design concept and recommendations.

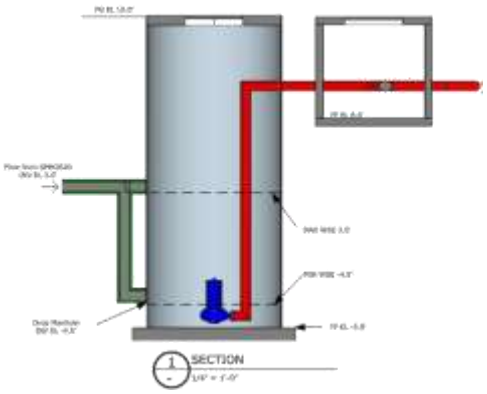
Reference Contact:
Daniel Shieh, PE
Deputy Chief Harbor Eng.
4801 Airport Plaza Drive,
Long Beach, CA 90815
(562) 283-7860
daniel.shieh@polb.com

Client:
Port of Long Beach

Construction Cost:
$3.1 M

Project Dates
Design:
- 2017-18: Prelim Design
- 2018: Construction Dwg
- 2019: Construction

Project Team:
PIC: Jacob Vandervis
PM: David Sloan
QA/QC: Todd Schmieder
PE: Bart Mink



NEWPORT HEIGHTS SEWER AND ALLEY REPLACEMENT PROJECT – NEWPORT BEACH, CA

TAIT was selected by the City of Newport Beach to provide civil engineering services on Newport Height Sewer and Alley Replacement Project. The project limits spanned across an entire neighborhood in the City's coastal community of Newport Heights and include the review and repair of existing alley sewer and lateral connections and a total of 3+ miles of alley reconstructions. In order to facilitate the City's budget and timelines, the design project was split in to three phases which required separate design PS&E for each project. Phase 1 included all sewer main replacements while Phases 2 and 3 included the alley removal and replacements in the neighborhoods.

The proposed design includes the preparation of design plan and profile for each alley, prepare of design cross sections at 25' intervals for review of proposed cross falls, preparation of sewer main replacement and lateral replacement plans, field review of all alley locations to field locate existing utilities, conflicts, and join locations, identification of sewer laterals that have been recently been replaced for protection, and the detailing of all alley approaches for ADA compliance. In total, the design package includes 60+ sheets of alley and sewer replacement plans. Due to the narrow alley widths (15' typical), design cross falls and alley drainage capacity was a critical issue in the design. TAIT is carefully checking each alley limit to ensure that the proposed design cross section improves the drainage condition both on the longitudinal as well as the horizontal cross sections.

As part of this design, TAIT also included the installation of LID seep drains at the low point of each alley in order to capture nuisance flows to infiltrate in to the sand bed rather than entering the storm drain system. TAIT is also working closely with City staff to determine the extent and need for private repairs for encroaching improvements within the alleys.

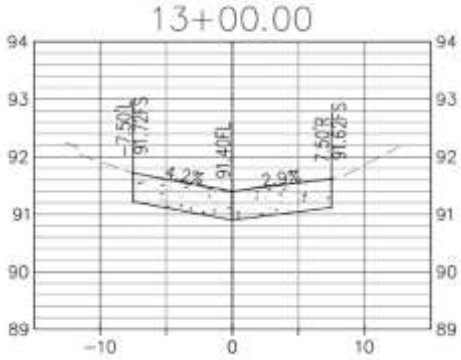
Reference Contact:
Frank Tran, PE, Associate Civil Engineer
100 Civic Center Drive,
Newport Beach, CA 92660
(949) 644-3340
FTran@NewportBeachCa.gov

Client:
City of Newport Beach

Construction Cost:
$1.3 M (Sewer)
$1.8 M (Alley)

Project Dates
Design:
2016 (Sewer & Alley)
Construction:
2016 (Sewer TBD)
2016-2017 (Alley)

Project Team:
PIC: Jacob Vandervis
PM: David Sloan
QA/QC: Todd Schmieder



Sewer, Alley & Roadway Design for Greenwood at Tustin Legacy – City of Tustin

TAIT provided engineering design and construction survey services for Precise Grading and Infrastructure Improvement Plans and Construction Staking Services as part of an 80-acre residential development containing 375 homes.

The project's infrastructure plans addressed 2.6 miles of public sewer and domestic water lines, private residential streets and alleys, and private storm drain lines. TAIT's design also included a short segment of recycled water line for the development's common area landscaping and Community Park and 2000 linear feet of CMU soundwall with a maximum wall height of 14 feet along Jamboree Road. The project included extensive use of private drives and private courts providing alley access to single family detached homes for over 50 percent of the residential lots. For these lots, storm water runoff management and maintaining private home owners access to private garages and the homes' primary and secondary entry points were critical elements used for creating the final construction plans.

TAIT's design services also included extensive coordination with multiple consultant's for the project's dry utilities, common area landscaping, community screen walls, the off-site public street improvements and backbone infrastructure improvements. Design services began in 2013, and construction of the project streets, storm drain, sewer, and water lines commenced in 2015. Precise grading for models and the initial building phases started in March 2015. The estimated construction cost for the infrastructure improvements is $6.3 million.

Reference:
Scott McBean, CM
15360 Barranca Parkway
Irvine, CA 92618
(949) 236-9042
scott.mcbean@calatl.com

Client:
Standard Pacific Homes/City of Tustin

Construction Cost:
$6.3M

Project Dates
2013-2015

Project Team:
PIC: Jacob Vandervis
PM: Todd Schmieder
PE: David Sloan

A-Town Sewer Capacity and Street Widening – Anaheim, CA

TAIT has worked closely with the City of Anaheim's Planning, Public Works, and Construction Departments to process plans for the proposed public infrastructure improvements within the City's Platinum Triangle Development District.

Engineering services included design of capacity enhancements for sewer lines in Katella Avenue, Gene Autry Way and Santa Cruz Road (approximately 2 miles on new sewer). TAIT also provided design plans for street widening to Katella Avenue, State College Boulevard and Gene Autry Way (approximately one-mile total length) including a new raised landscape median in Katella Avenue, and the reconstruction of a City Changeable Message Sign as part of our consultant services associated with the A-Town redevelopment area with in the City's Platinum Triangle. TAIT services also included coordination for the undergrounding of City electrical lines and obtaining Caltrans Encroachment Permits for street and sewer improvements within state right of way along the I-5 HOV access ramps to Gene Autry Way.

Reference:
Natalie Meeks, Public Works Director
200 South Anaheim Blvd.,
Anaheim, CA 92805
(714) 756-5148
nmeeks@anaheim.net
Client:
City of Anaheim
Construction Cost:
$7.3M
Project Dates
2005-2008
Project Team:
PIC: Jacob Vandervis
PM: Todd Schmieder

SEWER SLIP LINING – TUSTIN, CA

TAIT has hired by Lennar Homes to work with the Irvine Ranch Water District for the Valencia Avenue and Armstrong Avenue sewer lining project as part of the Tustin Legacy development in Tustin, California. TAIT's scope of work for this project involved the preparation of sewer lining plans, temporary sewer by-pass plans and traffic control plans for slip-lining approximately 3,300 LF with an existing 8-inch and 15-inch sewer for the Irvine Ranch Water District (IRWD).

Services also included the development of a construction staging program and a six-phase traffic control plan to accommodate existing traffic on the new public streets. The existing sewer lines were recently installed in Valencia Avenue and Armstrong Avenue without the IRWD required slip-lining to accommodate potential pipe settlement due to concrete encasement. To satisfy the slip-ling contractor work schedule, TAIT coordinated a pre-design submittal process with IRWD and the City of Tustin that allowed design to be completed in six weeks. Design Services and Construction were completed on schedule. The estimated project cost was $250,000 and the project was completed in July 2007.

Reference Contact:
Marsha Santry, Vice President
(949) 306-4899
msantry@mac.com
Client:
Lennar Homes/Irvine Ranch Water District
Construction Cost:
$250 K
Project Dates
Design: 2007
Project Team:
PIC: Jacob Vandervis
PM: Todd Schmieder

References

1. City of Santa Ana
Craig Foster, PE
20 Civic Center Plaza,
Santa Ana, CA 92701
(714) 647-5659 / cfoster@santa-ana.org
Project: Bristol Street & Civic Center Dr. Water Quality Improvements

2. City of Diamond Bar
John Beshay
21810 Copley Drive
Diamond Bar, CA 91765
(909) 839-7043 / JBeshay@DiamondBarCA.Gov
Project: Drainage Improvement Project Phase 1 & 2

3. Port of Long Beach
Daniel Shieh, PE
Deputy Chief Harbor Eng.
4801 Airport Plaza Drive,
Long Beach, CA 90815
(562) 283-7860 / daniel.shieh@polb.com
Project: Pier G Avenue North Sewer Line Improvement Project

4. City of Newport Beach
Frank Tran, PE
100 Civic Center Drive
Newport Beach, CA 92660
(949) 644-3340 / FTran@NewportBeachCa.gov
Projects: Newport Heights Sewer & Alley Replacement

5. County of Orange
James Campbell
300 N. Flower St.
Santa Ana, CA 92703
(714) 834-5736 /
Joseph.Seybold@ocpw.ocgov.com
Project: OC Animal Care Facility & On-Call Engineering

6. City of Irvine
Darrell Hartman, PE
1 Civic Center Plaza
Irvine, CA 92606
(949) 724-7556 / dhartman@cityofirvine.org
Project: Campus Drive Roadway Improvement

7. City of Seal Beach
Iris Lee, Deputy Public Works Director/City Engineer
211 8th Street,
Seal Beach, CA 90740
(562) 431-2527x1322 / ilee@sealbeachca.gov
Project: 7th Street Waterline and Sewer Replacement

Experience and Qualifications of Key Personnel

RESUMES

Jacob Vandervis, PE

PRINCIPAL-IN-CHARGE/QA/QC MANAGER

Education

B.S. - Civil Engineering

California State University, Long Beach

Year of TAIT Team Enlistment

1997

Total Experience

34

Certifications

Registered Professional Engineer, Civil – California, Oregon, Arizona, Utah, Nevada, North Dakota, Washington, Hawaii, and Alaska.

Professional Engineer California No. C46301

Mr. Vandervis currently serves as a Vice President/Chief Operations Officer in TAIT's Corporate Office in Santa Ana. In addition to his management duties, he acts as the primary point of contact for several national retail and residential developers. Mr. Vandervis is a licensed civil engineer with over 34 years of experience with land development projects in the western United States. His areas of expertise include site design, grading design, drainage studies, water pollution control plans, erosion & sediment control plans, as well as street improvement plans. He is experienced in site design of all sizes for commercial development, involved in preliminary design to develop cost estimates & due diligence packages, as well as experienced in the entitlement phase of projects. His surveying experience includes the preparation of ALTA and topographic surveys, parcel maps, record of survey and legal descriptions. He is a certified Qualified SWPPP Developer (QSD), Certified Development, Design & Construction Professional (CDP) and Certified Retail Property Executive (CRX)

Pipeline Management Program, FY2018-2019 Phase 1 Project
Glendale Water & Power, Principal in Charge, 2018-2019

Principal in Charge of the work being conducted by all TAIT staff to provide Design Engineering Service for the $3.1 M water main replacement project throughout various locations in Glendale, CA. Primary responsibilities were to review and stamp water main replacement plans and specifications, supervise design engineers and coordinate with client and contractor through the design and construction phases.

Pier G Avenue North Sewer Line Improvement Project, Port of Long Beach, Principal-In-Charge, 2017-2019

TAIT provided civil engineering services for the review, recommendation, design, and construction support services for the Pier G Avenue North Sewer Line Improvement Project. The project limits spanned approximately 1/3 of a mile within Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current peak flow conditions. Extensive meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare detailed quality management plans and a basis of design report that outlined all project parameters.

Chino Quadrant III Water Main Replacements, City of Chino, Principal-In-Charge, 2017-2018

TAIT provided design services to the City of Chino for approximately 7000 linear feet of new 8-inch PVC water line replacing a similar length of 50-year old 6-inch ACP lines within 13 residential street. Over 170 customers will be affected during construction. The City required that all points of connection to be upgraded to include the newer and larger PVC water pipe and the installation of new water values in each cross street. Eight of the thirteen segments require obtaining approvals from the State Division of Drinking Water due to restricted horizontal clearances in the narrow residential streets. To assist the City in meeting an early delivery schedule for one of their current water projects Quadrant III water plans were separated into two separate bid contracts. The first segment of 2800 LF was recently awarded at a low bid price of $990,000 and construction commenced in April 2018. The second bid package received City authorization to advertise in February 2018 and was constructed in 2018.

Hoover, Toll, Keppel Recycled Water Project, Glendale Water & Power, City of Glendale, Principal-In-Charge/Project Manager, 2016-2017

TAIT provided design services to the City of Chino for approximately 7000 linear feet of new 8-inch PVC water line replacing a similar length of 50-year old 6-inch ACP lines within 13 residential street. Over 170 customers will be affected during construction. The City required that all points of connection to be upgraded to include the newer and larger PVC water pipe and the installation of new water values in each cross street. Eight of the thirteen segments require obtaining approvals from the State Division of Drinking Water due to restricted horizontal clearances in the narrow residential streets. To assist the City in meeting an early delivery schedule for one of their current water projects Quadrant III water plans were separated into two separate bid contracts. The first segment of 2800 LF was recently awarded at a low bid price of $990,000 and construction commenced in April 2018. The second bid package received City authorization to advertise in February 2018 and was constructed in 2018.

Kenneth and Ben Lomond Water Main Replacement Projects, Glendale Water & Power, City of Glendale, Principal-In-Charge/Project Manager, 2015-2016

TAIT provided design build services with JDC for the Kenneth and Ben Lomond neighborhoods water main replacement projects. The project was located in residential streets in an area of Glendale which required our team to develop construction documents that could accommodate traffic while working in residential streets and a design that would work with many existing utilities. TAIT provided the design services along with topographical survey of the long neighborhood. Due to the numerous existing utilities and mains within the project, detailed designs were provided to ensure adequate clearance between all utilities. TAIT met and discussed with many of the utility purveyors in order to ensure the final design and construction was approved by all. In addition, TAIT worked with public works to complete Traffic Control plans for the heavily used intersections and Detour Plans for the narrow areas of the streets.

Drainage Improvement Project Phase 1 & 2, City of Diamond Bar, Principal-In-Charge, 2017-2018

TAIT provided design engineering and construction management services for Phase 1 & Phase 2 of the City's Drainage Improvement Project. This project included three separate areas: 1. Brea Canyon Road – Parkway Drain System & Perforated Drain; 2. Hipass Drive – Sub drain System, Low Flow Storm Drain & X-gutters; 3. Golden Springs – Sub drain System & Low Flow Storm Drain. This project included extensive coordination with the City and the design team in order to recommend and implement final design

scenarios for each location. Appropriate water quality treatment systems were implemented in all systems that have direct storm drain connection (modular wetland system), and the sub drain system and crossing were analyzed to avoid conflicts. During the construction phase, TAIT managed the contractor in order to review the field operations, respond to design related inquiries, updated designs based on final field needs, and successfully completed the construction project. The construction of this project was completed in 2018 within budget.

Newport Heights Alley and Sewer Replacement Project, City of Newport Beach, Principal-In-Charge, 2016-2017

TAIT provided civil engineering services on Newport Height Alley and Sewer Replacement Projects. The project limits spanned across an entire neighborhood in the City's coastal community of Newport Heights and include a total of 3+ miles of alley reconstructions as well as the review and repair of existing alley sewer and lateral connections. In order to facilitate the City's budget and timelines, the design project was split in to three phases which required separate design PS&E for each project. Phase 1 included all sewer main replacements while Phases 2 and 3 included the alley removal and replacements in the neighborhoods.

Citywide Comprehensive Drainage Analysis and CIP Design Projections, City of Diamond Bar, Principal-In-Charge, 2014-2015

Analyzed, designed and recommend pavement and drainage solutions for 11 locations throughout the City which currently experience groundwater seepage problems. The analysis included field investigations, geotechnical testing and reporting, pavement design, and the preliminary design and cost estimating for multiple design scenarios at each project location. The cost estimate included estimation of the design consultant fees as well as the construction costs for the ultimate design scenarios. Extensive coordination was required on this contract with City, Utility, LACFCD Staff, and private residences in order to understand the existing conditions and to project the required design and permitting efforts for the design and construction phase. Upon completion of the report, the City will utilize TAIT's recommendations for future CIP budget and project planning efforts in order to justify the cost and importance of each location.

Beaudry Terrace Water Main Replacement Project, Glendale Water & Power, City of Glendale, Principal-In-Charge, 2014-2015

TAIT provided design build services with JDC for the Beaudry Terrace neighborhood water main replacement project. The project was located in residential streets in a hilly part of Glendale which required our team to develop construction documents that could accommodate traffic while working in narrow residential streets. The existing water mains in the Beaudry Terrace neighborhood were 40-50 years old and were deteriorated and made with unlined cast-iron. The design involved the preparation of plans and specifications for the replacement and installation of approximately 5,300 linear feet of new 12-inch, 8-inch, and 6 inch diameter ductile-iron water mains. Existing galvanized and copper services smaller than 1 inch were replaced with 1-inch copper services. Existing fire hydrants were replaced and spacing was increased to provide current fire protection to the neighborhood. TAIT provided the design services along with topographical survey of this hilly neighborhood.

David Sloan, P.E.

LEAD PROJECT MANAGER

As a Project Manager, David is responsible for supervising staff at TAIT on the preparation of public and private development projects. David has performed and coordinated detailed designs on federally funded arterial roadways, conducted utility coordination for major relocations on high profile projects and conducted project management efforts on multiple projects throughout the Sothern California region. David has designed and managed the construction for multiple projects in the southern California region and is an ideal candidate to manage this project for the City. David is an effective communicator and actively stays in contact with his clients throughout the life of his projects. David has also managed multiple public works construction projects and understands the methods and costs of construction.

Education

B.S. - Civil Engineering Tau Beta Pi Honor Society & Chi Epsilon, University of Southern California

BS Physical Science, Biola

Year of TAIT Team Enlistment

2014

Total Experience

13

Certifications

Professional Engineer California No. 82595

Newport Height Alley & Sewer Reconstruction Project, City of Newport Beach, Project Manager, 2016-2017

David was the Project Manager to the City of Newport Beach for the Newport Heights Alley & Sewer Reconstruction Project. The project includes the survey, design, and reconstruction of over three miles of residential alleys. The project is designed in three phases with phase 1 being sewer main replacements, and phase 2 & 3 being alley reconstructions within select neighborhoods. The alley replacement design included the geometric and profile analysis of each alley along with the preparation of design plan and profile sheets for each alley segment. The design also included the preparation and analysis of design cross sections (via use of Civil 3D corridors) to ensure design crossfalls along the alley are appropriate. The project is scheduled to complete phase 1 design in April, 2016, and phase 2 & 3 design in July, 2016.

Pier G Avenue North Sewer Line Improvement Project, Port of Long Beach, Project Manager, 2017-2019

As Project Manager, David provided civil engineering services for the review, recommendation, design, and construction support services for the Pier G Avenue North Sewer Line Improvement Project. The project limits spanned approximately 1/3 of a mile within Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current peak flow conditions. Extensive meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare detailed quality management plans and a basis of design report that outlined all project parameters.

Drainage Improvement Project Phase 1 & 2, City of Diamond Bar, Project Manager/Construction Manager, 2017-2018

As Project Manager, David provided design engineering and construction management services for Phase 1 & Phase 2 of the City's Drainage Improvement Project. This project included three separate areas: 1. Brea Canyon Road – Parkway Drain System & Perforated Drain; 2. Hipass Drive – Sub drain System, Low Flow Storm Drain & X-gutters; 3. Golden Springs – Sub drain System & Low Flow Storm Drain. This project included extensive coordination with the City and the design team in order to recommend and implement final design scenarios for each location. Appropriate water quality treatment systems were implemented in all systems that have direct storm drain connection (modular wetland system), and the sub drain system and crossing were analyzed to avoid conflicts.

Chino Quadrant III Water Line Replacement Project, City of Chino Project, Project Engineer/Specs Manager, 2017-2018

This City project required the replacement of approximately 8000LF of existing 6-inch ACP water pipe with new 8-inch PVC water pipe within13 local streets for the City. The process included obtaining DDW approvals for 8 of the 13 segments.

Citywide Comprehensive Drainage Analysis and CIP Design Projections, City of Diamond Bar, Project Manager, 2014-2015

As Project Manager, David analyzed, designed and recommend pavement and drainage solutions for 11 locations throughout the City which currently experience groundwater seepage problems. The analysis included field investigations, geotechnical testing and reporting, pavement design, and the preliminary design and cost estimating for multiple design scenarios at each project location. The cost estimate included estimation of the design consultant fees as well as the construction costs for the ultimate design scenarios. Extensive coordination was required on this contract with City, Utility, LACFCD Staff, and private residences in order to understand the existing conditions and to project the required design and permitting efforts for the design and construction phase. Upon completion of the report, the City will utilize TAIT's recommendations for future CIP budget and project planning efforts in order to justify the cost and importance of each location.

El Toro Development Plans Drainage Analysis & Design, City of Irvine, Project Engineer, 2013-Present

As Project Manager, David provided for the Phase 1 Preliminary Engineering and Environmental Support Services for a development of the County of Orange's "100-Acre Parcel" and "West Alton Parcel" areas on approximately 140 acres. Plans the combined projects will provide nearly 3000 multi-family residential housing units, 200,000 SF of retail, a 200-room hotel and 1.8 million sf of commercial office space. Working with Lowe and the Project Architect, KTGY, TAIT has assisted in the development of the Site Plans, Master Drainage Studies, and Preliminary WQMPs for both areas.

Portola Parkway Resurfacing Project, Project Manager, 2015

David is currently serving as the Project Manager to the City of Lake Forest on this federally funded arterial pavement rehabilitation project which included design engineering, geotechnical engineering, surveying, and federal documentation/ approvals. The project included the rehabilitation of the arterial roadway as well as the identification and replacement of non-ADA compliant or non-functional PCC sidewalk, curb ramp, curb and gutter and other improvements. The design also included the replacement and updating of the roadway and bike lane striping throughout the project limits.

Bart Mink, PE, LEED AP

PROJECT MANAGER-SEWER

Bart Mink, PE, LEED AP, a registered civil engineer in California and LEED AP certified brings 22 years of multidisciplinary experience to our team. Bart is results-driven and detail-oriented. He is proficient in many facets of civil engineering, including the municipal, industrial, commercial and residential fields. Bart is proficient in water hydraulic modeling utilizing KY Pipe and WaterCAD. He is also proficient in wastewater modeling using SewerCAD. Bart has in depth knowledge and experience in water/wastewater treatment and design. He is skilled in state and federal funding policies and procedures and is efficient with Autodesk Civil 3D including grading, corridors, and pipe networks. Bart is experienced and knowledgeable in hydrology and hydraulics utilizing such programs as TR-55 and HEC-RAS. He is also knowledgeable with FEMA Letters of Map Amendment and Map Revision procedures.

Education

B.S. - Civil Engineering, Arkansas State University

Year of TAIT Team Enlistment

2018

Total Experience

22

Certifications

Professional Engineer
California No. 82953
Arkansas No. 12169

2009/LEED Accredited Professional

Associations

American Public Works Association, US Green Building Council Leadership in Energy and Environmental Design, American Society of Civil Engineers
Past Memberships: National Society of Professional Engineers, American Water Works Association, Arkansas Water Works, and Water Environment Association

West Seaside Way Storm Drain, City of Long Beach, CA, 2017-2018

Project Engineer for the field review, recommendation, and final design services of the upsize to this key relief storm drain system in the City of Long Beach. Due to an extremely large rain event caused flooding of the lower levels of several parking garages along W Seaside Way near Rainbow Harbor, a portion of the existing Storm Drain Backbone along W. Shoreline Drive and the Storm Drain Lateral along W. Seaside Way were found to be deficient. Final design included upsizing of 1,900 LF of Storm Drain from S. Chestnut Place near the Pike Outlets Parking Garage to the tie in of the County's Storm Drain system just past the Golden Shore overpass as well as reworking the County's junction structure and upsizing the inlet pipe from Shoreline Drive. The project included an extensive research and potholing effort, urban hydrology utilizing the LA County Hydrology MODRAT, pipe hydraulics utilizing Bentley StormCAD and WSPG, traffic control, coordination with FEMA and City of Long Beach regarding disaster relief funds, coordination with OC Flood Control, and obtaining encroachment permits from the County.

The Creek at Dominquez Hills-Athletics, Recreation, and Retail, City of Carson, 2017-2020, Project Manager

Project Manager for the design of approximately one mile of new onsite roadways and over 2,000 parking spaces. Public street improvements included additions of 2 signalized intersections and modifications to several existing intersections around the site on Avalon Boulevard and Martin Luther King Jr. Street. Other work performed included 5,900 LF of SCE electrical backbone; 2,100 LF of new public sewer main lines; 4,500 LF of reclaimed water main lines; 5,400 LF natural gas main lines; 7,300 public fire water main lines; saving over 2

dozen onsite trees; and mass grading of approx. 450,000 cubic yards of soil with imports of approx. 150,000 cubic yards.

Pier G Avenue North Sewer Line Improvement Project, Port of Long Beach, 2017-2019, Project Engineer

Project Engineer for the review, recommendation, design, and construction support services for the Pier G Avenue North Sewer Line Improvement Project. The project limits spanned approximately 1/3 of a mile within Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current peak flow conditions. Extensive meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare detailed quality management plans and a basis of design report that outlined all project parameters.

On-Call Engineering/Plan-Check Services, Orange County Public Works, Plan Review Team Lead, 2018-Present

Provides On-call Plan Check Services to OCPW Planned Communities for the review of Developer Submittal for a project in Ladera Ranch Covenant Hills and multiple developer projects in the PA 1 of the Ranch Plan. Serving as the Team Lead for TAIT's consultant team of reviewers plan review submittals have ranged from Tentative Maps, Site Development Plans, Water Quality Management Plans, Rough and Precise Grading Plans, Public and Private Street Improvement Plans, Storm Drain Plans and Technical Reports, Wall and Fence Plans, Model Complex Plan, Building Master Plans, Building Repeat Plans, Landscape Plans, Park Plans, Non-residential structural submittal plans, Geotechnical Investigation Reports and Final Maps. Responsibilities as the Team Lead, in addition to conducting technical plan acceptance reviews and actual plan checks, includes coordination of the TAIT team members, coordination with the County's management and QA/QC staff members and coordination with the Applicant and their design consultants.

6th Street Storm Drain, City of Long Beach, CA, 2017-2018

Project Engineer for the final design of this key relief storm drain system in the City of Long Beach. The project included an extensive potholing effort, hydrology, hydraulics, traffic control and obtaining encroachment permits from the County.

Pavement Rehabilitation Ximeno Avenue and Redondo Avenue, City of Long Beach, CA, 2017

Project Engineer for engineering services for the pavement rehabilitation of Ximeno Avenue (from Atherton Street to Los Coyotes Diagonal) and Redondo Avenue (from Reservoir Drive to Stearns Street). Services included support during construction, and the supervising, coordinating, monitoring and reviewing of design plans and specifications for conformance with local agency standards, policies and procedures.

Vincent Street Sanitary Sewer Rehabilitation, Redondo Beach, CA, 2018

Project Engineer for the design, preparation of the civil plans and construction management for the building of an approximate 745 LF parallel sewer system near the Vincent Street Park and surrounding neighborhoods.

Daniela Malott, P.E.

PROJECT MANAGER-STORM DRAIN

Education

M.S. - Civil Engineering (Hydrology and Water Resources), University of California at Irvine

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

Year of TAIT Team Enlistment

2017

Total Experience

8

Certifications

Professional Engineer, California No. C86581

Affiliations

American Society of Civil Engineers (ASCE), OC YMF

Mrs. Malott has a strong civil engineering background with a water resources and surface runoff focus. Her engineering experience includes hydrology, storm drain design, and hydraulics. Her computer modeling background includes the application of the U.S. Army Corps of Engineers HEC-HMS (Hydraulic Modeling System), HEC-SSP (Statistical Software package), and HEC-RAS (River Analysis Software), Watershed Modeling System (WMS), Advanced Engineering Software (AES) for hydrologic/hydraulic analysis in Southern California, Water Surface Pressure Gradient (WSPGW) Software, XP-Solutions Storm Water and Wastewater Management Model (XP-SWMM), AutoCAD Civil 3D, and ArcGIS. She has worked for projects in the County of Los Angeles, County of Orange, and San Bernardino County. The projects she has been involved with are both in the private and public sector. In the private sector she worked on projects for developers including Rancho Mission Viejo and the Irvine Company. Her public sector experience includes working on projects for the County of Orange, the City of Rancho Palos Verdes, the City of Chino, the City of Chino Hills, and the City of Santa Ana. She is an out of the box thinker with great energy and a hard working ethic. She has great communication, writing, organizational and leadership skills.

WQMP/BMP Design for Bristol Street Improvements and Civic Center Street Improvements, City of Santa Ana, Project Manager/Project Engineer, 2020

As part of this project Mrs. Malott served as the Project Manager/Project Engineer, she provided client coordination, scheduling tracking, reviewed internal scheudling and supported the City in a timely manner and under the budget to achieve the project goals. The Bristol Street and Civic Center Improvements Water Quality Management Plans (WQMP) Project included the development of a Water Quality Best Management Practices (BMP) design, cost benefit analysis, cost estimates, coordination with the client, and development of construction plans for the BMP's installation. As part of the cost benefit analysis, several alternatives location and solutions for the type and configurations of BMP were analyzed and preliminary design was completed to determine the most optimal solution for the City. After an alternative was selected project design plans for the BMP installation were prepared and proprietary manufacturer detail design and coordination was completed. Careful review of the Santa Ana and Newport Beach Watershed basin plans was completed to understand the pollutant of concerns and develop a treatment system that provides appropriate treatment. Additionally, two WQMPs were completed for each of the street improvmenet projects following the North Orange County Tehcnical Guidance Document.

Dana Point Harbor Revitalization, City of Dana Point Harbor, Project Manager, 2018-Present

As part of the Dana Point Harbor project team Ms. Malott has provided stormwater technical design for the Master Plan of Drainage for Planning Areas 1 and 2, supported the development of the Hydrology and Hydraulics Basis of Design Report and WQMP for Planning Areas 3 and 4 for the Coastal Commission Project Application. Starting 2020, she has assisted as the Project Manager for the Commercial Core and Marina development portions of the DPH Revitalization Plan. As the Project Manager, Mrs. Malott has overseen the preliminary design of different aspects of the project, and the construction documents design and development for the Phase 2 of the Commercial Core Portion of the DPH Revitalization Plan. Additionally, Mrs. Malott has led a team of 10 Civil Engineering Designers to support the Projects efforts, while maintaining and providing coordination with the client and other subconsultants. Her organizational skills, civil design knowledge and experience, and communication abilities resulted in timely submittals and project reviews to achieve deadlines and project schedule, as well as to maintain project budget goals.

Pier G Avenue North Sewer Line Improvement Project, Port of Long Beach, Project Engineer, 2017-2019

Mrs. Malott supported all project coordination efforts and was a vital part of the project team. Task managed the Hydraulics Analysis and Basis of Design Report for the Pier G Avenue North Sewer Line Improvement Project for the Port of Long Beach (POLB). The project limits spanned approximately 1/3 of a mile within The Port's Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current and future demand peak flow conditions. Client meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare a Basis of Design Report that outlined all project parameters, calculations and chosen alternative, as well as detailed Sewer Design Plans. This project faced different challenges due to there being several existing utilities such as water, storm drain, dry utilities and oil lines that support the Port's daily operations. Additionally, extensive preliminary planning and coordination with potential contractors was completed in order to ensure all traffic control plans accommodated sufficient space for trucks and trailers while construction activities occurred to ensure Port operations would be maintained.

Newport Heights Alley and Sewer Replacement Project, City of Newport Beach, Project Engineer, 2016-2017

Mrs. Malott was an Assistant Engineer for the Newport Heights Alley and Sewer Replacement Project. The project included the preparation of design plan and profile for each alley that was repaired, prepared of design cross sections at 25-foot intervals for review of proposed cross falls, preparation of sewer main replacement and lateral replacement plans, field review of all alley locations to field locate existing utilities, conflicts, and join locations, identification of sewer laterals that were recently replaced for protection, and the detailing of all alley approaches for compliance with the Americans with Disabilities Act (ADA). As part of the project team Mrs. Malott provided plan production assistance, alley design, and completed field visits.

Subarea 2 Agricultural Preserve Master Plan of Drainage, City of Chino, Project Engineer, 2015-2016

Prepared the Master Plan of Drainage (MPD) Report and Analysis for the Agricultural Preserve storm drain system. The 2016 MPD incorporated amendments and updates to the Agricultural Preserve storm drain system that were completed after the 2001 MPD. The 2016 MPD included hydrologic and hydraulic analysis following the County of San Bernardino standards. The analysis was prepared for the existing, interim and ultimate condition. The analysis provided alternatives for the master plan storm drain systems in order to accommodate the City of Chino requirements. The MPD included studies for regional water quality basin preliminary design following the Santa Ana Region Water Quality Board Control and the San Bernardino County requirements. The storm drain design and regional water quality basin design optimized the basin location and sizes to maximize the developable land within the area.

Storm Water Master Plan, City of Rancho Palos Verdes, Project Engineer, 2014-2015

The Rancho Palos Verdes Storm Water Master Plan includes the development of a GIS database for the storm drain inventory including a Facility Mapping Tool which is being utilized to gather field data and keep the City informed of the field work schedule and findings. Data gathering for the project includes filling in missing as-built data such as inverts and facility naming. The hydrology and hydraulics modeling is being completed utilizing GIS, XPSWMM, and XPWSPGW. This master plan includes the integration of stormwater quality retrofit opportunities. The Master Plan will ultimately provide the City with a comprehensive “living” storm water master plan. The master plan also includes a project prioritization scheme and a Capital Improvement Plan.

Orange County Flood Control District Local Drainage Manual Updates, County of Orange, Assistant Engineer, 2015-2016

The Orange County Flood Control District Local Drainage Manual was in the process of being updated to incorporate new policies and methodologies that have been set in place in recent years. The Local Drainage Manual provides design criteria policies and procedures to be utilized by Civil Engineering Consultants and Developers for projects located in the County of Orange. As the Assistant Engineer, Ms. Malott supported the preparation of several Chapters and attended meetings with the County staff to discuss comments and the approach of the updates to the manual.

Santa Ana Storm Drain Master Plan, City of Santa Ana, Designer, 2013

Responsible for CADD design. Provided professional engineering services to update the city's storm drain master plan. The city has an established drainage system with some segments over 50 years old and other segments recently constructed. Michael Baker analyzed the main line drainage system and prepared a hydrology study along with maps for the entire city boundary and for individual sub-areas for 2-, 10-, 25- and 100-year storm events. The capacity of the existing storm drainage was evaluated to determine system capacity sufficiency using a hydrodynamic hydraulic model. A comprehensive list of needed storm drainage improvements was then generated. Performed a hydraulic analysis to size sufficient storm drain lines and provided an ESRI ARCGIS geodatabase of city storm drain facilities, including storm drain pipes, city-owned drainage channels, manholes, catch basins, and culverts. Michael Baker used the Bentley software hydrodynamic hydraulic model CivilStorm, which uses hydrographs with in the hydraulic model to determine adequate pipe sizing.

Samantha A. Wohlfarth, PE

PROJECT ENGINEER

Ms. Wohlfarth has professional experience that includes the preparation of storm drain plans and drainage reports, storm water quality management reports, grading plans, water main replacement plans, sewer plans, cost estimates and cost benefit analysis for public and private developments throughout Southern California, Western Washington, and North Dakota. Her project experience includes the preparation of storm water quality reports such as SWPPP, WQMP, SUSMP and LID following the state and local municipalities' mandates. Ms. Wohlfarth has technical knowledge with multiple software programs including Microstation, AutoCAD 2014, Civil 3D, Land Desktop, GeoPak, WWHM2012, RetainPro, and additional specialty programs.

Education

B.S. - Civil Engineering,
Valparaiso University
Valparaiso, IN, 2012

Year of TAIT Team Enlistment

2012

Total Experience

8

Certifications

Professional Engineer

California No. 86126

Pipeline Management Program, FY2018-2019 Phase 1 Project
Glendale Water & Power, Project Manager, 2018-2019

TAIT was contracted to provide design build services with JDC for the Pipeline Management Program, FY2018-2019 Phase 1 water main replacement project. The project was located in residential streets in various areas of Glendale which required our team to develop construction documents that could accommodate traffic while working in residential streets and a design that would work with many existing utilities.

Chino Quadrant III A, B, and C Water Line Replacement Project, City of Chino Project, Project Engineer, 2017-2018

This City project required the replacement of approximately 8000LF of existing 6-inch ACP water pipe with new 8-inch PVC water pipe within13 local streets for the City. The process included obtaining DDW approvals for 8 of the 14 segments.

Hoover, Toll, Keppel Recycled Water Project, Glendale Water & Power, Project Engineer, 2016-2017

TAIT was contracted to provide design build services with JDC for the recycled water project within the Glenwood residential neighborhood and surrounding schools. The project was located in the residential streets in an area of Glendale which required our team to develop construction documents that could accommodate traffic while working and a design that would work with many existing utilities.

Kenneth and Ben Lomond Water Main Replacement Projects, Glendale Water & Power, Project Engineer, 2015-2016

TAIT was contracted to provide design build services with JDC for the Kenneth and Ben Lomond neighborhoods water main replacement projects. The project was located in residential streets in an area of Glendale which required our team

to develop construction documents that could accommodate traffic while working in residential streets and a design that would work with many existing utilities.

Beaudry Terrace Water Main Replacement Project, Glendale Water and Power, Project Design Engineer, 2014

The Beaudry Terrace water main replacement project included four phases, six streets, and approximately 5,300 linear feet of water line that was designed to replace existing service pipe mains with ductile iron pipe. The project included new services, hydrants, inverts, tie-ins, and other appurtenances. Department of Public Health waiver exhibits were prepared for select non-potable and water crossings. The project included a community outreach meetings, service survey coordination, as well as detailed final As-Built submittals.

Adams Hill Water Main Replacement Project, Glendale Water and Power, Design Engineer, 2014

The Adams Hill water main replacement project included six phases, 13 streets, and approximately 10,620 linear feet of water line that was designed to replace existing service pipe mains with ductile iron pipe. The project included new services, hydrants, inverts, tie-ins, and other appurtenances. As well, the project included different pressure zones and the installation of a division gate. Department of Public Health waiver exhibits were prepared for select non-potable and water crossings. The project included a community outreach meetings, service survey coordination, as well as detailed final As-Built submittals.

Foothill Water Line Improvement Projects, Golden State Water Company, Design Engineer, 2013

The Foothill Improvements included six projects that were designed to replace existing service pipe mains with 8” ductile iron pipe. One of the six projects included replacement of the transmission line and reconnection to three existing wells. The total pipe replacement was approximately 13,200 linear feet. Multiple agencies reviewed the design plans, including City of San Dimas, City of Claremont, City of Arcadia and the County of Los Angeles in addition to Golden State Water.

Freeman Ave. Water Line Improvement Projects, Golden State Water Company, Project Design Engineer, 2013

The Freeman Avenue Water Line Improvement included approximately 3600 linear feet of water line that was designed to replace existing service pipe mains with 8” ductile iron pipe. The project included new services, hydrants, inverts, tie-ins, and other appurtenances. Department of Public Health waiver exhibits were prepared to the satisfaction of Golden State Water Company for select non-potable and water crossings.

Normandie Ave. Water Line Improvements, Golden State Water Company, Design Engineer, 2013

The project encompassed the planning and design for a 12” water main replacement in Normandie Ave. in the County of Los Angeles, approximately 1400’ linear feet. Project included new services, hydrants, inverts, tie-ins and other appurtenances. Existing 14” pipe was designed for abandonment. Department of Public Health waiver exhibits were prepared to the satisfaction of Golden State Water Company for select non-potable and water crossings. GWSC project engineer: Conde Ventura.

Ryan Haskin, P.E.

PROJECT ENGINEER

Ryan is an experienced Project Engineer in design, technical analysis, and quality control of land development projects. Since joining TAIT & Associates, he has prepared construction documents for a variety of residential, commercial, industrial, and institutional projects. He has expertise in design and preparation of construction drawings, hydrology and water quality calculations and reports, water system hydraulic modeling, and coordination with clients, sub-consultants, site managers, contractors, and survey crew.

Education

B.S. Civil Engineering, California Polytechnic State University, San Luis Obispo, 2012

Year of TAIT Team Enlistment

2012

Total Experience

8

Certifications

Professional Engineer California No. 84850

Affiliations

American Society of Civil Engineers, Member

Irvine Avenue Sidewalk Gap Closure Project, Design Manager, 2019

Ryan is serving as the lead Design Manager for the City of Newport Beach on the Irvine Avenue Sidewalk Gap Closure Project which includes the design and implementation of two blocks of missing sidewalk adjacent to Harbor High school in the City of Newport Beach. Project includes site review and home owner coordination due to impacts to driveways, utility notification and relocations, Regrading of sidewalk and private steep driveways to ensure accessible path of travel, and preparation of detail PS&E for the City's review and approval. Project design is anticipated to be completed by June of 2019.

Mesa Drive Widening and Drainage Improvement Project, Design Manager, 2019

Ryan is serving as the lead Design Manager for the City of Newport Beach on the Mesa Drive widening and drainage improvement project which includes the widening of Mesa Drive, construction of a new catch basin, design of on-street flows, and implementation of a new storm drain junction structure to join existing storm drain system. The project includes utility notification, hydraulic analysis, and preparation of detail PS&E. Project design is anticipated to be completed by June of 2019.

Packer Place Park Drainage Improvements, Design Manager, 2019

Ryan is serving as the lead Design Manager for the City of Lake Forest on Packer Place Drainage Improvement project which includes the removal and replacement of an existing undersized storm drain line, and the construction of new roadway parkway drain capture and discharge system, dry creek drainage conveyance system, and roadway/park grading activities in order to mitigate flooding that is currently being encountered. Scope of the project includes design survey, hydraulic analysis of the tributary areas, grading analysis, preparation of details PS&E, and construction support services. Project design is anticipated to be completed by June of 2019.

El Toro 100-Acre Parcel Development, Irvine, Project Engineer, 2014-2016

Ryan was a lead Project Engineer for the County of Orange, 100-Acre Development project on the former Marine Corps Air Station El Toro. The project involved developing 108 acres of a linear parcel for residential,

commercial, retail, and open-space mixed use which included 30 Planning Areas and a series of backbone streets and utilities. Ryan was directly responsible preparing the County reviewed and approved Master Drainage Study, Water Quality Reports, Master Grading scheme, and backbone drainage facilities. The Master Drainage Study included 100-year project runoff analysis to 3 separate OCFCD facilities, the connection and capacity analysis of a Caltrans facility, and design of individual Water Quality Treatment systems for each of the 30 Panning Areas.

Western Alton Parcel, Irvine, Project Engineer, 2015-2016

Ryan was a lead Project Engineer for the County of Orange, Western Alton Parcel project on the former Marine Corps Air Station El Toro. The project involved developing 2 separate triangular plots of land consisting of 40 acres for residential use. Ryan was directly responsible preparing the County reviewed and approved Master Drainage Study, Water Quality Reports, Grading Plans, Utility Plans, and Roadway Widening Plans. The Master Drainage Study included 25 and 100-year project runoff analysis to 3 separate OCFCD facilities and 2 separate county watersheds, design and analysis of 3 detention basins and 1 infiltration basin.

Orange County Animal Care Facility, City of Tustin, Project Engineer, 2016

Ryan was a Project Engineer on this Orange County Animal Care Facility in the City of Tustin. The project includes Public Sewer, Water, Fire Water, Water Quality, On-site Utilities, and Grading plans. Ryan produced the Hydrologic modeling and reports for the Project runoff for multiple storm year events and Hydraulic Modeling for connections to public storm facilities.

Monterey Park Marketplace, City of Monterey Park, Project Engineer, 2015

Ryan served as the lead designer of a Storm Facility network and a pressurized water network for a 40 acre retail development in the City of Monterey Park. Ryan performed an in-depth drainage analysis incorporating and analyzing off-site run-on from an additional 40 acre area of an adjacent cemetery thru the on-site drainage system, 2 underground Detention basins, and mitigated discharge flows to a Caltrans drainage facility and a Southern California Edison drainage channel.

Orange County Engineering Plan Check, County of Orange, Project Engineer, 2015-Present

Ryan currently provides plan check services for the County of Orange including review of Hydrologic & Hydraulic Reports, Grading Plans, Street Improvement Plans and Storm Drain Plans. Plans are reviewed for compliance with various codes and regulations including California Building Code, the Americans with Disabilities Act, community specific development standards, and County of Orange Standards.

Christopher Engelbach, E.I.T.

PROJECT ENGINEER

Mr. Engelbach is an experienced Project Engineer in design, approval, and quality control of Public Works projects as well as private residential and commercial land development. He has extensive experience in preparation of storm drain, street, sewer, water, rough grading, precise grading, and erosion control plans. He has extensive experience in preparing hydrology and hydraulic analysis utilizing AES, Civil-D and WSPG for a variety of public works and private development projects. Additionally, he has experience with developing and designing Water Quality Best Management Practices (BMPs) WQMP, report preparation, coordination with clients, sub-consultants, site managers, contractors, and survey crew. Mr. Engelbach's technical skills, abilities and engineering experience allow him to assist on all areas of a project.

Education

B.S. Civil Engineering, California State Polytechnic University, Pomona

Year of TAIT Team Enlistment

2016

Total Experience

11

Certifications

E.I.T.

Newport Heights Alley and Sewer Replacement Project, City of Newport Beach, Project Engineer, 2016-2017

Project Engineer for the services on Newport Height Alley and Sewer Replacement Projects. The project limits spanned across an entire neighborhood in the City's coastal community of Newport Heights and include a total of 3+ miles of alley reconstructions as well as the review and repair of existing alley sewer and lateral connections. In order to facilitate the City's budget and timelines, the design project was split in to three phases which required separate design PS&E for each project. Phase 1 included all sewer main replacements while Phases 2 and 3 included the alley removal and replacements in the neighborhoods.

Pier G Avenue North Sewer Line Improvement Project, Port of Long Beach, Project Engineer, 2017-2019

Project Engineer for the civil engineering services for the review, recommendation, design, and construction support services for the Pier G Avenue North Sewer Line Improvement Project. The project limits spanned approximately 1/3 of a mile within Pier G, and included the review of existing conditions, analysis of tributary areas and hydraulic capacity for the existing system, preliminary design and recommendation for five separate design alternatives which included conventional open trench, pipe bursting, sewer lift stations, sewer force mains, and retrofit of existing sewer lift stations to accommodate the current peak flow conditions. Extensive meetings and coordination efforts were conducted with POLB during the preliminary engineering phase to prepare detailed quality management plans and a basis of design report that outlined all project parameters.

Balboa Peninsula Alley Reconstruction and Sewer Repair Project, City of Newport Beach, Project Engineer, 2020-Current

The Balboa Peninsula Project will extend the existing alley, provide needed additional width, correct existing drainage, provide accessible paths of travel, and repair damaged portions of the existing public sewer line. Mr. Engelbach's familiarity with the City's standards along with his knowledge of roadway design and drainage are an asset in facilitating the client's budgetary and scheduling needs.

Jeronimo Road Widening, City of Lake Forest, Project Engineer, 2020-Current

The Jeronimo Road Widening Project will correct the current roadway geometry of Jeronimo Road at the Intersection with El Toro Road in the City of Lake Forest. Mr. Engelbach is the Project Engineer handling the roadway widening design which includes vertical and horizontal design, drainage, relocation of existing public and private improvements, reconstruction of existing roadway medians and construction of a new retaining wall. In addition to engineering services Mr. Engelbach supports coordination with the client, land owners, and appropriate utility purveyors.

Trabuco Road Median, City of Lake Forest, Project Engineer, 2020-Current

The Trabuco Road Median Project will provide a safe left turn to and from the Ascension Cemetery Located in the City of Lake Forest. This project includes the design of a new acceleration lane and redesign of existing medians. Mr. Engelbach is the Project Engineer handling the roadway design which includes vertical and horizontal design while maintaining existing drainage patterns.

Dana Point Harbor, Project Engineer, 2018-Current

The Dana Point Harbor Project includes the redesign of entire guest experience at the Harbor. Mr. Engelbach is the Project Engineer providing design solutions for the harbor which includes an all new retail and dining area, roadways, parking fields, boater services, as well as updated drainage management facilities and wet utilities. Mr. Engelbach's knowledge of Civil 3D, drainage, grading and roadway design are providing the client the best possible solutions for their vision of the new Dana Point Harbor Experience.

Campus Drive Pavement Rehabilitation Project, City of Irvine, Project Engineer, 2017-2018

The Campus Drive Pavement Rehabilitation Project, included the redesign of Campus Drive from University Drive to Carlson Ave. As part of this project Mr. Engelbach, assisted as the Project Engineer for the design of the pavement rehabilitation strategies as well as the identification and replacement of non-ADA compliant curb ramps, sidewalk, damaged curb and gutter, reconstruction and re-grading of the low point of the roadway due to flooding and ponding issues. As part of the design team he supported the coordination with IRWD and UCI for right of way and wetlands protection, and for the identification, adjustment and protection of utility facilities throughout the project limits. Mr. Engelbach's ability to create a Civil 3D Corridor model for this project provided the client a better solution for the street design, streamlined the design process and plan production.

Michael Tran, EIT

PROJECT ENGINEER

As a Project Engineer, Michael has performed and coordinated detailed designs on residential, commercial, industrial and public works projects throughout the Southern California region. In addition to the wide range of projects, Michael has also designed and coordinated K-12 and higher education projects. He is an effective communicator and well-rounded engineer that stays in contact with his clients throughout the life of his projects. He has a great passion for quality of design and project ownership.

Education

BS Civil Engineering – CSULB

Year of TAIT Team Enlistment

2015

Total Experience

7

Certifications

Engineer-In-Training

El Rancho High School Reconstruction, El Rancho, Design Engineer III, 2017
Michael served as Design Engineer for the reconstruction of El Rancho High School. The design included various site improvements and layouts for the new classroom buildings and baseball and football fields. Michael was responsible for the overall grading, drainage, and utility infrastructure design for the site. In addition, the project also met the storm water requirements that were necessary for obtaining LEED credits.

Glendora Residential Tract –Glendora, Design Engineer, 2014
Michael served as Design Engineer for a residential development consisting of 148 townhomes. His design included precise grading, public and private utility plans and SWPPP report.

The Parker Collection – Buena Park, Design Engineer, 2013
Michael served as Design Engineer for a residential development consisting of 140 townhomes. His design included demolition, rough grading, retaining wall, precise grading, private utility, fire access, erosion control, and public improvement plans.

Sun Valley Business Park – Sun Valley, Design Engineer II, 2016
Michael served as Design Engineer for the industrial development of approximately 16 acres. The project included site improvements and utility infrastructure for new distribution warehouses. The design included precise grading, private utility and public improvement plans.

Home Depot, Pasadena, Project Engineer, 2018
Michael served as Project Engineer for the commercial development consisting of a reconstructed Home Depot building, parking lot, and various public improvements. He was responsible for the overall project design which included all plans and reports required for project permitting and approval.

Starlight Cinemas, Garden Grove, Project Engineer, 2019
Michael served as Project Engineer for a commercial development consisting of a carwash, fast food restaurant and parking lot. He was responsible for the overall project design which included all plans and reports required for project permitting and approval.

Sunset House, City of Los Angeles, Project Engineer, 2019
Michael served as Project Engineer for a commercial development consisting of an 18-story hotel with 4 levels of subterranean parking. He was responsible for the overall project design which included all plans and reports required for City of LA approval and permitting.

Michael Furlong, PLS

PROJECT SURVEYOR

Mr. Furlong is a Land Surveyor licensed in the State of California with 40 years of experience, over 30 of those being in the Field on all types of Projects from Boundary Surveys to Construction Services with some of the largest listed below. More recently he has spent years providing Mapping Services preparing Tract Maps, Parcel Maps, Record of Surveys, Corner Records and Exhibits of all kinds as well as providing Support to Engineering and Field Support for the Survey Crews.

Year of TAIT Team Enlistment

2019

Total Experience

41

Certifications

CA PLS 8899

Experience

2019– Present Tait and Associates

2012 – 2019 O.K.O. Engineering Inc.

2008 – 2012 Hernandez, Kroone and Associates

2005 – 2007 AEI-CASC Consuling

1997 – 2005 David Evans and Associates, Inc.

1981 – 1997 J.F. Davidson and Associates, Inc.

Equipment

GPS-Trimble & Lieca, Total Stations Trimble & Leica, Data Collectors-Trimble, Leica & Allegro, Electronic Levels, AutoCAD

Public Works Related Projects

- On-call Services for Caltrans District 7 East Contact Area providing Construction Staking and Topographical Surveys on various large widening and reconstruction Highway Projects including the 10, 110, 134 and 210 Freeways.
- Topo and mapping of various rivers at bridge crossings along HWY 101, Santa Clara County.
- SR 71 Segments 1 through 3 in Chino, 6 miles of new Freeway Construction.
- I-10 Segments 1 and 2 in Montclair and Ontario, 10 Miles of Freeway widening.
- SR 30/210 Segments 4, 5 and 7 in Rancho Cucamonga and Fontana, 6 miles of new Freeway Construction.
- I-10 in El Monte, 2 Miles of Freeway widening with 12 Undercrossing structures to be widened.
- SR 60 in Moreno Valley, 8 miles of Freeway widening.

Subdivisions

- Coyote Canyon, a 400 Lot Development in North Fontana with extensive Storm Drain Improvements.
- Sunnymead Ranch a 2000 Lot Development in Moreno Valley.
- Infrastructure for Moreno Valley Ranch a large Development in Moreno Valley.
- Many other Residential and Commercial Development Projects in Orange, San Bernardino and Riverside County.

Reese B. Brashear, LSIT

FIELD PARTY CHIEF

Mr. Brashear's expertise is in field surveying, A.L.T.A. surveys, rough grade staking operations, construction staking projects, engineering design surveys, as-built surveys, topographic surveys, and GPS surveys.

Selected project experience:

Education

A.A. – Land Surveying (Degree in Progress) Santiago Community College

Year of Tait Team Enlistment

2003

Total Experience

17

Licenses/Certifications

Licensed Surveyor-In-Training State of California

Global Positioning System Certification

University of California-Riverside, 2008

Field Party Chief – Greenwood at Tustin Legacy, Tustin, CA, 2013-Present

Served as TAIT's Field Party Chief performing construction staking survey for the preparation of 2.6 miles of Developer backbone streets, storm drain sewer and water infrastructure improvements for an 80-acre single family detached planned community on the former Tustin MCAS. Design services also include preparation of precise grading plans for three residential neighborhood totaling nearly 300 SFD residential homes and 2000 linear feet of sound wall along Jamboree Road.

Field Party Chief – College View School, Glendale, CA, 2013-2015

Survey services included developing base maps from aerial mapping and field topographical services, conducting design surveys to verify existing conditions, including ADA accessibility and preparation of base map, including all existing public and private utilities.

Field Party Chief – County Regional Park at Former MCAS, Tustin, CA, 2010-2011

TAIT's survey services included conducting a boundary survey, obtaining updated aerial mapping, and developing an existing utility base map of the 84.5 acre site and surrounding public streets.

Field Party Chief – Tustin Family Campus, Tustin, CA, 2007-2009

Survey services included providing design survey for connecting to existing improvements, obtaining aerial base map, developing property boundary, and preparation of easement documents for public utilities.

Field Party Chief – Irvine Unified School District, Irvine, CA 2009

TAIT was recently retained by the Irvine Unified School District to conduct a detailed topographical and site survey of the existing Woodbridge High School campus located in Irvine, California. Mr. Brashear was the Party Chief on the field crew and provided detailed topographical shots for ADA path of travel and future design. The site survey also included research to locate existing on-site utilities and off-site utilities in the adjacent public streets.

PROJECT TEAM
P2S INC.

MARCO CABIBBO

PE, LEED AP BD+C

Project Manager, Senior Electrical Engineer | P2S Inc.

Marco Cabibbo is an Electrical Engineering Group Manager, electrician, licensed electrical contractor, and certified Grade 2 water treatment and distribution system operator. He specializes in industrial power systems, instrumentation and control system design. His 30+ years of experience includes research, design, engineering, construction administration, and project management for an extensive range of facilities including water/wastewater treatment plants, petrochemical refineries, bulk loading plants, motion picture studios, healthcare and educational facilities.

Marco strives to deliver top-tier projects through close collaboration with project stakeholders and equipment manufacturers, as well as his extensive field experience in construction, troubleshooting, maintenance and repair. Marco volunteers his time to various initiatives in the Long Beach community. He is a member of the IEEE, AWWA and the ISA.

EDUCATION

MS, Electrical Engineering, CSU Long Beach

BS, Electrical Engineering, Cal Poly Pomona

REGISTRATIONS

Electrical Engineer, California, E17508

Electrical Contractor, California, C10 658090

Water Treatment Operator Grade 2, 20440

Water Distribution Operator Grade 2, 9011

CERTIFICATIONS

- LEED AP BD+C

AFFILIATIONS

- IEEE
- AWWA
- ISA

RELEVANT PROJECT EXPERIENCE

- **City of Anaheim**
  Design-Build Harbor 12kV Substation
  Anaheim, CA
- **City of Anaheim**
  Water Department Arc Flash Analysis
  Anaheim, CA
- **City of Monterey Park**
  Water Utility Well & Booster Station Electrical Upgrades
  Monterey Park, CA
- **City of Monrovia**
  Arc Flash Study
  Monrovia, CA
- **Los Angeles Department of Water and Power**
  Sun Valley Battery Storage
  Sun Valley, CA
- **San Diego State University**
  Infrastructure Assessment
  San Diego, CA
- **Long Beach Water Department**
  Groundwater Treatment Plant HVAC Study
  Long Beach, CA
- **City of Long Beach**
  Willow Springs Wetlands Restoration Project Electrical Plan Review
  Long Beach, CA
- **Irvine Ranch Water District**
  Pressure Regulating Station Instrumentation & Controls
  Irvine, CA
- **Elsinore Valley Municipal Water District**
  Arc Flash Risk Assessment
  Lake Elsinore, CA
- **Marigold Mutual Water Company**
  Pressure Regulating Station Instrumentation & Controls
  Bloomington, CA
- **John Wayne Airport**
  Microgrid Independent Fee Estimate
  Santa Ana, CA
- **John Wayne Airport**
  Capital Improvement Program Construction Management
  Santa Ana, CA
- **Port of Long Beach**
  Infrastructure Assessment
  Long Beach, CA
- **Port of Long Beach**
  Middle Harbor Redevelopment
  Long Beach, CA
- **Port of Los Angeles**
  Distribution Center Medium Voltage Infrastructure Upgrades
  San Pedro, CA

1

RFQ No. 20-02. On-Call Engineering Design Services for Utilities

City of Hermosa Beach

CHAMBERS GROUP

Lisa Louie

Senior Project Manager, Regulatory Permitting Specialist

Education

MS, Marine Science, University of San Diego, 2005

BS, General Biology, University of California, San Diego, 1999

Training

California Rapid Assessment Method (CRAM) – Southern California Research Project (May 2009)

Wetland Delineation – Wetland Training Institute (August 2007)

Wetland Riverine Functional Assessment/Ecology for Project Managers – USACE

Environmental Considerations in Planning – USACE

Hydrologic & Hydraulic Considerations in Planning – USACE

Public Involvement and Teaming in Planning – USACE

Professional Experience

Lisa Louie is a Senior Project Manager with more than 20 years of experience in aquatic environmental management. She has prepared or supported in the preparation of multiple NEPA and CEQA documents. Lisa also has coordinated with state and federal resource agencies, including the successful negotiation of mitigation and conservation requirements. In addition, Lisa has coordinated and managed mitigation and monitoring plans as well as permit applications that include Clean Water Act (CWA) Section 404 (individual and nationwide) permits for United States Army Corps of Engineers (USACE), CWA Section 401 water quality certifications for the Regional Water Quality Control Board (RWQCB), Section 1600 streambed alteration agreement applications for the California Department of Fish and Wildlife (CDFW).

Project Experience

Westminster Coastal Resources Evaluation, USACE – Sub to Noble Consultants, Westminster, CA. **Project Manager, Environmental Planner, Marine Biologist**. Lisa prepared the environmental impacts on coastal biological and water resources evaluation from the proposed flood risk management project for the NEPA document. Lisa developed and analyzed a compendium qualitative report for water quality and sediment in the project area of the Garden Grove-Wintersburg Channel and participated in regulatory and resources agencies meetings to develop alternatives to address the project objective. The project NEPA lead was USACE. The Orange County Flood Control District was the CEQA lead for the preparation of a Joint Environmental Impact Statement/Environmental Impact Report.

On-Call Environmental Services, Orange County Public Works (OCPW), Orange County, CA. **Senior Project Manager/Biologist/Permitting Specialist**. Lisa was responsible for coordination with OCPW regarding regulatory permits, including biological resource surveys for sensitive species/habitat, protocol-level surveys, environmental documentation, jurisdictional delineations of waters and wetlands, and construction monitoring in support of regulatory permits.

Desalination Slant Well Decommissioning Project, Municipal Water District of Orange County, Orange County, CA. **Senior Project Manager, Regulatory Permitting Specialist**. Lisa prepared the appropriate amendments to the project regulatory permits for the removal of the test slant well for the Doheny desalination project, including the lease and right of entry permit for CDPR, lease for CSLC, Coastal Development Permit for CCC, CWA Section 401 permit and Waste Discharge Requirements for RWQCB, and CWA Section 404 permit for the USACE. Lisa also participated in agency and contractor meetings and managed the monitors.

Sepulveda Boulevard over Dominguez Channel, Permitting, City of Carson & Caltrans, RKA Group, Carson, Los Angeles County, CA **Regulatory Permitting Specialist**. Lisa prepared the application packages for the Section 404 NWP for USACE, Section 401 WQC for RWQCB, and Section 1602 LSAA for CDFW. The project involves widening the Sepulveda Blvd. bridge over the Dominguez Channel by adding a median and sidewalks on both sides of the bridge to improve road safety and reduce traffic congestion.

SOUTHERN CALIFORNIA GEOTECHNICAL

RESUME

Gregory K. Mitchell
Principal Engineer

Professional Registrations

Registered Civil Engineer, California
Registered Geotechnical Engineer, California
Registered Civil Engineer, Arizona
Registered Civil Engineer, Nevada (inactive)

Education

BS Civil Engineering, University of New Mexico, 1987

Professional Training

Shallow Foundation Short Course,
University of Missouri-Rolla, 1987
USEPA 40-hour HAZWOPER Training, 1987
Phase I ESA Seminar, PSI, 1989
Phase II ESA Seminar, PSI, 1989
Slope Stability and Landslides Short Course
University of Wisconsin, 1997

Experience

Over twenty-five years' experience in the geotechnical and environmental industries. Began career as a field engineer on both environmental and geotechnical assignments. The geotechnical assignments included supervision of drilling rigs during geotechnical investigations, and field density testing as part of grading control operations. Environmental assignments included all phases of field investigation including monitoring well installation, well drawdown tests, well sampling, collection of soil and groundwater samples, and completion of research for Phase I ESAs.

Mr. Mitchell managed the geotechnical operations at a branch office of a national engineering firm for three years, and was the regional manager for a second national firm for 7 years. In addition to the management activities, also had responsibility as a senior-level engineer, and obtained extensive experience in preparing and supervising geotechnical studies for commercial, industrial, residential and retail properties, including warehouses, manufacturing facilities, bridges, towers and single family residences. Provided designs for shallow foundations, drilled piers, driven piles, pavements, floor slabs and retaining walls. Geotechnical experience also includes liquefaction studies, fault studies, forensic investigations, pavement studies, groundwater studies, landslide evaluations, slope stability studies, and general geotechnical consulting services.

Assignment of Key Personnel

TAIT has carefully considered the City's needs and prepared the following team members for the success of this on-call contract. The key personnel for the TAIT Team is listed below with their positions, qualifications, and availability percentage. We understand that team members may only be substituted with written permission from the City.

Name	Classification/ Designation	Licenses/ Registration	Years of Experience	Time with Firm	% of Availability
Jacob Vandervis, P.E., QSD/P	Principal In Charge/QA/QC Manager	CA No. C46301	34	23	20%
David Sloan, P.E.	Lead Project Manager	CA No. C82595	13	6	20%
Bart Mink, P.E., LEED AP	Project Manager-Sewer	CA No. 82953	22	2	30%
Daniela Malott, P.E., QSD/P	Project Manager-Storm Drain	CA No. C86581	8	4	30%
Samantha Wohlfarth, P.E.	Project Engineer	CA No. C86126	8	8	30%
Ryan Haskin, P.E.	Project Engineer	CA No. C84850	8	8	30%
Christopher Engelbach, EIT	Project Engineer	E.I.T	11	4	30%
Michael Tran, EIT	Project Engineer	E.I.T.	7	5	30%
Michael Furlong	Surveyor of Record	CA PLS No. 8899	41	2	30%
Reese Brashear, LSIT	Field Party Chief	CA LSIT No. 7868	17	17	30%

REQUIRED FORMS

Certification of Proposal

RFQ 20-02 **City of Hermosa Beach**

6.3 Required Forms

6.3.1 Certification of Proposal

RFQ #: 20-02

The undersigned hereby submits its proposal and agrees to be bound by the terms and conditions of this Request for Proposal (RFQ).

1. Proposer declares and warrants that no elected or appointed official, officer or employee of the City has been or shall be compensated, directly or indirectly, in connection with this proposal or any work connected with this proposal. Should any agreement be approved in connection with this Request for Proposal, Proposer declares and warrants that no elected or appointed official, officer or employee of the City, during the term of his/her service with the City shall have any direct interest in that agreement, or obtain any present, anticipated or future material benefit arising therefrom.
2. By submitting the response to this request, Proposer agrees, if selected to furnish services to the City in accordance with this RFQ.
3. Proposer has carefully reviewed its proposal and understands and agrees that the City is not responsible for any errors or omissions on the part of the Proposer and that the Proposer is responsible for them.
4. It is understood and agreed that the City reserves the right to accept or reject any or all proposals and to waive any informality or irregularity in any proposal received by the City.
5. The proposal response includes all of the commentary, figures and data required by the Request for Proposal
6. The proposal shall be valid for 90 days from the date of submittal.
7. Proposer acknowledges that the City may issue addendums related to this RFQ and that the proposer has reviewed the following addendums which have been issued:

   Addendum: none issued

   Addendum: _____

   Addendum: _____

   Addendum: _____

8. Proposer further acknowledges the provisions of any addendums issued have been incorporated into their proposal.

Signature of Authorized Representative:

_____

Printed Name and Title:

Jacob Vandervis, COO/Vice President

Page **32** of **35**

Non-Collusion Affidavit

RFQ 20-02 **City of Hermosa Beach**

6.3.2 Non-Collusion Affidavit

RFQ #: 20-02

The undersigned declares states and certifies that:

1. This proposal is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation.
2. This proposal is genuine and not collusive or sham.
3. I have not directly or indirectly induced or solicited any other Proposer to put in a false or sham proposal and I have not directly or indirectly colluded, conspired, connived, or agreed with any other Proposer or anyone else to put in a sham proposal or to refrain from submitting to this RFQ.
4. I have not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price or to fix any overhead, profit or cost element of the proposal price or to secure any advantage against the City of Hermosa Beach or of anyone interested in the proposed contract.
5. All statements contained in the Proposal and related documents are true.
6. I have not directly or indirectly submitted the proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, RFQ depository, or to any member or agent thereof, to effectuate a collusive or sham proposal.
7. I have not entered into any arrangement or agreement with any City of Hermosa Beach public officer in connection with this proposal.
8. I understand collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and civil damage awards.

Signature of Authorized Representative:

Jacob Vandervis

Printed Name and Title:

Jacob Vandervis, COO/Vice President

Page **33** of **35**

Compliance with Insurance Requirements

RFQ 20-02 **City of Hermosa Beach**

6.3.3 Compliance with Insurance Requirements

RFQ #: 20-02

The selected consultant will be expected to comply with the City's insurance requirements contained within this RFQ.

The undersigned declares states and certifies that:

1. Proposer agrees, acknowledges and is fully aware of the insurance requirements as specified in the Request for Proposal.
2. If selected, proposer agrees to accept all conditions and requirements as contained therein.

Signature of Authorized Representative:

Printed Name and Title:

Jacob Vandervis, COO/Vice President

Acknowledgement of Professional Services Agreement

RFQ 20-02 **City of Hermosa Beach**

6.3.4 Acknowledgement of Professional Services Agreement

RFQ #: 20-02

The selected consultant will be expected to comply with and sign the City's Professional Services Agreement. Proposers should identify and/or indicate any exceptions to the Sample Professional Services Agreement included in Section 6.2. The City Attorney or their designee retains the discretion to accept or reject proposed exceptions or modifications to the City's Professional Services Agreement.

1. Proposer agrees, acknowledges and is fully aware of the conditions specified in the City's Sample Professional Services Agreement.

2. Proposer agrees to accept all conditions and requirements as contained therein with exceptions noted as follows:

Section 12 (Indemnification) needs to be modified to comply with CA Civil Code 2782.8(a) which states that the duty and cost to indemnify/defend are "unenforceable except to the extent the claims arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional" and "in no event shall the cost to defend charged to the design professional exceed the design professional's proportionate percentage of fault."

Signature of Authorized Representative:

Printed Name and Title:

Jacob Vandervis, COO/Vice President

FEE SCHEDULE

Per the RFQ requirements, the fee schedule has been submitted in a separately sealed envelope.